

# **PORT OF YAMPI SOUND**

## **PORT AND TERMINAL HANDBOOK**

Current version number: 3.0      File reference: HBR159/194686      Maintained by: Harbour Master

Original issue date: January 2022      Last review date: November 2024      Next review date: November 2026

### **CONTENTS**

<b>1. INTRODUCTION.....</b>	<b>4</b>
<b>2. LOCATION .....</b>	<b>4</b>
<b>3. HISTORY .....</b>	<b>5</b>
<b>4. CLIMATE.....</b>	<b>5</b>
<b>5. CYCLONES .....</b>	<b>5</b>
<b>6. WINDS / SWELL.....</b>	<b>6</b>
<b>7. TIDES AND CURRENTS .....</b>	<b>6</b>
<b>8. CHARTS.....</b>	<b>6</b>
<b>9. VESSEL INFORMATION.....</b>	<b>6</b>
<b>10. BERTHING REQUIREMENTS.....</b>	<b>7</b>
10.1. Pre-Arrival Requirements .....	7
10.1.1. Australian Border Force .....	7
10.1.2. Department of Agriculture, Fisheries and Forestry (Quarantine) .....	8
10.2. Notice of Arrival at the Load Port.....	8
<b>11. ANCHORAGE .....</b>	<b>9</b>
<b>12. PILOTAGE.....</b>	<b>9</b>
12.1. Approaches Buoys and Beacon – Koolan Island .....	10
12.2. Approaches- Buoys and Beacon - Cockatoo Island.....	11
<b>13. TOWAGE AND MOORING SERVICES .....</b>	<b>11</b>
13.1. Towing of barges within Port limits of Yampi Sound .....	11

<b>14. SAFETY WARNINGS .....</b>	<b>12</b>
14.1. Alcohol and Drugs .....	12
14.2. Environment Protection .....	12
14.3. Engine and Shipboard Repairs.....	13
14.4. Permit to Work on Board a Vessel at the Berth .....	13
14.5. Hot Work .....	13
<b>15. FIRE AND EMERGENCY .....</b>	<b>13</b>
<b>16. LOADING PROCEDURES .....</b>	<b>14</b>
16.1. Loading Procedures-Koolan Island.....	14
16.2. Loading Procedures-Cockatoo Island.....	15
<b>17. CARGO SPECIFICATIONS .....</b>	<b>15</b>
17.1. Cargo Specifications – Koolan Island: .....	15
17.2. Cargo Specifications -- Cockatoo Island.....	16
<b>18. DEBALLASTING .....</b>	<b>16</b>
<b>19. DEPARTURE PROCEDURE.....</b>	<b>16</b>
<b>20. PORT SERVICE CHARGES.....</b>	<b>16</b>
<b>21. GENERAL INFORMATION .....</b>	<b>17</b>
<b>22. CRUISE VESSELS .....</b>	<b>17</b>
<b>23. DANGEROUS GOODS.....</b>	<b>18</b>
<b>24. GLOSSARY.....</b>	<b>18</b>
<b>25. DISCLAIMER.....</b>	<b>19</b>
<b>26. KOOLAN / COCKATOO ISLAND GENERAL VESSEL REQUIREMENTS .....</b>	<b>19</b>
26.1. Vessel Restrictions Bulk Carriers .....	19
26.2. Additionally for vessels loading at Koolan Island .....	20
26.3. Nomination of Performing Vessel .....	20
26.4. Shipping Agent .....	22
26.5. Communications.....	22
26.6. Vessel Condition .....	22
26.7. In addition, for Vessel arriving into Koolan Island .....	23
26.8. Hold Cleanliness Requirements .....	23
26.9. Hold Cleanliness Inspection .....	23
26.10. Berthing Arrangements.....	24
26.10.1. Berthing Arrangements at Koolan Island.....	24
26.10.2. Berthing Arrangements at Cockatoo Island.....	24
26.11. Notice of Arrival at the Load Port.....	25

26.12.	Preliminary Stowage Plan .....	25
26.13.	Proceeding to the Loading terminal .....	25
26.13.1.	Proceeding to the Loading Berth-Koolan Island .....	25
26.13.2.	Proceeding to the Loading Terminal (Cockatoo Island) .....	26
26.14.	Towage and Mooring Services .....	26
26.15.	Winches Requirements at Koolan Island .....	26
26.16.	Mooring Equipment at Koolan Island .....	27
26.17.	Responsibility for Loading Operations .....	27
26.18.	Code of Responsibility .....	27

#### **APPENDIX A – Koolan Island Jetty And Wharf Areas (URS 2006)**

#### **APPENDIX B – Yampi Pilot Leader Arrangements**

#### **APPENDIX C – Shiploader – Operating Envelope (URS Australia, 2007)**

#### **APPENDIX D – Koolan Island Berth Pocket (URS Australia, 2007)**

#### **APPENDIX E – Koolan Island – Sk07b Kamsarmax Vessel 2020**

#### **VARIATION RECORD:**

<b>Version No.</b>	<b>Version Date:</b>	<b>Brief Description of Change:</b>
1.0	January 2022	
2.0	April 2023	Full review
3.0	Nov 2024	Full document review - Towage guidelines added. - Details for Cockatoo Island operations added. - Port Limits updated.

## 1. INTRODUCTION

The Ports of Broome, Wyndham, Derby and Yampi Sound are administered by the Kimberley Ports Authority under The Port Authority Act (PAA Ports) 1999 and The Port Authority Regulations 2001.

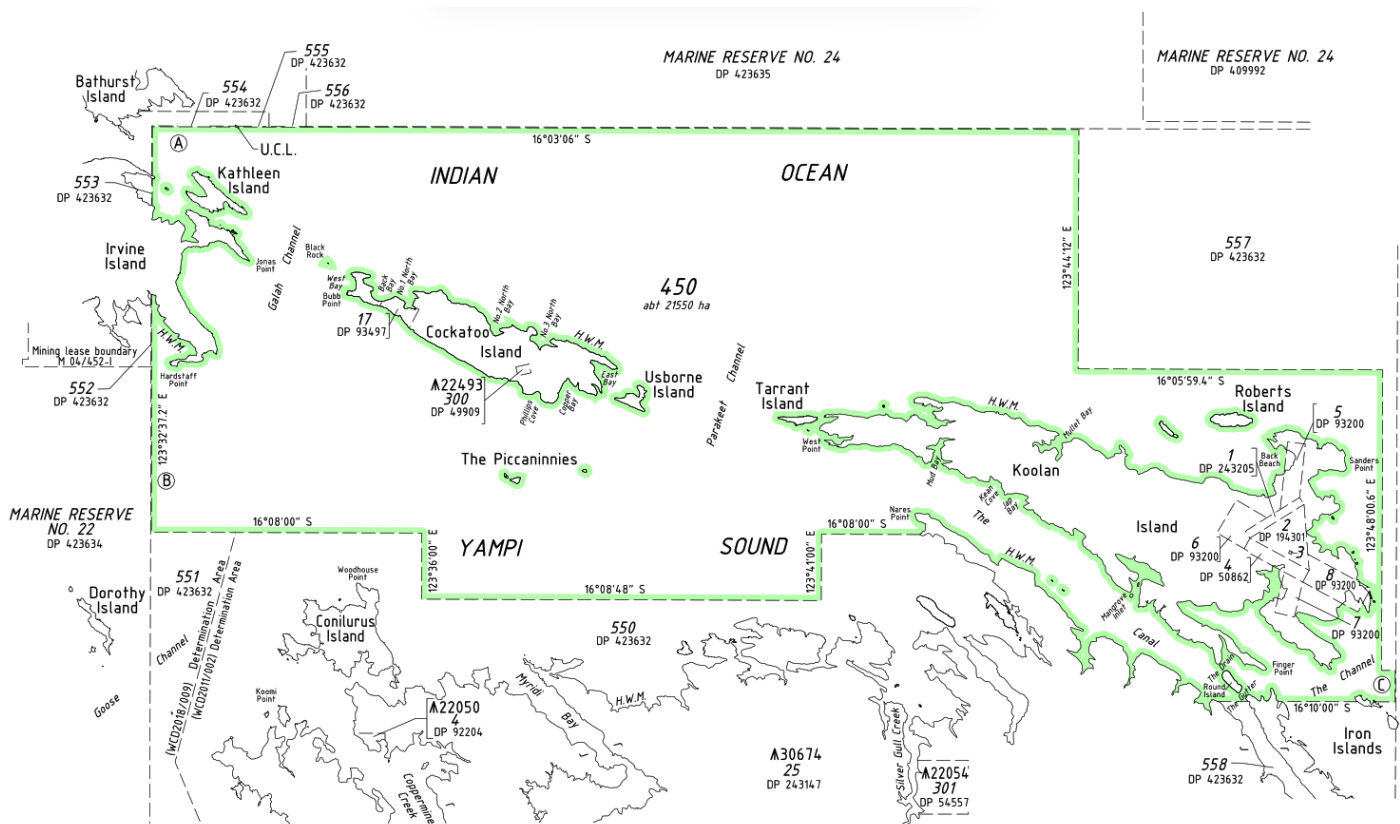
This document has been produced to provide a reference tool to meet the information needs of users transiting, anchoring in, or requiring load/discharge facilities in Yampi Sound including Ships Masters, agents and shore personnel.

It also covers Safe Work Procedures and Emergency Response, outlining appropriate action to take and contact information in the event of an emergency.

## 2. LOCATION

Yampi Sound – located in the Buccaneer Archipelago, approximately 130km north of Derby in the Kimberley Region of Western Australia. Local time in Yampi Sound is GMT + 8. Yampi Sound is located between King Sound and Collier Bay.

Under the direction of the Kimberley Ports Authority, vessels are permitted to transit, anchor, load and or discharge subject to the Port Authority Act of 1999 and the Port Authority Regulations of 2001, Marpol, Collision Regulations -Prevention of Collision at Sea 1983.



### 3. HISTORY

The sound was visited in March 1838 by Lieutenant [John Lort Stokes](#) of [HMS Beagle](#), who named **Yampee Point**, *Yampee* being the local [Aboriginal peoples'](#) word for [fresh water](#).<sup>[2]</sup> The sound is off the Yampi Peninsula, which is bounded by King Sound to the south, Collier Bay to the north, and the [King Leopold Ranges](#) inland on the north-eastern side.<sup>[3]</sup>

During [World War II](#), several raids were launched against the [Japanese](#) forces in [Borneo](#) and [Java](#) using [Catalina](#) flying boats by the [Royal Australian Air Force](#) from [Cockatoo Island](#) in Yampi Sound. (Ref Wikipedia 2022).

### 4. CLIMATE

The climate of the Port can be described as sub-tropical with wet and dry seasons. Rainfall generally falls in the period November to March. Humidity is high in the wet season and the temperature is consistently high and frequently exceeds 35°C throughout the summer months when applicable.

### 5. CYCLONES

During the summer months, Yampi Sound and surrounding areas may be affected by tropical cyclones which typically originate in the Timor Sea and follow an erratic south westerly path.

The official cyclone season is from November to April with an incidence of usually four (4) cyclones per year occurring in the North-West of Australia during this period. During periods of regional cyclonic activity, the storms can be intense with wind speeds more than 250 kilometres an hour recorded.

The Kimberley Ports Authority (KPA) delegated Harbour Master and various Port Operation Teams monitor Tropical Low / Cyclones during the cyclone season. At the Harbour Master's discretion, Yampi Sound may be declared "cleared", "closed" or "opened with caution" to all shipping.

Under [KPA's Cyclone Management Plan](#), if a tropical low or cyclone has the potential to impact within 48 hours, Port of Yampi Sound may be closed. Closure of Yampi Sound requires all berths to be evacuated, and all vessels ordered to clear the Sound. The Ships' Masters are always responsible for ensuring the safety of the vessel and compliance with their Cyclone Management Plan.

If any Cyclone Management Plan from the terminal, service providers, or vessels comes into effect the Harbour Master must be notified. No vessel movements/marine activities should commence until the Harbour Master has reopened the Port.

The Kimberley Ports Authority (KPA) Harbour Master may issue instructions to ensure that safety of maritime operations within Yampi Sound at the time of an impending cyclone or adverse weather event. If in any doubt, contact the Kimberley Ports Authority Harbour Master ([harbourmaster@kimberleyports.wa.gov.au](mailto:harbourmaster@kimberleyports.wa.gov.au)) (Mob +61 408 253 193).

## 6. WINDS / SWELL

During the season November to March, the prevailing winds are westerly, strong at times, particularly during the afternoon. Rain and thunder squalls are also frequent during this period and Masters are warned to be watchful for storms as the accompanying winds can be gale force.

The season April to October brings a period of very little rain, frequent periods of strong south-easterly wind during the mornings with accompanying generally low swell, giving way to light westerly sea breezes in the afternoon. No cyclones are likely during this period.

## 7. TIDES AND CURRENTS

Refer ANTT Port 62860. The tidal regime is significant with a spring tidal range of over 9 meters. Tidal streams within Yampi Sound generally set East with the rising tide and West with the falling tide. Tidal stream currents of 3 knots have been reported although currents could be greater than this.

As a recognized Port, tide predictions (Table 1) are provided for Koolan Island in the Australian National Tide Table, which can be obtained from Admiralty Chart Agents and nautical booksellers.

**Table 1: Yampi Sound - Koolan Island Tidal Ranges**

	Height Above Chart Datum (m) – Year 2024	Height Above Chart Datum (m) – Year 2025
HAT – Highest Astronomical Tide	11.1	11.1
MHWS – Mean High Water Springs	9.9	9.9
MHWN – Mean High Water Neaps	6.6	6.6
MSL – Mean Sea Level	5.5	5.5
MLWN – Mean Low Water Neaps	4.4	4.4
MLWS – Mean Low Water Springs	1.1	1.2
LAT – Lowest Astronomical Tide	0.06	0.08

## 8. CHARTS

Reference should be made to charts AUS 733, AUS 40 and AUS 41.

## 9. VESSEL INFORMATION

All vessels operating within the Yampi Sound must be appropriately registered and readily identifiable. All vessels must be fit for sea in all respects.

All recreational craft should be aware that large vessels operate within the sound and are at times restricted in their ability to maneuver, accordingly it is requested recreational craft stay

well clear of commercial vessels. This request is not meant to override the International Collision Regulations at any time. The Collision Regulations prevail at all times.

Any vessel deficiencies must be reported to the Harbour Master before entering the waters of Yampi Sounds

If AIS is fitted it must be on and appropriately notated. Underway or at Anchor.

## **10. BERTHING REQUIREMENTS**

### **10.1. *Pre-Arrival Requirements***

The Harbour Master requires that all vessel Masters, Marine Pilots, port facility operators and other port users operating within the Port shall:

- a) Follow all Harbour Master's directions.
- b) Immediately report any marine incidents as defined by the Navigation Act 2012, and or Port Authority Regulations 2001 (PAR 2001) of Port Authority Act 1999 (PAA 1999) or potential/actual spills of oil or noxious substances.
- c) Report any events or near miss (potential) events or activities which impacted or may have impacted on safe operations at Yampi Sound.
- d) Report limitations or defects of any vessel which would affect the seaworthiness operational capacity or safety of the vessel; and
- e) Report any activities or event, circumstance or condition which could potentially affect the safety or the security of the Port.
- f) For vessels greater than 35 metres, complete the 'KPA Ship Masters pre arrival declaration – Yampi Sound & Derby' form and submit to the terminal for review. For vessels only transiting the port of Yampi Sound, this declaration must be sent to the Pilotage provider and Harbour Master.

#### **10.1.1. Australian Border Force**

The Australian Border Force requires all overseas vessels to provide the following documentation at least 96 hours prior to arrival in Australia via the Shipping Agent (cc [harbourmaster@kimberleyports.wa.gov.au](mailto:harbourmaster@kimberleyports.wa.gov.au)):

- a) Ship Pre- Arrival Report (Form 13)
- b) Crew Report (Form 3b)
- c) Copy of Last Port Clearance

Note – ALL crew arriving into Australian Waters MUST hold a current and valid Australian Maritime Crew Visa (MCV). Agents must ensure that the relevant requirements are complied with, and any non-compliances are reported to ABF.

### **10.1.2. Department of Agriculture, Fisheries and Forestry (Quarantine)**

The Australian Department of Agriculture and Water Resources requires that all overseas vessels provide the following Maritime Arrivals Reporting System (MARS) reports via the Shipping Agent:

- a) Non first point (NFP) of entry application: Required a minimum of 10 days from ETA, otherwise entry into the Port may not be granted. The Shipping Agent will provide a copy of this document directly to the vessel.
- b) Pre arrival report (PAR): 96 – 24 hours prior to arrival. If the vessel does not have on board the latest version of this report, the Shipping Agent will provide the requisite form for completion.
- c) Water Ballast Summary Sheet: NO later than 24 hours pre arrival. If the vessel does not have on board the latest version the Shipping Agent will provide accordingly.

\* Please note that Australian Ballast Water Management requirements were amended, effective from March 2020. The Shipping Agent may provide the Ships Master directly with Version 8 of the “Australian Ballast Water Management Requirements.

\* The Shipping Agent will also provide directly a copy of the tips / quick reference guide on to how best complete the MARS Documents (PAR and Ballast Water Summary Sheet).

### **10.2. Notice of Arrival at the Load Port**

All commercial vessels irrespective of size, that intend to enter the Port must report their intentions to the Harbour Master via email at:

- a) 72 hours prior ETA
- b) 12hours prior ETA and
- c) Upon Arrival at the Port's limits.

Commercial vessels will have complied with the abovementioned requirement if they have provided this information to the Harbour Master via a Shipping Agent, Port Facility Operator or a licenced Marine Pilot engaged for the purpose of providing pilotage services on the vessels.

As a minimum, the arrival notification must include the following details:

- a) Actual time of arrival at the Port boundary/limit.
- b) Passage intent (including berth, anchorage, passage plan, operations to be conducted with in the port boundaries, deepest draft etc.).
- c) Declare the status of all the navigation, steering, propulsion, AIS and critical equipment (i.e. declare what is not operational); and
- d) Total number of persons aboard.

- e) Confirmation that the vessel master has reviewed all KPA Local Marine Notices in force and the vessel complies with all requirements.

## 11. ANCHORAGE

All vessels intending to anchor within the Port shall request permission and obtain a designated anchoring location from the Harbour Master. This obligation shall be met if directed to do so by either the Koolan Island Port Facility Security Officer, scheduler or licenced Marine Pilot.

A vessel at anchor within the Port shall always maintain an anchor watch to comply with:

- a) STCW Guidelines.
- b) Flag Administration Minimum Safe Manning Certificate.
- c) Rule 5 of the International Regulations for Preventing Collisions at Sea 1972 (maintain a proper lookout); and
- d) Rule 30 of the International Regulations for Preventing Collisions at Sea 1972 (display light and shapes).

All vessels and Ship Masters shall move their vessels, depart the Port limits, put down additional anchors or pay out additional cable if directed to do so by the Harbour Master.

No vessel shall anchor in any designated anchorage area, within the Port boundary without prior approval from the Harbour Master.

Anchorage is available 2 miles west of Nares Point (16°08'S 123°42'E), at positions:

- KI 1. Latitude: 16° 08.2' South      Longitude: 123° 40.3' East and.
- KI 2. Latitude: 16° 08.4' South      Longitude: 123° 39.4' East

Depths at anchorage vary from 16 to 22 m with a mud seabed.

**Caution** A 9.9 m (34ft) patch (16° 08'S 123° 41'E) lies east of this anchorage.

**Tidal streams** at these anchorages are slight, with a possible maximum rate of approximately 1knot during spring tides.

## 12. PILOTAGE

All vessels over 35m without a pilot exemption, operating within the Port must have on board a Marine Pilot licensed by the Kimberley Port Authority pursuant to the Port Authority Regulations 2001. This requirement can only be waived if the Ship's Master holds a valid pilotage exemption certificate issued by the Kimberley Port Authority for the Port or has been given written direction by the Harbour Master to operate without the exemption certificate.

Vessels calling the Port of Yampi Sound would normally approach from the North (parakeet channel) or the West, and ideally proceed towards K1 or K2 anchorage. Pilots often board Iron Ore Export Vessels whilst the ships are at anchor here, upon boarding, the pilot will

discuss with the Master the passage plan for taking the vessel to the berth (for Koolan Is) or OGV anchorage (for Cockatoo Is).

The Koolan Pilot Boarding Ground is located approximately 2 miles west of Nares Point at:

Latitude 16° 07.6' South

Longitude 123° 40.0' East.

The Cockatoo Pilot Boarding Ground is located approximately 1.5 miles north of Woodhouse Point at:

Latitude 16°07.0' South

Longitude 123°35.3' East

The total distance between the Koolan pilot boarding ground and the Koolan Island Port loading facility, or the Cockatoo Port Loading Facility is approximately 5 nautical miles, and the vessel will be under pilotage for the passage.

The Cockatoo Pilotage boarding ground is to be used only if a vessel intends to proceed directly to the OGV Anchorage for Cockatoo Island transshipment. This must only be used if terminal/pilots have confirmed the arrangement in advance where the pilot would board at the Cockatoo Pilot boarding ground.

When the Pilot is boarding it is critical that the vessel makes a suitable lee. Failure of the vessel to offer a lee may result in the Pilot being unable to board, with the consequent delay being against the vessel. All vessels must rig their pilot boarding facilities in accordance with IMO and SOLAS regulations.

Refer to Appendix B for a diagram of boarding arrangements for the Pilot in accordance with International Maritime Organisation (IMO) requirements (The IMO Convention for Safety of Life at Sea (SOLAS Chapter V, Regulation 23) setting out the principal boarding arrangements for pilots).

A Master of any vessel arriving at the Port of Yampi Sound must declare that the design, procurement, installation and ongoing maintenance of the pilot ladder is in accordance with IMO, SOLAS, AMSA, ISO and IMPA rules and regulations. "Certificate of Manufacturer" for the pilot ladder must be ready upon request. Pilot ladders must not be older than 30 months, and the manropes must not be older than 12 months from the fabrication date. A competent deck officer must check and confirm the pilot ladder, and manropes are in good condition prior it's being rigged; a responsible officer shall supervise the rigging of the pilot ladder and manropes and embarkation/disembarkation of all personnel.

### **12.1. Approaches Buoys and Beacon – Koolan Island**

Koolan Island is separated from the Australian mainland in the south by The Canal, a passage of deep water through-out in the fairway varying from 20 to 25 metres at Chart Datum, 6 cables wide at its West entrance but narrowing considerably towards its East entrance. It is three (3) nautical miles from the entrance of The Canal to the Koolan Island loading facility.

The following buoys and beacons are located within the Port:

- a) A lighted buoy marking Comber Rock in Parakeet Channel (East Cardinal Beacon);

- b) A clearing line delineating by leading marks positioned on the southern side of The Canal near the loading facility; Forward lead also indicating with West Cardinal Beacon; and
- c) A light (Starboard light) (Characteristics Q.G) at Nares Point (16°08'S 123°42'E) at the western entrance to The Canal.

### **12.2.      *Approaches- Buoys and Beacon - Cockatoo Island***

Cockatoo Island is separated from the Australian mainland in the south by Yampi Sound, with approx. two nautical miles of navigable water with varied depths. There is a 9.6 metre isolated shoal midway between Woodhouse Point and Laxton Point well to the south of any recommended tracks in and out of Yampi Sound. The fairway between the K1/ K2 anchorages and the CIM Trans-Shipment anchorage is at least 1 nautical mile wide. Tidally driven currents exceeding 1 Knot are common along the fairway.

At the K1/K2 end of the passage Comber Rock Light in Parakeet Channel (East Cardinal Beacon) will be visible.

At the Western end of the fairway the Tanner Island Light exists, (Fl2), marking the northern edge of the fairway and lying about 1 mile north of the east west recommended tracks into/out of the Sound.

A group of five flashing yellow lights will mark the barge loading facility location and this is about 1.1 Nm ENE of the Transshipment Anchorage.

Ships proceeding to the Transshipment Anchorage will exit the fairway in the vicinity of the Cockatoo Pilot Boarding Ground and anchor at position 16° 06.6' S 123° 35.7' E in approx. 27 metres-30 metres of water, deploying 7 shackles well stretched.

## **13. TOWAGE AND MOORING SERVICES**

Towage services are available in Yampi Sounds if sufficient notice is given. Please contact agents directly or the Harbour Master for further details.

There are no moorings available for hire within the port limits.

### **13.1.      *Towing of barges within Port limits of Yampi Sound***

Prior to any towage request within port waters can be reviewed, KPA requires the following documents to be provided.

- Date/ time of the proposed tow movement including tidal constraints.
- Details/Specs of the asset/barge being towed.
- Passage plan. Please draw the passage plan on a map (for areas within port limits)
- Provide Bollard pull requirements for the barge. This should be a class surveyor approved calculation.

- In addition to the lead tug, an assist vessel must be arranged. Provide details of main tow vessel and assist tow vessel including their bollard pull capability.
- Details/location of the final mooring position (if within Port limits), including mooring analysis to confirm suitability.
- Please note that towage will be scheduled to occur in daylight hours only and be with a Marine Pilot or PEC Master onboard.

Request with all the above details must be sent at least 7 days prior to the proposed date, to avoid any delays in approval. The request must be sent to KPA - [harbourmaster@kimberleyports.wa.gov.au](mailto:harbourmaster@kimberleyports.wa.gov.au) and [operations@kimberleyports.wa.gov.au](mailto:operations@kimberleyports.wa.gov.au)

\*These requirements do not apply to transshipment operations from the BLF for Iron Ore Bulk Ships, which must be undertaken only by approved PEC Tug Master's as per operating agreement provided by the operator and approved by KPA.

## **14. SAFETY WARNINGS**

### **14.1.      *Alcohol and Drugs***

Masters are advised that loading will cease if a person or persons involved in operations are affected by fatigue, alcohol or drugs.

Operations will not resume until the matter has been fully investigated by relevant authorities and the Port Facility Security Officer considers it safe to recommence loading. A delay in the vessel's departure could result, with any such delay being the responsibility of the vessel.

### **14.2.      *Environment Protection***

The Port Facility has the capacity to effectively manage a level 1 oils spill response (first strike) as outlined in the State Hazard Plan Maritime Environmental Emergencies (MEE) (refer [www.transport.wa.gov.au](http://www.transport.wa.gov.au)) and each terminal's Marine Oil Spill Contingency Plan.

There are numerous pieces of legislation that relate to oil spills. The two most relevant for the Port are the • *Environment Protection Act 1986 (WA)* and the *Pollution of Waters by Oil or Noxious Substances (POWBONS) Act 1987 (WA)*, as amended from time to time.

The Master of a vessel berthed at the Port Facility must comply with the requirements of the above acts and policies and:

1. Not cause or permit refuse of any kind to be discharged from the vessel or its scuppers into Port waters
2. Not cause or permit a person to pump or discharge any oil, spirit or flammable liquid into Port waters.
3. Allow the vessel to emit excessive funnel smoke; and
4. Ensure rat guards are fitted to all ships mooring lines whilst they are berthed at the wharf.

### **14.3.      *Engine and Shipboard Repairs***

Under no circumstances may a vessel de-mobilise the main engine without the express permission of the Harbour Master. Permission will not be given in cyclone season unless an emergency exists.

No hot work, Confined Space Entry, Diving, overside maintenance or similar activities, Lifeboat or rescue boat drills are to be conducted without the prior written approval of the Harbour Master.

### **14.4.      *Permit to Work on Board a Vessel at the Berth***

When any repair or maintenance work is required to be done on board a vessel moored at the berth or anchored within Port limits, the responsible ship's officer must inform the Pilot/Loadmaster. The Pilot/Loadmaster will seek approval from the respective terminal Management prior to the commencement of any work. Agreement should be reached on the safety precautions to be taken, with due regard to the nature of the work.

### **14.5.      *Hot Work***

Generally hot work is not allowed at the berth. In extenuating circumstances hot work may be authorised by the Harbour Master. Before undertaking hot work, permission must also be granted by the respective terminal Management. All hot work permits are to be counter signed by the Terminal Manager, or his nominee and the Ship's Officer. Hot work is usually restricted to engine room and boiler spaces

## **15. FIRE AND EMERGENCY**

### **IN CASE OF EMERGENCY NOTIFY THE HARBOUR MASTER AND PORT FACILITY SECURITY OFFICER (PFSO)**

In the event of the following occurring:

- FIRE
- EXPLOSION
- ESCAPE OF TOXIC and/or FLAMMABLE GASES
- ESCAPE OF TOXIC and/or FLAMMABLE LIQUIDS (OIL SPILL)

### **RAISE THE ALARM**

Call the PFSO of respective terminal to notify them of the emergency.

- The PFSO of Koolan Island monitors the marine radio station VHF 16, and UHF Channel #3. They may also be contacted on mobile: +61 484 934 561
- The PFSO of Cockatoo Island monitors the marine radio station VHF 16, and UHF Channel #27. They may also be contacted on mobile: +61 422 987 305

ACTION – SHIP	ACTION – BERTH
<b>Emergency on a ship</b>	<b>Emergency on a ship</b>
<ul style="list-style-type: none"> <li>The ship will follow their approved Vessel Safety management system</li> </ul>	<ul style="list-style-type: none"> <li>Raise the alarm</li> </ul>
<ul style="list-style-type: none"> <li>Notify the Pilot and Terminal</li> </ul>	<ul style="list-style-type: none"> <li>Contact the ship to clarify the emergency</li> </ul>
<ul style="list-style-type: none"> <li>Notify the Harbour Master</li> </ul>	<ul style="list-style-type: none"> <li>Cease all cargo operations</li> </ul>
	<ul style="list-style-type: none"> <li>Contact Emergency response team in the event of an emergency. ERT team to stand by for instruction</li> </ul>
	<ul style="list-style-type: none"> <li>Implement Emergency Response Plan if required</li> </ul>
	<ul style="list-style-type: none"> <li>Notify the Harbour Master</li> </ul>

## 16. LOADING PROCEDURES

### 16.1. Loading Procedures-Koolan Island

The minimum depth of water alongside the MGI Koolan Island Berth is 15.0 metres at chart datum with a tidal range between MLWS and MHWS of 8.8 metres. A detailed sounding of the berth pocket is set out in Appendix D.

Masters are always to ensure that the vessel has an under-keel clearance (**UKC**) of at least 1 metre or 10% of the deepest draft, whichever is greater. Vessels may need to cease loading during low water periods to ensure the minimum UKC is maintained.

The ship-loader consists of a fixed, slewing and luffing conveyor boom located at the centre dolphin. The outreach of the ship-loader from the fender face is 10.7 metres to a nominal range of 19.7 metres. The ship-loader is fixed in location, a slewing range of +80° to -170° and an operating luff boom angle of +10° to -10° from the horizontal while loading. Nominal loading rate is 1800tph with a peak loading rate of 3000tph.

Due to the fixed nature of the ship-loader, the Ships' Masters are required to bring each hatch in sequence under the boom by warping the vessel along the jetty using the ship's gear. During these operations, KIO employees are in attendance for handling the shore end of mooring lines only and to advise the Master when the vessel is in the required position for loading. Position of bow and stern lines at hatches 1 and 7 will be considered regarding the positioning of the vessel for loading of Kamsarmax vessels, this is to reduce any potential chafing of mooring lines.

The Ship's Master is responsible for the warping operations at all times. The Pilot/Loadmaster and tugs are available to assist warping the vessel alongside the jetty.

To minimise delays, it is strongly recommended that vessels keep their moves to a minimum consistent with allowable stability and stress limits for the vessel. During loading operations, a responsible deck officer must be present to supervise the loading requirements.

General cargo is not handled at the jetty.

## **16.2. Loading Procedures-Cockatoo Island**

*\*CIM Transshipment operations are expected to commence in Q1 of 2025, and there may be minor variations to the below processes relating to the transshipment operations. Please contact KPA or CIM directly to confirm the latest requirements.*

The minimum depth of water at the CIM Transshipment anchorage is 15 metres while the ship's anchor is dropped into 28 metres, with the 15-metre sounding touching the watch circle 700 metre NW from the centre. Flood tides set to the east, and Ebb Tides set to the west and tidal currents greater than one knot can be expected. A detailed sounding of the anchorage watch circle is set out in Appendix F.

Masters are always to ensure that their vessel has an under-keel clearance (UKC) of at least 1 metre or 10% of deepest draft, whichever is greater. The anchor cable may be shortened with the PLM's (Pilot/Loadmaster) approval if this is required to ensure the UKC requirement is achieved during any low water period.

Ship loading at Cockatoo Island is conducted using ship's gear and grabs. Cargo is transferred from 70 metre (LOA), 3500 dwt dumb barges moored alongside the ship. The barges are purpose built and are fendered.

Ship's crew will handle mooring lines passed up to them by barge crew. The barges will be placed either side of the ship by assistant tugs.

Ships hatches will be loaded in a sequence calculated by the ship and approved by the Pilot/Loadmaster. Nominal loading rate is 1000 tph with 250 tonne per hour allocated to each crane.

Loading operations are conducted 24/7 within operational and maintenance limits of cranes with respect to roll, pitch, list, trim, wind speed and any other limitations of the system including ongoing routine run maintenance requirements.

## **17. CARGO SPECIFICATIONS**

Following information is provided for guidance:

### **17.1. Cargo Specifications – Koolan Island:**

Stowage Factor Iron Ore: Lump: 0.32 to 0.36 m<sup>3</sup>/mt

Fines: 0.29 to 0.32 m<sup>3</sup>/mt

Maximum Angle of repose: Lump: 27.00° to 30.00°

Fines: 31.00° to 34.00°

Average moisture: Lump: 1.00% to 5.00%

Fines: 2.00% to 6.00%

### **17.2. Cargo Specifications -- Cockatoo Island**

Stowage Factor Iron Ore: Lump: 0.32 to 0.36 m<sup>3</sup>/mt

Fines: 0.29 to 0.32 m<sup>3</sup>/mt

Maximum Angle of repose: Lump: 27.00° to 30.00°

Fines: 31.00° to 34.00°

Average moisture: Lump: 1.00% to 5.00%

Fines: 2.00% to 6.00%

## **18. DEBALLASTING**

The requirements published by the Department of Agriculture and Water and The Environment in the document titled the “Australian Ballast Water Management Requirements” must be followed. This document, as amended from time to time, can be found at [www.agriculture.gov.au/biosecurity/avm/vessels/marine-pest-biosecurity](http://www.agriculture.gov.au/biosecurity/avm/vessels/marine-pest-biosecurity)

At all times it is the responsibility of the Master to ensure that the entire vessel's ballast can be discharged prior to the completion of loading operations. Any delays incurred throughout the loading awaiting the vessel to de-ballast shall be reflected on the Statement of Fact.

## **19. DEPARTURE PROCEDURE**

Once approximately 90% of the cargo has been loaded the loading operation will cease and a joint draft check shall be undertaken by the Master/Chief Officer to determine the balance of cargo remaining to be loaded. On completion of loading, a final draft survey will be conducted to determine actual tonnage loaded on the vessel which shall be reflected in the Mate's Receipt.

Vessel departure time will be confirmed by discussion between the Master and Pilot/Loadmaster and will be subject to operational schedules as well as tidal, weather and visibility conditions.

## **20. PORT SERVICE CHARGES**

Current port charges and berth fees for the Koolan and Island terminals are available from the shipping agents. Cockatoo Island Facility fees will be advised in due course. Transit fees for Cruise vessels, vessels at anchor and vessels transiting the sound will be available on request.

The cost of all services required at the Port are charged through the Shipping Agent and include:

- Pilotage
- Berthing
- Towage
- Agency

Other statutory charges payable by the shipowner and calculated by Kimberley Port Authority include:

- Navigation Safety levy
- Marine oil pollution levy and are based on the GRT of the vessel.

## **21. GENERAL INFORMATION**

Due to the remote location of the Port, facilities are extremely limited.

STORES AND PROVISIONS - Not available

REPAIRS - Not available

SHORE LEAVE - Not permitted

REPATRIATION - Is prohibited except in the event of an emergency.

BUNKERS - Not available

DIRTY BALLAST OR REFUSE - Cannot be accepted

FRESH WATER - Not available

MEDICAL FOR EMERGENCY PURPOSES ONLY - Not available. In emergencies, contact should be made with RCC and/or RFDS.

BANKING FACILITIES - Not available

VISITORS TO THE Koolan Island /Cockatoo Island FACILITY

Access to any one of the facilities is by light aircraft from Broome or Derby. Because of the limited capacity of scheduled flights, the difficulties in arranging extra flights and severe accommodation constraints at the terminals, the attendance of visitors is not normally possible.

Independent surveyors, ships' agents, buyers' representatives and others intending to visit should seek permission of the Terminal Manager, or their nominee, at least two days before the scheduled arrival of the Vessel. Early advice would be appreciated.

## **22. CRUISE VESSELS**

Yampi Sound is a popular destination for small and large cruise vessels.

All cruise vessels equal to or greater than 35.0m LOA, prior to arrival in Yampi sound must make a declaration to the Kimberley Ports Harbour Master with the following details, at least 24 hours prior to proposed entry into Port limits (by e-mail to [harbourmaster@kimberleyports.wa.gov.au](mailto:harbourmaster@kimberleyports.wa.gov.au)):

- Health status of all crew and passengers. The intended route and or anchorage location in Yampi Sound.
- Intended activities in Yampi Sound.
- Confirmation that the vessel master has reviewed all KPA Local Marine Notices in force and the vessel complies with all requirements.
- Attach the completed 'KPA Ship Masters pre arrival declaration – Yampi Sound & Derby' form.

## 23. DANGEROUS GOODS

Whenever Dangerous Goods as defined by the IMDG Code are to be carried by any operator within Yampi Sound the Harbour Master must be notified. Notification is to include:

- a) Name of vessel
- b) Date of Carriage
- c) Intended destination
- d) Type of Cargo

A Dangerous Goods Management Plan is to be submitted to the Harbour Master on request.

## 24. GLOSSARY

**CIM** means Cockatoo Island Mining Pty Ltd. CIM is the company that operates the Cockatoo Island Iron Ore Mine.

**CIM TS Anchorage** means the anchorage delegated specifically to ships loading iron ore via Trans-shipment barges and own ships gear, from Cockatoo Island.

**KPA** means the Kimberley Ports Authority.

**Port** means the land, the wharf and waters within the boundaries of the Port of Yampi Sound, Western Australia, as varied from time to time.

**Port Control Officer** means the person(s) appointed by Koolan Iron Ore Pty Ltd, Or Cockatoo Island Mining, or Cockatoo Island Resort to fulfil the duties as the Shore Based Stevedoring interface, Offshore Liaison and Contact and so appointed as the Port Security Officer under the requirements of the Maritime Transport and Offshore Facilities Security Act 2003 (CTH).

**Port Facility** means the facilities within the Yampi Sound used to provide the services and includes Koolan Island, Cockatoo Island, Cockatoo Island Resort.

**Shipping Agent** means the Shipping Agent nominated by the Port Operator.

## **25. DISCLAIMER**

The contents of this booklet are provided as a guide only and whilst reasonable care has been taken Kimberley Ports Authority accepts no responsibility for any changes which may occur.

The KPA acknowledges the assistance of the terminals at Cockatoo Is and Koolan Is and their assistance in the preparation of this document.

It is the responsibility of readers to make their own enquiries in relation to any facts referred to prior to acting on them.

## **26. KOOLAN / COCKATOO ISLAND GENERAL VESSEL REQUIREMENTS**

### **26.1. *Vessel Restrictions Bulk Carriers***

Vessels loading at any berth must comply with the latest SOLAS and MARPOL conventions and protocols. Vessels found to be deficient or substandard will not be permitted to load at any berth. In accordance with the Yampi Sound Safe Management System, the Harbour Master must be notified of any vessel defects or noncompliance with SOLAS/MARPOL/ Etc.

Vessels nominated for Iron Ore bulk carriage must comply with any KPA requirements that may be in force from time to time, in addition to the following minimum requirements:

1. Compliant with requirements of relevant KPA's Local Marine Notices and Port requirements.
2. Single deck bulk carrier, which is staunch and strong and, in every way, fit for the nominated voyage.
3. Engine/bridge aft.
4. Maximum twenty (20) years of age from the date of commissioning.
5. Suitable for the carriage of iron ore.
6. Classed Lloyds highest or equivalent (as per Institute Classification Clause).
  - Maximum arrival displacements tonnage of 60,000 tonnes
  - Capable of loading iron ore in accordance with SOLAS and IMO regulations.
7. No centreline beams, bulkheads or obstructions in holds.
  - The vessel is to comply with specific anchor, winch and mooring requirements as detailed herein.

8. ITF Certificate or equivalent.
9. Holds a valid ISM certificate.
10. Fully entered with a recognised P&I Club; and
11. Holds a valid International Ship Security Certificate.

**26.2.      *Additionally for vessels loading at Koolan Island***

1. Vessel must arrive in heavy ballast condition with required hold(s) filled with ballast water to meet the air draft restrictions of 13.5 metres alongside the berth at the first loading hatch. (Refer Appendix C for Ship loader Operating Envelope);
2. Maximum berthing approach speed of the vessel with 60,000 Tonne displacement is 0.125 m/second
3. No deck cranes or vertical logging poles. Vessel must be gearless.
4. A maximum length overall of 229 metres and beam of 32.3 metres applies. Vessels outside these dimensions may only be accepted with written permission from the Harbour Master, having been satisfied prior to approval that:
  - The berth (at Koolan Island) is engineered in such a way as to be suitable to withstand all the forces the vessel will place on the infrastructure.
  - The deviation from the limits is risk assessed with input from suitable subject matter experts.
  - The deviation from the limits is risk assessed with input from suitable subject matter experts.
5. Mooring lines – wire or heavy synthetic mooring lines will not be accepted. Due to the extreme tidal range experienced at Koolan Island, all mooring lines must be soft rope, lightweight so as to float on water, such as polypropylene. (Ref 23.13).

**26.3.      *Nomination of Performing Vessel***

The following information should be provided at the time of officially nominating a vessel:

1. Name of vessel, country and year built.
2. Previous name (if applicable).
3. Port of registry/Lloyds No. /IMO No.
4. Type of vessel.
5. Class Society & Classification.
6. Nationality of Masters/Officers/Crew.



7. Written authorisation that the master's and Officer's certificates are in order by a competent authority.
8. Arrival Draft/LOA/LBP/Beam.
9. Summer Draft/Summer DWT/Summer DISPL.
10. Gross Tons/Net Tons.
11. Call sign/Email/Fax.
12. Number of holds/Hatches/Type of hatch covers.
13. Confirm no beams, centreline bulkheads or obstructions in holds.
  - Current general arrangement/pocket plan showing deck layouts and configuration of winches and mooring equipment
  - Number of anchor cable shackles both port and starboard.
14. Advise when the Pilot ladder was last replaced and confirm that the ladder is fitted with a manufacturer's compliance plate. Does the Pilot ladder and Man ropes comply with KPA Local Marine Notice requirements.
15. Vessel must have a current ITF certificate. A copy is to be provided.
16. Confirmation of the following information:
  - a) Date of last survey
  - b) Date of last special survey
  - c) Date of last gear survey
17. Owners P&I and Expiry date.
18. Insured Hull and Machinery value.
19. Confirm the vessel is classed as Lloyds 100A1 or a member of IACS, ACS or equivalent as per Institute Classification Clause.
20. Advise whether the vessel has on board AUS 40, AUS 41,
21. AUS 733 or equivalent.
22. Confirm the vessel has the following valid certificates under Chapter IX of the SOLAS: ISM code and certification; Document of Compliance; Safety Management Certificate; International Ship's Security Certificate; (Copies of the DOC, SMS and ISSC are to be attached).
23. Where and when the vessel's last Australian port of call was and any AMSA findings.
24. Whether the vessel subject to US sanctions.

25. Names of the last 10 ports of call, dates arrived/sailed, and cargoes carried.
26. Vessel's full itinerary including ports enroute and estimated port stay at each port.
27. Preliminary stowage plan; and
28. Full contact details of Owners and Name of Company Security Officer.

**Additionally, for Vessels loading at Koolan Island Terminal:**

29. No deck cranes or vertical logging poles to obstruct the ship loader. The ship loader is not retractable.
30. Owners to confirm the vessel has available six non-wire/nylon mooring lines, each of a minimum of 220 metres in length, both fore and aft, four (4) of which are fitted, both fore and aft, to self-storing, independently operated and well-maintained winch drums. (Ref 23.13).
31. Advise whether winches are tension set.
32. Confirm winches are hydraulically driven.
33. Confirm break liners are made from non-asbestos material.
34. Advise the number of mooring ropes, length, diameter and material both fore and aft.

**26.4. Shipping Agent**

Yampi Sound does not have a resident shipping agent as all marine personnel fly to the islands by light aircraft or small vessels. All vessel requirements must be referred to a Shipping Agent.

The details of a Shipping Agent will be provided upon request.

**26.5. Communications**

All communication regarding vessel movements and marine operations should be in accordance with this SMS

Koolan Island Mining, Cockatoo Island Mining terminals, can be contacted on Ch 16.

As appropriate Vessels should maintain VHF listening watch on Channel 16. One (1) hour prior to boarding, the Pilot will establish VHF communication with the vessel and allocate appropriate marine working channel.

The most effective method to commence communication with the Harbour Master is via email: [harbourmaster@kimberleyports.wa.gov.au](mailto:harbourmaster@kimberleyports.wa.gov.au).

**26.6. Vessel Condition**

Vessels at the Port in ballast must maintain sufficient ballast on board to keep the propeller fully submerged to assist with safe manoeuvring.

**26.7.      *In addition, for Vessel arriving into Koolan Island***

Vessels are to ensure that the cargo hatch (including railings) air draft of 13.5m at MHWS (10.1m), (adjusted for real time tidal heights at time of berthing) is not exceeded at any time for berthing and the duration of loading operations. If necessary, vessels are to arrive in 'heavy ballast condition' to achieve the required air draft. Consideration should be given as to when de-ballasting should commence, after berthing, in relation to High Water times. Should the vessel approach 13.5m air-draft, the Pilot and personnel operating the Ship-loader must be informed immediately on the provided UHF Channel 3. The situation should be assessed by the on-board pilot and if necessary de-ballasting should cease and the Ship-loader should boom out from the vessel.

Refer to the Tidal Ranges given in Table 1 and the Ship-loader Operating Envelope attached at Annexure C.

Note: The Pilot will not berth the vessel if the air draft is greater than the nominated maximum amount or the propeller is not fully submerged with any re-ballasting time marked as "Time Not to Count" on the Statement of Fact.

**26.8.      *Hold Cleanliness Requirements***

Vessels calling at the Port to load iron ore in bulk must ensure that all holds to be loaded are sufficiently clean by preparing the holds in accordance with the criteria as follows:

1. The holds/cargo spaces must be totally empty, clean, dry and clear of previous cargo residues, chemicals, all rubbish, cargo gear, dunnage, drums etc
2. No loose scale or rust present on the tank-tops/hold floors, bulkheads and ship-sides or undersides of hatch covers.
3. No leaks from fuel or ballast tanks into holds/cargo spaces.
4. All manhole covers leading from holds/cargo spaces are to be secured and sealed.
5. Hatch covers must be watertight when closed.

**26.9.      *Hold Cleanliness Inspection***

Prior to the vessel proceeding to the Port Facility the pilot or surveyor will undertake a hold cleanliness inspection to determine whether the vessel meets the terminal's hold cleanliness requirements.

If natural daylight is insufficient the vessel will be obliged to provide adequate lighting to allow for proper inspection.

Once the pilot/surveyor is satisfied that the vessel's holds/loading compartments are in all respects ready for loading the vessel will be permitted to proceed to the load.

If a vessel does not pass the hold cleanliness inspection it will be issued with a certificate indicating that the holds/cargo compartments have failed survey and shall remain at anchor

until such time that all holds/cargo compartments have been re-presented for inspection and passed for loading by the pilot/surveyor.

Any consequences, costs and/or delays incurred because of a vessel failing the hold cleanliness inspection will be for the vessel's expense.

## **26.10. Berthing Arrangements**

### **26.10.1. Berthing Arrangements at Koolan Island**

Vessels will predominately berth starboard side to, depending on prevailing tidal and wind conditions. The tugs will assist with berthing as directed by the pilot. An anchor will not be normally used during berthing operations, but the pilot will advise requirements prior to the vessel proceeding to the berth. The line boat will run the ship's mooring lines to the dolphin in a sequence advised by the pilot.

The Koolan Iron Ore Export Facility consists of seven (7) berthing and two (2) mooring dolphins aligned in an approximate south-east – north-west direction running parallel to the tidal streams. The general arrangement of the berth is shown at Appendix A.

The total distance between dolphins one (1) and nine (9) is 377 metres. The distance between each dolphin is set out in the table below:

Dolphin 1 to Dolphin 2	50 metres
Dolphin 2 to Dolphin 3	40 metres
Dolphin 3 to Dolphin 4	45 metres
Dolphin 4 to Dolphin 5	47 metres
SHIPLOADER	
Dolphin 5 to Dolphin 6	43 metres
Dolphin 6 to Dolphin 7	45 metres
Dolphin 7 to Dolphin 8	45 metres
Dolphin 8 to Dolphin 9	62 metres

Upon berthing the initial draft survey will be conducted by the Pilot/Loadmaster in conjunction with the Master/Chief Officer. The intended loading and stowage plan will then be finalised and agreed upon. Once the Shipping Agent and Port Control/Security Officer have completed their documentation, the Port Control/Security Officer will give permission for loading to commence.

### **26.10.2. Berthing Arrangements at Cockatoo Island**

Vessels will be piloted from the anchorage or PBG into the CIM TS Anchorage. When the vessel has securely anchored in the correct position and deployed 7 shackles, the cargo barges will be brought alongside.

The pilot will remain onboard as Pilot/Loadmaster (PLM), in order to facilitate an efficient and safe cargo operation on behalf of all parties. The PLM (if onboard) can be the first point of

contact between the ship and terminal/terminal operations. In emergency situations the PLM will liaise with the Terminal and other external authorities as required.

#### **26.11. Notice of Arrival at the Load Port**

The Ship's Master or owner is required to provide the Shipping Agent with Daily updates of the vessel's GMT noon position and ETA at the load port Ten days out from arrival and include daily temperature recordings and health status of all crew on board.

The Ship's Master or owner is required to provide notice of the vessel's estimated arrival time at the Port as per the following, include daily health declarations and temperatures as required of all on board:

- For Ten (10) days prior to arrival
- Twelve (12) hours prior to arrival

Where Port services have been ordered and the vessel fails to arrive within six (6) hours of its twenty-four (24) hour ETA advice, it is likely a cancellation fee will be incurred, covering costs associated with pilotage, towage, line-boat and mooring crew services as appropriate.

#### **26.12. Preliminary Stowage Plan**

48 hours prior to the vessel's arrival at the export facility the Master is to provide the Shipping Agent with a copy of the preliminary stowage plan, including the number of proposed warps, anticipated arrival and departure drafts, and time required for de-ballasting.

#### **26.13. Proceeding to the Loading terminal**

##### **26.13.1. Proceeding to the Loading Berth-Koolan Island**

Once the Pilot has inspected the vessel's winches and mooring equipment and is satisfied that the vessel is in all respects ready for loading, berthing of the vessel shall then take place at the discretion of the Master and the Pilot with due regard to following factors:

1. The sustained wind speed does not exceed 20 knots (depending on the direction) and with a maximum beam component of 10 knots onto the jetty.
2. When there is no tropical cyclone or tropical depression which is likely to impact the Port within 72 hours.
3. If DFES issue a cyclone alert level the Koolan Island cyclone management plan will be implemented and the Harbour Master must be informed of this. All movements within the port must have permission from the Harbour Master while in any cyclone alert level.
4. Approaches to the Koolan Island ship-loading facility will only be attempted:
  - During day light hours, with wind, tide and current being within the berthing parameters as defined below, and with due regards to all other Port Facility safety parameters

- Suitable direction and rate of the Current stream - Current is to be less than 1 Knot i.e. slack water
- Berthing: Maximum 20 knots, Maximum beam component 10 knots, Current less than 1 Knot
- Departure Starboard side alongside: Maximum 40 Knots, Maximum beam component 20 Knots, Current no restrictions
- Departure port side alongside: Maximum 20 Knots, Maximum beam component 10 Knots, Current less than 1 Knot i.e. slack water.

#### **26.13.2. Proceeding to the Loading Terminal (Cockatoo Island)**

Once the pilot has inspected the ship and is satisfied that the vessel is in all respects ready for loading, anchoring of the vessel shall then take place (at CIM TS Anchorage). This is provided that:

- There is no tropical depression or cyclone likely to impact the port within 56 hours: Noting that all movements within the port, concurrent with a DFES cyclone alert, must have express approval from the Harbour Master.
- Arrivals are daylight only.

#### **26.14. *Towage and Mooring Services***

The use of tugs and line boat is compulsory for all vessels when berthing, warping and departing from Koolan Island. The tug's own tow lines are to be always used. The tugs and line boat will assist as directed by the Pilot.

Towage is undertaken in accordance with the Amended United Kingdom Standard Conditions for Towage and Other Services (revised 1986).

#### **26.15. *Winches Requirements at Koolan Island***

1. Winches may be hydraulically driven or direct coupled electric motor winches. All winches must be in good working order
2. There must be at least two winches each with a total of 4 independently operated winch drums both fore and aft of the vessel on which are stowed the required soft mooring ropes.
3. Warping drums or similar that do not hold the full minimum 200 metres of the mooring line are not considered winches and are not suitable for securing or warping.
4. Winches must be in first class working order and able to supply full power.
5. There must be no rust on the brake drums and all brake liners must be in good condition.
6. The worm drive break lever must be able to turn freely and be well cleaned and greased.

7. Forward and aft winch areas are to have suitable lighting to enable personnel to work throughout the night. Adequate deck and winch lighting is required for the vessel to be berthed or sailed by night.
8. All walkways around the winches should be in sound condition and all guards that should be fitted to moving winch parts are fixed securely in place.

#### **26.16. Mooring Equipment at Koolan Island**

The vessel's mooring equipment shall comply with the following minimum specifications:

- All roller leads should be free and in good condition.
- Ship ropes should be soft regular lay polypropylene or similar low stretch composition (polypropylene/polyester composite fibre), in good condition, at least 220 metres in length and be buoyant (floating). Six (6) working ropes are required at each end. Of the six (6) ropes at each end there should be a minimum of four (4) ropes stowed on independently operated winch drums at each end of the vessel. All ropes shall be fitted with a spliced eye at least one (1) metre long at the outer end. Two ropes are required at each end of the vessel to assist in distant runs and in case of a rope parting.
- Should a vessel carry ropes of a different size or composition the Master should advise the Port Control Officer via the Shipping Agent at least seven (7) days prior to arrival of the number, size, composition, length and location (winch position) of these ropes.
- Wire or hard lay synthetic or nylon mooring lines ARE NOT acceptable as there are no facilities on the wharf to handle them.

#### **26.17. Responsibility for Loading Operations**

The vessel's personnel are advised that the responsibility for the loading operation on board the ship rests solely and absolutely with the Ship's Master. It is the responsibility of the ship's personnel to ensure safe operations when alongside.

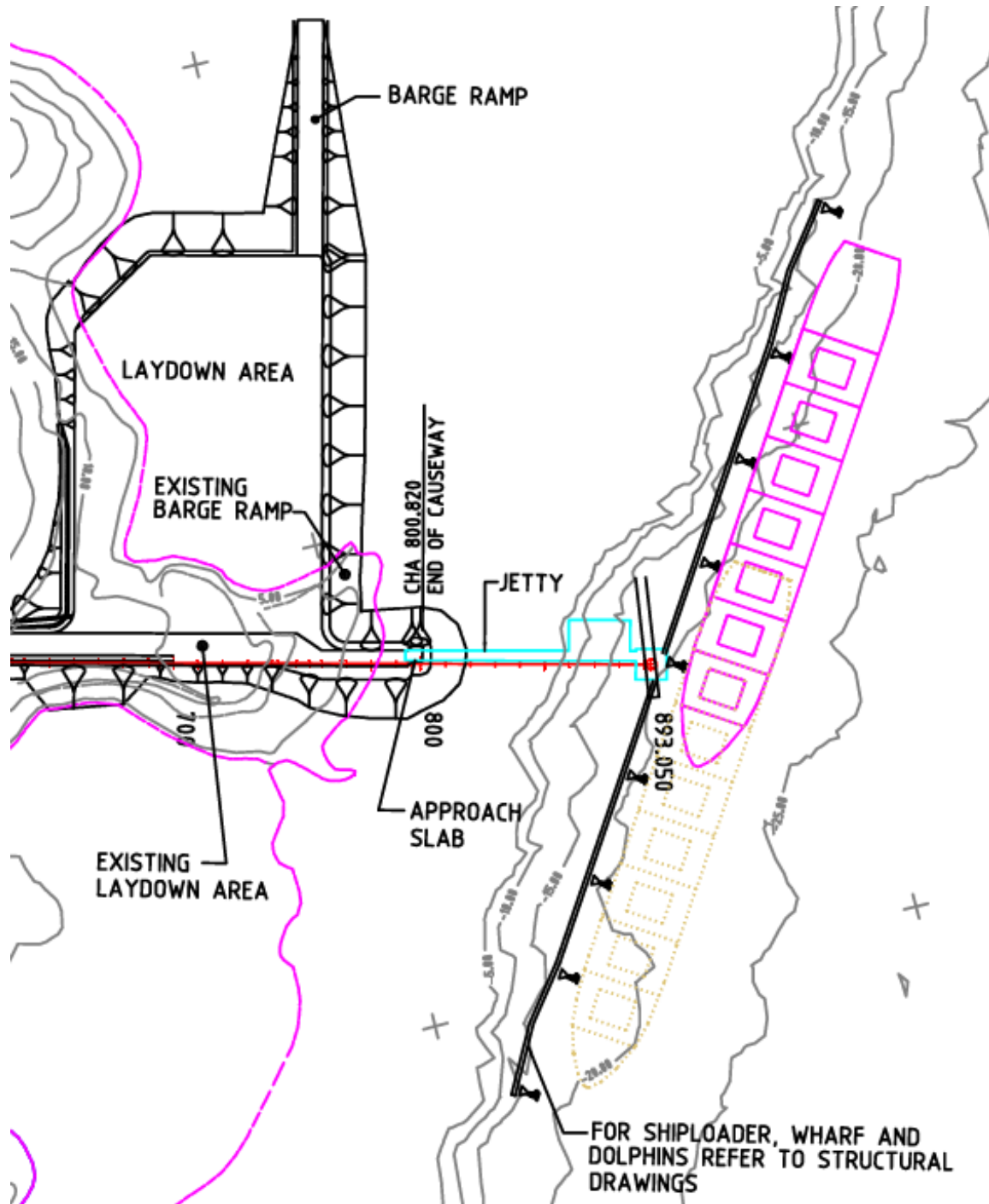
Upon arrival, a 'Ship to Shore' Safety Checklist for Bulk cargoes (IMO) will be agreed to and signed off on by both the Port Facility Security Officer (or PLM, if authorised by the terminal) and the Ship's Master. The vessel's personnel are advised that responsibility for the discharge or escape of oil from a vessel rests with the ship. In the event of a prosecution being taken by the appropriate authorities' heavy penalties together with liability for dispersal costs and damages for pollution damage is provided for by legislation.

The Port Facility has the capacity to effectively manage a level 1 oil spill response (first strike) as outlined in the state hazard plan, Maritime environmental emergencies (MEE) and the terminal's Marine Oil Spill Contingency Plan.

#### **26.18. Code of Responsibility**

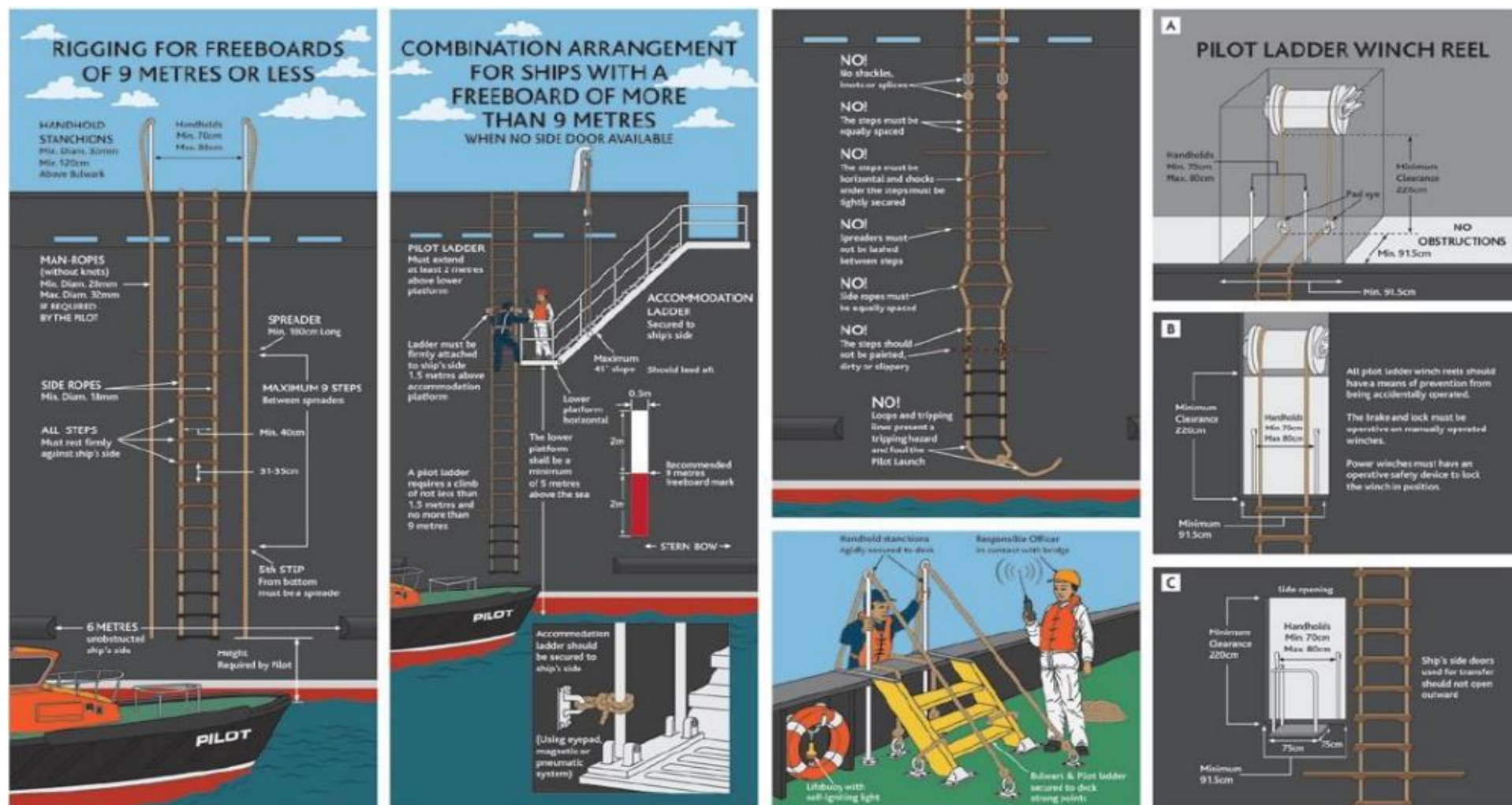
Emphasis is placed on the fact that the completion of a safe and successful cargo handling operation is dependent upon effective co-operation, co-ordination and communication (“3 Cs”) between all parties involved. All operations should be conducted in the spirit of mutual agreement.

**Appendix A – Koolan Island Jetty and Wharf Areas (URS 2006)**

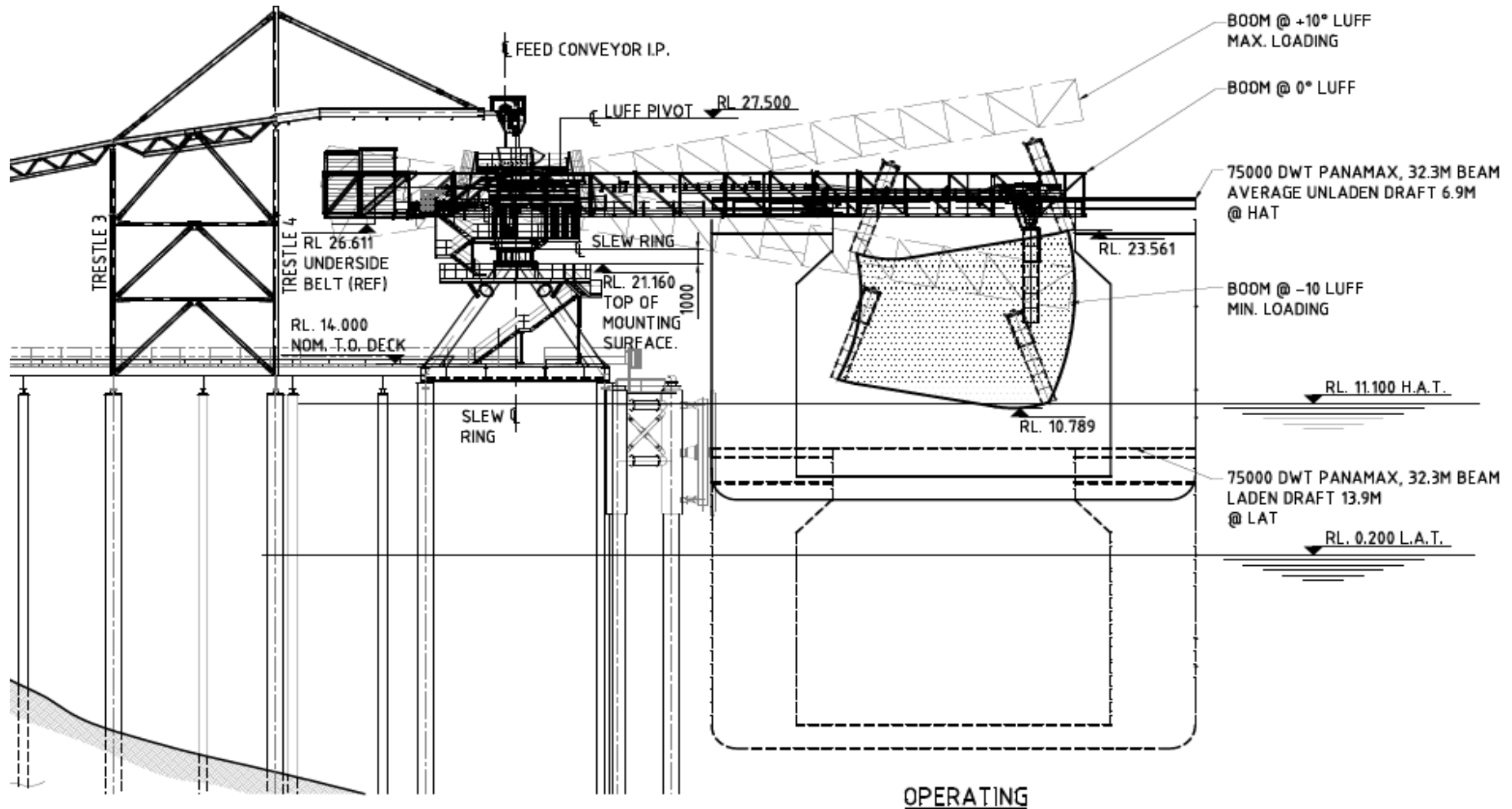


## Appendix B – Yampi Pilot Ladder Arrangements

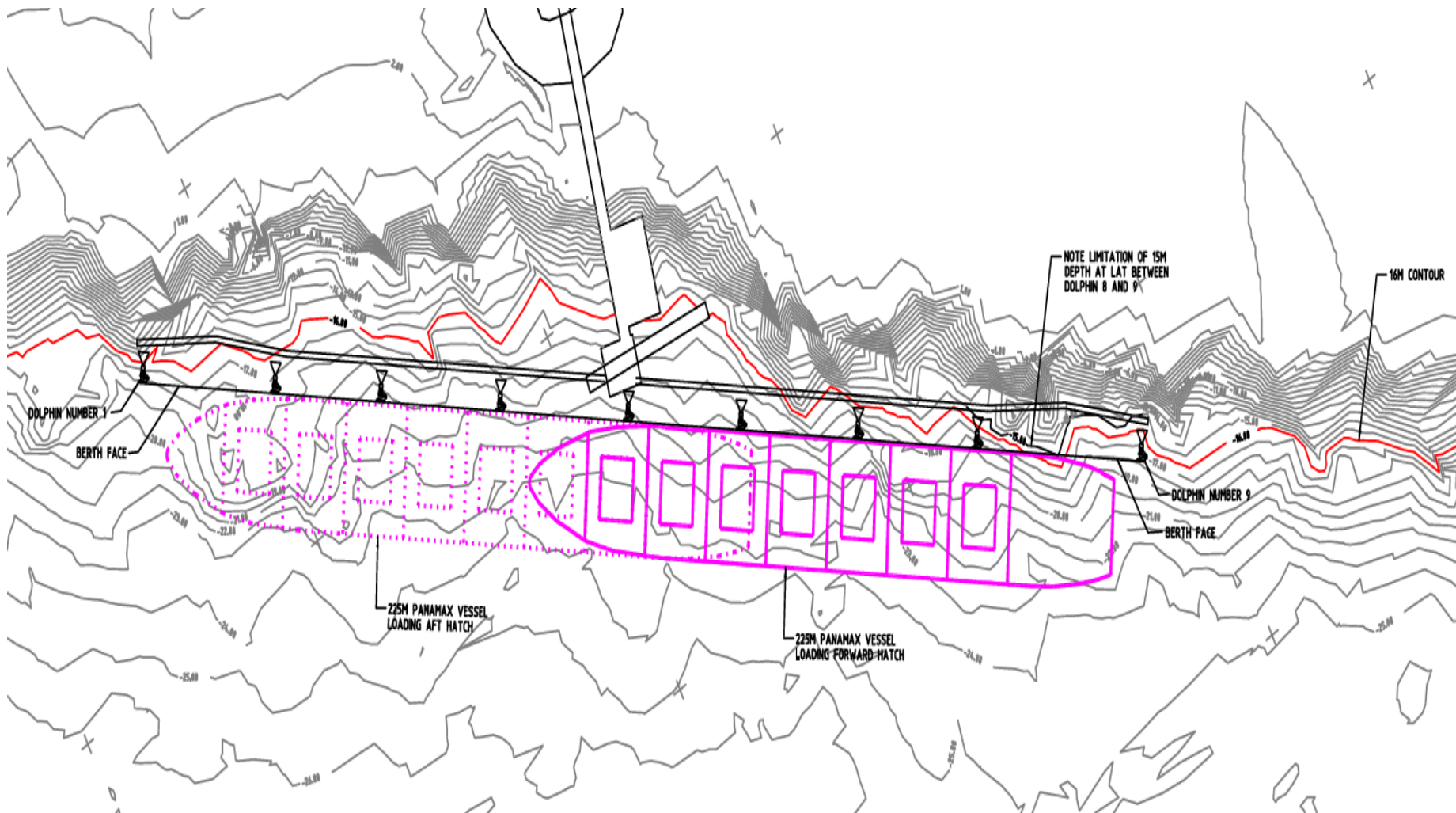
Pilot Ladders are to be rigged strictly in accordance with SOLAS guidelines as shown below.



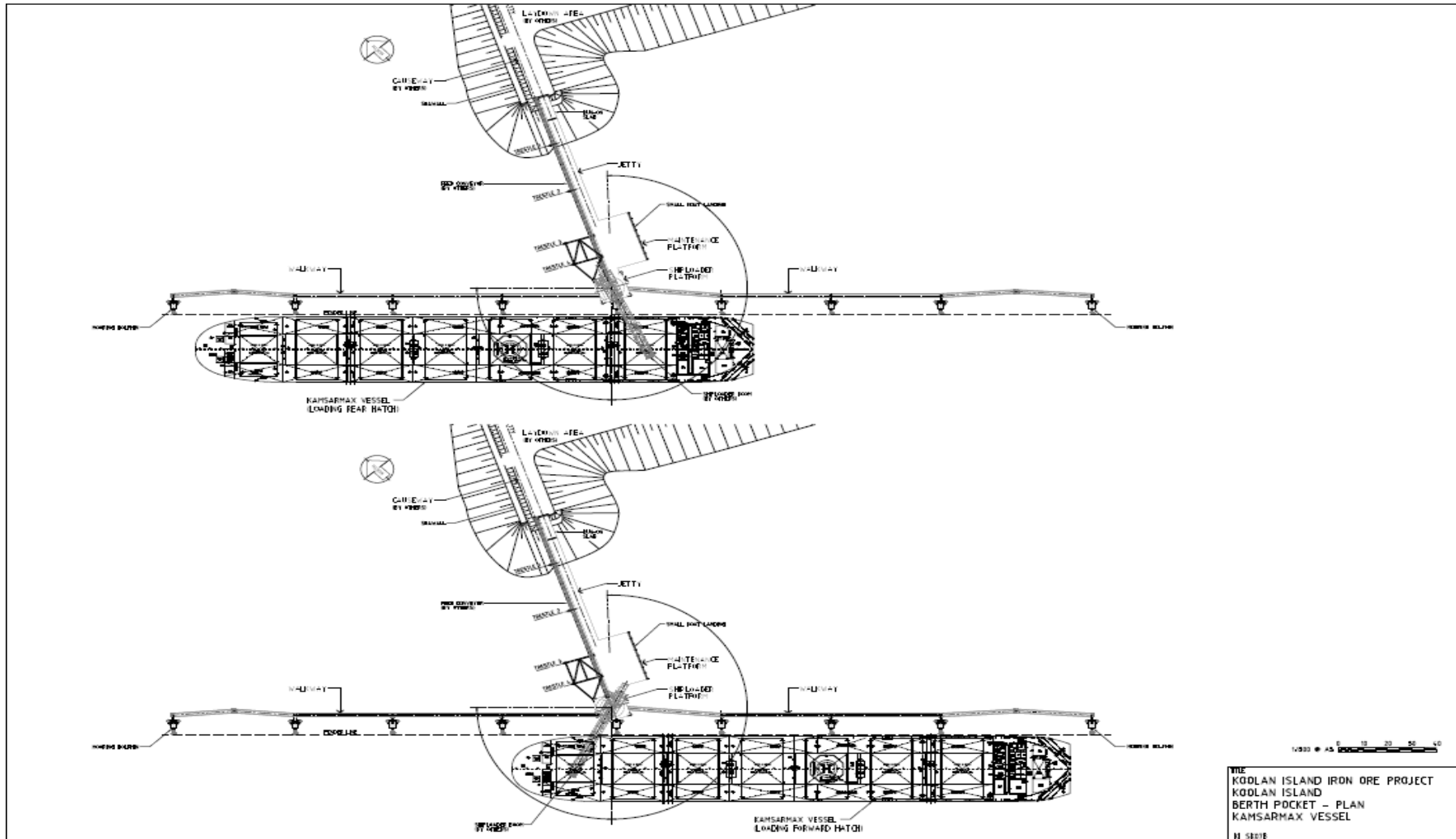
**Appendix C – Shiploader – Operating Envelope (URS Australia, 2007)**



**Appendix D - Koolan Island Berth Pocket (URS Australia, 2007)**



**Appendix E - Koolan Island – SK07b Kamsarmax vessel 2020**



**Appendix F - Cockatoo Island Trans Shipping Anchorage Chartlet**

