

## 5. Port Infrastructure

### 5.1 Berth Information

Table 7 Berth information

Berth	Design depth	Berth face (M)	Height above	Berth pocket	Max LOA	Comments
M1	10.6	123.6	9.44	210x35	210	Petroleum by 200 mm pipeline at 350 tph — storage 52,000 mt Ethanol by 200 mm pipeline at 200tph storage 13,500 mt Bunkers — gas oil by 200 mm pipeline at 300 tph General cargo
M3	13.0	230	9.0	200x35	225	Bulk raw sugar by rail mounted gantry at 1650 tph. Diesel by 450mm pipeline at 2,900 tph 64,000 mt storage
M3 Wider Pocket	11.0	230	9.0	200x40	225	RoRo
M4	10.6	140	9.0	155x35		Bulk refined sugar by fixed ship loader at 500 tph Liquid chemicals by 200 mm pipeline at 250 tph General cargo.
M5	12.5	165	9.8	270x40	230	Bulk fertiliser (grabs and hoppers) Iron concentrates — grabs

						Bulk grain (rail mounted gantry at 1000 tph) Break bulk cargoes Petroleum
Small Craft Harbour (Mackay Marina)	3.5			Various	50m	Tourist terminal — marina amenities — public boat ramp Channel depth 4.5 metres Unleaded and diesel fuel, water, and power Maximum beam <20m, vessel's draft >3m subject to berth limitations.

Note: depths are subject to change — please consult the [Notices to Mariners](#) for latest information.

The sugar ship loader at berth M3 is fitted with a mechanical trimmer, has a maximum outreach to the centre of the chute of 17.5 metres from the fender and a maximum air draft (lowest astronomical tide to horizontal boom) of 20.8 metres. Maximum loading rate is 2250 tonnes per hour and average loading rate of 1650 tonnes per hour.

## 5.1.1 Anchorage Areas

Ships are only to anchor in a position as directed by the VTS centre.

There is a prohibited anchorage area defined by a decked line drawn from the following positions:

- a) 21° 05·82'S                      149° 13·5'E
- b) 21°06·78'S                      149°16·55'E
- c) 21°07·63'S                      149°15·70'E
- d) 21°07·63'S                      149°13·20'E

Chartered anchorages (N21 to N25 have been designated for the use of ships waiting to berth at the port of Mackay upon anchoring, ships are to advise 'Mackay VTS' of their anchoring time.

Ships at anchor in the pilotage area are:

- To maintain a continuous listening watch on VHF channel 10 and 16 and any other channel as instructed.
- To report to the VTS centre if dragging their anchor; and
- Not permitted to immobilise engines without the written approval of the RHM ([10.1.1 Immobilisation main engines](#)).

## 5.2 Navigation Aids

### 5.2.1 Leading Lights

**Table 8 Leading lights**

Navigational aid	Type	Characteristic	Height (m)	Range (M)	Leads in line
Harbour sea leads	Front lead	Night F R, by day F W	12	8	277.5°
	Rear lead	Night F R, by day F W	21	8	
Harbour entrance leads	Front lead	PEL Sector Light F.W Fl.RG	16	2	254.8°
	Rear lead	F.Bu	38.5	2	

Mackay Marina entrance leads	Front lead	F.Bu (F day)			209.8°
	Rear lead	F.Bu (F day)			

## 5.2.2 Breakwater Lights

**Table 9 Breakwater Lights**

Navigational aid	Characteristic	Height (m)	Range (M)
Forgan Smith Point light	Iso. G.2sec	9	5
Bagley Point light	Iso. R.2sec	8	5
Main Breakwater light	Q.R.	9	5