# 5. Port infrastructure

# 5.1 Berth and channel information

#### Table 7 Berth information

Channel / berth	Design depth (metres)	Required UKC	Berth pocket (metres)
South Channel	12.2	1.2	
Departure Channel	11.7	1.2	
Cora Bank South Channel	7.3	0.6	
Jessica Point to Lorim Point Channel	8.8	0.9	
Lorim Point Swing Basin	9·4 (diameter 487 metres)	0.9	
Evans Landing Wharf	9·9 (diameter 335 metres)	0.9	200
Lorim Point East and West Export Wharf	12·3	0.3	510
Humbug Point Wharf	9.5	0.3	245

Please note that depths are subject to change; consult the Notices to Mariners for latest information.

A Weipa port layout (<u>16.5</u>) has been established that extends 50 m from the Lorim Point wharf, including the access jetty and mooring dolphins, to the shore. Vessels not involved in port operations, including recreational vessels, are prohibited from entering the declared zone.

## 5.1.1 Lorim Point Wharf

The Lorim Point export wharf consists of two berths: Lorim Pont East and Lorim Point West. Together they have a total berthing length of 548.6 m, capable of berthing one vessel each of 236 m overall length. The depth of water alongside the berths is at present 12.3 m at lowest astronomical tide. The wharf consists of 13 sheet pile, concrete capped, sand filled caissons 15.2 m in diameter. It is fendered by tubular rubber fendering and conical buckling fendering and interconnected by tubular steel piling supporting the rail structure for the ship loaders and a light roadway inshore of the loading facility. There are mooring dolphins at each end of the wharf. Bollards and quick release hooks are fitted at intervals along the full length of the wharf and on the dolphins.

The following minimum / maximum size restrictions apply to each berth:

#### Table 8 Lorim Point - berth restrictions+

Lorim Point minimum / maximum berth restrictions (applying to each berth)			
	Minimum	Maximum	
LOA	175.00 m	236.00 m	
Beam	23.00 m	43.00 m	
Laden Draft	10.00 m	12.20 m	
Laden Freeboard	4.00 m	5.85 m	
Laden Displacement	30,000 t	108,000 t	
Ballast Draft	5.50 m	9.00 m	
Ballast Freeboard	8.50 m	9.55 m	

Vessels outside of these parameters will only be approved berthing following a full assessment and permission granted by the Regional Harbour Master (Cairns), in consultation with the port authority NQBP.

## 5.1.2 Loading gantries

There are two ship loaders at the Lorim Point berths each with a capacity of 6500 tonnes per hour.

For the safe berthing of vessels at all berths the operator is required to have the loaders parked out of the way at the designed securing site for that equipment.

When any such equipment is required to have the main boom or structure down for maintenance and so on, and it protrudes out from the berth, and there is no vessel on the berth at the time, then the terminal operator is required to notify VTS of the times that the particular piece of equipment will be in this condition.

Should this equipment be in a lowered or in a boom down condition during night hours then the structure will need to be adequately lit.

Existing mooring arrangements of 4 head/stern lines and 2 fore/aft springs (4 and 2) being changed to 3 head/stern lines, 2 fore/aft breast lines and 2 fore/aft springs (3, 2 and 2). If the loader is to be positioned adjacent to the ship with its boom down, then it should be not less than 40 metres aft from the bow or 40 metres forward of the bridge position.

In the event that a ship is no longer securely attached to the wharf (e.g. a parted line) or if the ship requires a tug to stay alongside, loading is to cease immediately.

Figure 1 Ship loader at Weipa (courtesy NQBP)



### 5.1.3 Evans Landing Wharf

The total berthing length is 63.80 m. The maximum LOA for vessels at this berth is 185 m. The berth consists of two berthing dolphins with conical buckling fendering and two mooring dolphins. Various older structures exist, comprising a dolphin either side of the downstream berthing dolphin and a timber decked, steel piled structure between the berthing dolphins supporting a light roadway. Various sized quick release hooks and bollards are fitted and since these vary from trawler sized equipment up, vessels should ensure that they are tied to the appropriate size equipment.

Connections for the discharge of distillate, aviation and motor fuels are situated on the wharf.

Distillate, jet fuel and unleaded grade fuels are all discharged through a 200 millimetre line.

Vessels up to 50 m LOA have no restrictions.

Vessels with an LOA more than 50 m utilising this berth, must have a minimum parallel body length (PBL) of 80 m in normal ballast conditions.

An exemption to this ruling is valid for the dredge Brisbane.

Application for vessels outside of these parameters to berth, are to be made to the Regional Harbour Master (VTS) Maritime Safety Queensland.

Fueling operations are to cease during the transit of large vessels past the berth and mooring lines are to be tended and a watch kept.

The use of mooring wires by NGF/GF Tankers is prohibited.

# 5.1.4 Humbug Point Wharf

The total berthing length is 114.3 m, capable of berthing a vessel up to 195 m LOA. Vessels in excess of this length may be berthed subject to confirmation by Regional Harbour Master (Cairns). The depth of water alongside the berth is 9.5 m. The berth consists of six

interconnected cellular sand filled steel caissons. Mooring dolphins are established on either end of the berth. The wharf is connected to the Weipa mine railway system and is used solely for the discharging/loading of general cargo, stores and equipment. The deck of Humbug wharf is 4.28 m above tide datum.

## 5.1.5 Jessica Point anchorage

The following rules apply to vessels utilising the Jessica Point anchorage

- Inbound vessels will arrive to moor on the flood tide
- One tug is to be used on arrival
- An approved line boat is to be used to assist in running two stern lines to the mooring, both are to be passed through the mooring and back to the vessel.
- Departure may be scheduled at any stage of the flood tide
- The vessel must maintain an SUKC of 0.9 mtrs between the mooring position and Lorim Point and 1.2 mtrs in the South Channel.
- Departures are not to hinder the movement of tidal dependant vessels.
- When a vessel is departing the Jessica Point anchorage the movement is to be treated as a "Lorim Point" double move.
- Example:
- Inbound vessel enters South Channel 2h 45m before HW
- Outbound vessel from Lorim Point departs 1h 45m before HW
- Vessel at Jessica Point departs anchorage 1h 45m before HW
- Inbound vessel remains in Cora South until Jessica Point vessel clears Lorim Point berths.
- Pilot will board a Jessica Point vessel in sufficient time to let go buoy moorings and prepare to raise anchor.

# 5.2 Leading lights and beacons

#### **Table 9 Navigation aids**

Duyfken			
Duyfken Point light	Tower	12° 34'S, 141° 36'E	FI.5 sec 17M Racon (K)
South Channel			
Fairway Beacon SC 2	Beacon	12° 42·140'S 141° 40·020'E	LFI.10 sec 8M
South Channel lateral beacons SC 1, 3-21	Beacons	Synchronised to flash every 4 secs.	FI R/G 4 sec
Lateral beacon SC 22	Beacon	Marks the end of the South Channel and junction of Embley River and Jackson Channels	V.Q.Y

Gonbung Point leading lights	White towers	Lights in line 078° mark centre of South Channel	F.Gn (F. by day)
Cora Bank South Channel			
Lateral Buoy SC 24	Red buoy	Northern side of Embley River channel	Q.FI.R
Cora Bank West beacon CBW	Y.B.Y	West cardinal of Cora Bank	Q.FI (9)15 sec
Cora South Channel lateral beacons CS 1- 6	Beacons	Synchronised to flash every 4 secs.	FI.R/G 4 sec
Cora Bank East beacon CBE	B.Y.B	East cardinal of Cora Bank	V.Q(3)5 sec.
Departure Channel			
Cora North Channel Lateral beacons 1, 3- 14, 16, 18	Beacons	Synchronised to flash every 4 secs.	FI.R/G 4 sec
Lorim Point wharf clearance leads (90)		(Rear) 12° 39·74'S 141°50·90'E (Front) 12° 39·81'S 141°51·03'E Indicates a clearance of 133 m from the line of fenders at this wharf.	F.B day (occas.) F.Bu night (occas.)
Lateral beacon CN2	Beacon	Off Gonbung Point	Q.FI.R
Hey River			
H1	Beacon	12° 42.3S, 141° 53.0E	FI.G.4s
Н3	Beacon	12° 43.1S, 141° 53.1E	FI.G.4s
H5	Beacon	12° 43.7S, 141° 53.6E	FI.G.4s
H7	Beacon	12° 44.7S, 141° 53.7E	Fl.G.4s
Special Mark Yellow	Beacon	12° 43.14'S 141° 53.9'E	FI.Y.2s

# 5.3 Anchorage conditions

Vessels are only to anchor in the position and area designated by the VTS centre. Upon anchoring, vessels are to advise Weipa VTS of their anchoring time and position and are to maintain a continuous listening watch on VHF channel 16 and any other channel as instructed.

Vessels are to report to the VTS centre if dragging their anchor and are not permitted to immobilise engines without the written approval of the Regional Harbour Master (See 10.2.1 <u>Immobilisation main engines</u>)

# 5.4 Anchorage areas

## 5.4.1 External anchorages

Mariners are advised that ships waiting at the pilot station for either pilots or orders should use the following anchorages in Albatross Bay.

The following anchorages may also be used if not occupied by vessels awaiting entry to Weipa:

Area	Location	
Anchorage A	12° 44·8'S 141° 36·2'E	
Anchorage B	12° 45·5'S 141° 35·2'E	
Anchorage C	12° 46·0'S 141° 36·3'E	
Anchorage D	12° 46·2'S 141° 34·2'E	
Anchorage E	12° 46·7'S 141° 35·3'E	
Anchorage F	12° 47·2'S 141° 36·4'E	

#### 5.4.2 Emergency anchorages

There are two emergency anchorages within the Weipa pilotage area.

Area	Location	
Detained vessel anchorage	12° 45.5'S 141° 38.0'E	minimum UKC 10% draft
Harbour emergency anchorage	An emergency anchorage has been established at the eastern end of the Cora Bank Channel that is marked by three special light buoys FI.Y.2.5 seconds. Permission must be obtained from the REGIONAL HARBOUR MASTER before this anchorage can be used.	

The bottom is soft mud, and the holding is generally good, but care must be taken during strong westerly winds.

The attention of masters is also drawn to section 10 Work permits, which requires prior permission of the Regional Harbor Master for the immobilisation of propelling machinery and immediate notification in the event of immobilisation as a result of any breakdown or failure of the propelling machinery. Immobilisation of main engines at anchorages within port limits will not be condoned except under special circumstances as decreed by the Regional Harbour Master (Anchoring Recommendations, Marine Notice 03/2014).

### 5.4.3 Prohibited anchorages

Ships are not to anchor in the zone which extends three miles to seaward of the fairway beacon.