C3.1 Project Overview
The Port of Cairns is the principal port in Far North Queensland, with the main industries being sugar, agriculture and tourism. Imports include refined fuel products, fertilizers and general cargo and exports raw sugar, molasses and general cargo. Regular shipping services have been established to service the small communities in the Gulf of Carpentaria and the Torres Strait as well as the mining communities in Papua New Guinea and Indonesia.

The Port of Cairns is a regular port of call for cruise ships and is a base for Royal Australian Navy patrol boats and a large fishing fleet. There is a large marina catering for vessels up to super yachts and a significant fleet of tourist vessels that provide daily tours to the Great Barrier Reef.

Far North Queensland Ports Corporation Limited (trading as Ports North), with support from the Queensland State Government, initiated the Cairns Shipping Development Project (henceforth known as ‘the project’) to expand cruise ship tourism opportunities by allowing larger cruise ships to enter the Port of Cairns. The project will involve dredging the inner port, outer channel and Crystal and Smith’s Creek Swing Basins to increase the channels width and depth.

A demand study carried out as part of the study has predicted that by 2026 the number of mega sized cruise ships accessing the port as a result of the improved infrastructure will be 63. This compares to the 1,994 vessel arrivals at the Port of Cairns in the 2012/13 financial year (Ports North, 2013). These were a mix of bulk trading vessels (79 arrivals), cargo and barge vessels (481 arrivals), international and domestic cruise (121 arrivals), fishing (1,171 arrivals), Australian Navy (18 arrivals) and tugs and slipping (124 arrivals).

Ports North, as the port authority, will be responsible for developing and managing the project. The operation of the project will be under the same management structure. Other key stakeholders that will play a role in the development of infrastructure and the management of operations are:

- Maritime Safety Queensland (MSQ), a government agency of the Department of Transport and Main Roads and the Cairns Regional Harbour Master (RHM), who are the authority responsible for navigation safety in the Port of Cairns. The RHM was consulted on 27 August 2014 to understand the requirements to be incorporated into this Vessel Traffic Management Plan (VTMP)
- Royal Australian Navy.

This Vessel Traffic Management Plan (Construction), VTMP(C) has been prepared for the project.

C3.2 VTMP(C) Overview
The interactions of shipping traffic and potential impacts for vessel management have been considered between the construction works, continuing port operations and other existing marine activities. This VTMP(C) has been prepared for the project which documents the marine traffic management requirements for construction works and forms part of the set of the project Environmental Management Plans.

This plan addresses potential marine traffic and safety issues identified in relation to vessel operations associated with the construction phases of the project.

Vessel collision, grounding or sinking can result in potential consequences on the marine environmental qualities and/or damage to property and well as risk to safety and port revenue.

The other management plan closely associated with the VTMP(C) and applicable to the construction stage for marine works is the Dredge Management Plan. The Dredge Management Plan identifies the preferred means of addressing environmental matters associated with the capital dredging works, whereas the VTMP(C) addresses navigational safety issues for all vessels during the construction phase. Management of vessel traffic once the project construction commences will be controlled under Standard for Marine Construction Activities within Cairns Harbour by a Harbour Master’s Direction under Section 86 of the Transport Operations (Marine Safety) Act 1994. This document will supersede and include the operations covered in the VTMP(C)

The VTMP(C) will be included as part of Ports North’s tender documentation for selecting the preferred dredging and marine construction contractors following approval of the EIS and completion of the EIS process.
C3.3 VTMP(C) Purpose

The construction phases of the project will generate marine traffic that has the potential to impact on vessel and marine safety and obstruct navigation. The VTMP(C) is necessary to meet the requirements of applicable legislations, achieve best practice management of vessel traffic in relation to the project construction and to aid in achieving the requirements of both Ports North and the relevant authorities. This VTMP(C) provides inputs for the contractor specific VTMP(C) for vessel traffic management during construction of the project as outlined in Section C3.10.2.

This plan describes the measures to be implemented during the construction of the project for monitoring and controlling vessel operations to achieve the following objectives:

- Provide practical and achievable plans for the management of construction vessel operations such that vessel safety is maintained and obstruction of navigation of other traffic is eliminated/minimised
- Provide Ports North and regulatory authorities such as MSQ with a framework to confirm compliance with requirements
- Provide a framework for the development of contractor specific VTMP(C) to be developed by the appointed contractors
- Provide the community with evidence and assurance that the management of construction vessels will be conducted in a manner that supports safe navigation for recreation vessels at all times.

C3.4 VTMP(C) Structure

The VTMP(C) has been structured to address the vessel operation requirements for the project construction as follows:

- Description of the expected vessels and marine plants that will be used for the project construction
- Vessel management measures to be addressed during the construction of the project
- Overview of legislative requirements associated with construction vessel operations
- Description of the roles and responsibilities for implementation of the VTMP(C)
- Provide a framework for the development of contractor specific VTMP(C).

C3.5 Site Location

The current Port of Cairns navigational channel extends into Trinity Bay, which forms part of the Coral Sea. Refer to Figure C3.5a which shows the port limits and pilotage areas for the Port of Cairns. The construction of the project will be in the existing port limits that falls under the control of the Cairns RHM.

The Port of Cairns is situated on the western bank of Trinity Inlet, a mangrove-lined estuary adjacent to the city of Cairns, Queensland. The port lies on the eastern border of the Cairns CBD. The land immediately surrounding the port is a mix of industrial and commercial uses. There are a small number of residential apartments and short-term accommodation options in close proximity to the Cairns Cruise Liner Terminal (CCLT). There are also a number of people who live aboard boats moored in the inlet. The eastern bank of Trinity Inlet is lined with fringing mangroves and the distant hill slopes provide a green backdrop to the city of Cairns. Refer to Figure C3.5b which shows the project area.
Figure C3.5a Port Limit and Pilotage Areas (source MSQ)
Figure C3.5b  Project Locality Plan
C3.6 Marine Construction Activities and Vessels

C3.6.1 Dredging Works

Dredging works is to be undertaken for the project to widen and deepen the existing navigation channel and cruise shipping swing basin as well as to provide a new turning basin in the InnerPort. Two different dredging methods based on the sea bed material are proposed for the project which is summarised in Table C3.6.1a.

Table C3.6.1a Proposed Dredging Methods

<table>
<thead>
<tr>
<th>Sea Bed Material</th>
<th>Proposed Dredging Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm to stiff clay in inner port</td>
<td>Backhoe dredger (BHD) with barges and tug boats</td>
</tr>
<tr>
<td>Very soft to firm clay in outer channel and part of inner port</td>
<td>Trailing suction hopper dredger (TSHD)</td>
</tr>
</tbody>
</table>

For dredging of firm to stiff clay in the inner port area, a medium-size BHD with ancillary vessels will be mobilised. BHD is a mechanical dredger, similar to an excavator which is mounted on a barge. A BHD is a stationary dredger anchored by three spud piles. It works by dredging the seabed using the bucket at the end of the excavator arm and placing the dredged material into a hopper barge which is moored alongside for disposal at the preferred dredge material placement area. Figure C3.6.1a shows a typical dredging operation of a BHD.

Figure C3.6.1a  BHD Dredging and Loading into Hopper Barge

In the outer channel and part of the inner port, a medium-size TSHD will be mobilised. TSHD is a self-propelled sea-going hydraulic dredger equipped with a hopper and dredging installations to fill and unload the hopper. The dredging takes place at the draghead on the seabed which is connected to a suction pipe to fill the hopper. Two sets of suction pipes and dragheads, one on each side of the TSHD, are used when dredging. The dredging process and hopper filling takes place while the TSHD is sailing along the dredged areas. The trailing speed during dredging is in the order of 1 to 2 knots. Figure C3.6.1b shows a typical medium size TSHD.
A summary of the likely marine equipment expected to be deployed during the project for the dredging works is provided in Table C3.6.1b.

**Table C3.6.1b Typical Vessels for Dredging Works**

<table>
<thead>
<tr>
<th>Dredging Fleet</th>
<th>Construction Activity</th>
<th>Location</th>
<th>Indicative Duration on Site# (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Vessels</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 x Medium BHD</td>
<td>Dredge firm and stiff clay and relocate to preferred dredge material placement area (DMPA).</td>
<td>Inner Port</td>
<td>6.3</td>
</tr>
<tr>
<td>2 x self-propelled hopper barges or 2 x hopper barges plus 1 tug boats</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 x Medium TSHD</td>
<td>Dredge very soft to soft clay and firm clay and relocate to DMPA.</td>
<td>Outer channel and part of inner port.</td>
<td>5.6</td>
</tr>
<tr>
<td><strong>Ancillary Vessels</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 x Survey boat</td>
<td>Hydrographic surveys.</td>
<td>All dredging areas and preferred DMPA.</td>
<td>6.3</td>
</tr>
<tr>
<td>1 x Work boat</td>
<td>Support for all vessels.</td>
<td>All dredging areas.</td>
<td>6.3</td>
</tr>
</tbody>
</table>

# includes time for mobilisation and demobilisation
C3.6.2 Navigation Aids and Wharf Upgrade Activities
The installation (or removal) of navigation aids and wharf upgrade works as part of the project will require the following marine plant:

- Pile driving barge
- Work barge or supply barge
- Work boat as required to reposition the barge
- Small vessel for transport of personnel.

Figure C3.6.2a Example of a Pile Driving Barge
A summary of the likely marine equipment expected to be deployed during the project for the installation (or removal) of navigation aids and wharf upgrade works is provided in Table C3.6.2a.

**Table C3.6.2a Typical Vessels for Navigation Aids and Wharf Upgrade Works**

<table>
<thead>
<tr>
<th>Primary</th>
<th>Construction Activity</th>
<th>Location</th>
<th>Indicative Duration on Site# (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Vessels</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 x Piling barge</td>
<td>Pile driving (or removal) for navigation aids and wharf</td>
<td>Navigation aids and</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>upgrade.</td>
<td>wharf area.</td>
<td></td>
</tr>
<tr>
<td>1 x Work / supply barge</td>
<td>Delivery of pile and general construction support.</td>
<td>Navigation aids and</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wharf area.</td>
<td></td>
</tr>
<tr>
<td><strong>Ancillary Vessels</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 x Small tug / work</td>
<td>Support for piling barge and work / supply barge.</td>
<td>Navigation aids and</td>
<td>7.5</td>
</tr>
<tr>
<td>boat</td>
<td></td>
<td>wharf area.</td>
<td></td>
</tr>
<tr>
<td>1 x Crew boat</td>
<td>Transfer of construction workers from barges to landing</td>
<td>Navigation aids and</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>point.</td>
<td>wharf area, crew landing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>point.</td>
<td></td>
</tr>
</tbody>
</table>

# includes time for mobilisation and demobilisation
C3.7 Navigation Measures During Construction

C3.7.1 General

The use of marine equipment will generate vessel traffic during dredging and wharf upgrade works. This requires measures to be in place and implemented to manage risks, while maintaining safe navigation, support efficient port operations and reduce disruption to other vessel traffic and shipping activities. Navigation measures are to be managed and implemented in accordance with this VTMP(C) appropriate for the works undertaken. This section identifies the potential vessel interactions that will result from the dredging and wharf upgrade works and management measures to mitigate potential impacts.

C3.8 Potential Vessel Interactions

The construction phase of the project will generate vessel traffic and marine based activities. If these activities are not appropriately managed, these movements have the potential to impact on vessel safety and obstruct the navigation of other traffic such as commercial shipping vessels, tug boats, pilot boats, navy vessels, and fishing and recreation vessels. An increase in construction vessel traffic will be generated, particularly by dredging works in the inner port.

Potential vessel interactions related to the construction activities will occur in the existing navigation areas in the port at the time of the works. The main potential vessel interactions generated from the project construction phase have been identified as follows:

- Dredging in the outer channel which cannot take place concurrently with shipping movements in the channel system
- Dredging in the inner port which cannot take place concurrently with shipping movements in the channel system
- Dredging works for the development of a new swing basin in the inner port
- Transporting dredged material from dredging locations to the preferred DMPA and returning to the dredging locations
- Piling barge for wharf upgrade and channel markers
- Work boats transporting personnel, vessel supplies and materials
- Bunkering of dredging and construction vessels
- Tug boats used for manoeuvring dredging plant and barges
- Hydrographic survey of navigation areas and at the preferred DMPA
- Temporary mooring of vessels at existing port facilities, temporary structures or anchorage areas
- Vessels deployed to conduct monitoring (i.e. water quality sampling) or service environmental monitoring equipment as required for the Dredge Management Plan for the duration of works.

C3.8.1 Vessel Management Measures

Key management measures summarised in Table C3.8.1a are in relation to the expected impacts of the project construction on vessel operations and navigation. These measures are to be implemented through the VTMP(C) addressed in Section C3.10.2 by Ports North and the appointed contractors in consultation with MSQ and the RHM. It should be noted that these management measures are in addition to that included in the Maritime Operations Management Plan (MOMP).
### Table C3.8.1a Vessel Management Measures for Marine Construction Activities

<table>
<thead>
<tr>
<th>Management Measure</th>
<th>Description</th>
</tr>
</thead>
</table>
| Safe vessel navigation | • Safety of personnel to be addressed at all times.  
• All vessel crews are to be suitably qualified mariners.  
• All vessels and equipments are to be suitable for marine construction.  
• Address how shipping and port operations will be protected from construction activities.  
• Outline risk management for recreational boating and commercial vessels.  
• Confirmation of dredging works to the design depths by hydrographic surveys to MSQ standards. |
| Vessel traffic management | • Implement measures and consultation to prevent disruption to shipping movements.  
• Integrate dredging works with ship movements. |
| Recreational & commercial boating and fishing craft | • VTMP(C) to be developed by the appointed contractors to include boating safety, in particular:  
  − temporary navigation aids for construction exclusion zones if required  
  − issuance of notice to mariners  
  − consultation with the boating community. |
| Mooring | • Provide safe and secured mooring of construction vessels and floating equipment.  
• Temporary structures to be approved by the relevant authorities.  
• Mooring procedures to be in place for inclement weather and cyclones. |
| Navigation aids | • Temporary navigation aids to support safe navigation during construction and to demarcate exclusion zones if required. |
| Pilotage during construction | • Resources planning to address construction stage requirements.  
• Develop program for obtaining pilot exemption certificates. |
| Port security | • Adopt the Port of Cairns Port Security Plan during construction.  
• Develop appropriate communication procedures and protocols. |
| Bunkering | • Ensure that refuelling activities is undertaken safely and measures are in place to manage spill risks. |
| Emergency management | • Review port wide emergency management procedures for cyclones and extreme weather to cater for construction vessels and floating equipment.  
• Develop contractor’s emergency management procedures for cyclones and extreme weather.  
• Review emergency response resources (equipment and personnel) during construction. |
C3.9 Cairns Port Procedures

Port Procedures are published by MSQ. For the Port of Cairns, the procedures are documented in the Port Procedures and Information for Shipping Port of Cairns, (Maritime Safety Queensland, January 2014) (http://www.msq.qld.gov.au/Shipping/Port-procedures/Port-procedures-cairns.aspx). Under Section 86 of the Transport Operations (Marine Safety) Act 1994, the Harbour Master can give a general direction that applies to all ship owners, ship masters, ships, other persons or matters. The port procedures are mandatory and are regularly reviewed.

The Harbour Master will issue a Standard for Marine Construction Activities within Cairns Harbour which will detail requirements for vessels, operation and traffic control.

C3.10 Strategies and Management Measures

C3.10.1 Responsibilities

C3.10.1.1 EIS Regulatory Bodies

The VTMP(C) complements the main body of the EIS for the project. This VTMP(C) describes the specific management and mitigation measures to support safe, efficient and effective vessel operations in the port during the construction stages of the project.

The Standard for Marine Construction Activities within Cairns Harbour will be finalised at the conclusion of the EIS, taking into account comments on the EIS, it will provide a framework for the management of vessels operating in the port during the construction of the project.

C3.10.1.2 Ports North

Ports North as the proponent of the project EIS is responsible for ensuring the project is designed and developed within the requirements of the EIS. Management actions will be put in place to support vessel operations in a safe manner and meet the requirements of applicable legislations.

Ports North will undertake tendering process and will oversee the construction of the project. Ports North will be responsible for managing contractors for works involving vessels, dredging equipment and marine plant.

C3.10.1.3 Appointed Contractors

The appointed contractors for the dredging and marine infrastructure works of the project will develop specific Vessel Traffic Management Plans for their construction activities. This Standard for Marine Construction Activities within Cairns Harbour will regulate such plans, and be updated to reflect the specific vessels and construction methodologies.

C3.10.2 VTMP(C) Components and Structure

The components of the VTMP(C) are provided in Table C3.10.2a.

**Table C3.10.2a VTMP(C) Components**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Management Issue</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section C3.10.2.1</td>
<td>VTMP(C)</td>
<td>Outlines the VTMP(C) and its requirements for the development of the project to be managed and issued by Ports North in accordance with the Standard for Marine Construction Activities within Cairns Harbour.</td>
</tr>
<tr>
<td>Section C3.10.3</td>
<td>VTMP(C) – Contractor</td>
<td>Specifies the VTMP(C) requirements and any procedures under the contract including the managing contracts involving dredgers, construction vessels or marine plant to be implemented by the appointed contractors.</td>
</tr>
</tbody>
</table>
C3.10.2.1 Vessel Traffic Management Plan (Construction)

This VTMP(C) will serve as a framework for the appointed contractors to prepare their own VTMP’s(C) – Contractor, specific to its construction vessels and operations. Ports North as the Principal will finalise the overall VTMP(C) in consultation with MSQ and the RHM to suit the marine construction works, intended contracting strategy and operational conditions at the time of project implementation.

This VTMP(C) will be updated for any changes to planned operations or construction methodology or the Port Procedures and Information for Shipping. The RHM shall be consulted in the preparation of each update.

<table>
<thead>
<tr>
<th>Element</th>
<th>VTMP(C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management objective</td>
<td>• Prepare, maintain, implement and monitor a VTMP(C) for the project.</td>
</tr>
<tr>
<td>Applicability</td>
<td>• Provides framework for the development and management of specific VTMP(C) – Contractor plans for the project.</td>
</tr>
<tr>
<td>Performance criteria</td>
<td>• Safe navigation and reduce risk of disruption for shipping</td>
</tr>
<tr>
<td></td>
<td>• Safe navigation and reduce risk of disruption for boating including recreational, tourism and commercial fishing</td>
</tr>
<tr>
<td></td>
<td>• Reduce risk of damage to infrastructure and aids to navigation</td>
</tr>
<tr>
<td></td>
<td>• Vessel strike to marine fauna avoided or minimised to the greatest practical extent.</td>
</tr>
<tr>
<td>Monitoring and reporting</td>
<td>• Ports North to monitor the requirements of the VTMP(C) is adequate and incorporated into the specific VTMP(C) – Contractor plans developed for the project</td>
</tr>
<tr>
<td></td>
<td>• Ports North in conjunction with the RHM will oversee the development of VTMP(C) – Contractor plans</td>
</tr>
<tr>
<td></td>
<td>• Ports North to monitor the performance of the contractor plans against the VTMP(C).</td>
</tr>
<tr>
<td>Auditing</td>
<td>• Ports North to oversee construction activities to monitor contractor’s performance against the VTMP(C).</td>
</tr>
<tr>
<td></td>
<td>• VTS to record non-conformance and incidents from marine construction activities.</td>
</tr>
</tbody>
</table>

Management actions

- Determine the allowable extent of working area.
- Determine the allowable extent, type and location of temporary structures.
- Specify requirements for temporary aids to navigation and demarcation of construction zones.
- Outline consultation requirements with regard to shipping activities.
- Outline consultation requirements with regard to recreational boating tourism and commercial fishing.
- Specify hydrographic survey requirements for depth measurements in navigation areas during and at the end of construction.
- Coordinate construction related traffic with environmental monitoring requirements.
- Specify methods for dealing with spilt material or obstructions in navigation waters.
- Identify resourcing levels for pilotage and pilot exemptions for the construction.
- Identify management measures for interfacing between contractors for works to be undertaken simultaneously under separate contracts.
- Specify limitations imposed to vessel operations and bunkering.
- Define the frequency and details of vessel movement schedules to be submitted by contractors.
- Define protocols for contractors interface with VTS and Ports North with regards to shipping movements.
- Define emergency planning requirements.
- Define port security requirements.
C3.10.3 Vessel Traffic Management Plan (Construction) – Contractor

The appointed contractors for dredging and marine construction works shall prepare and implement its plans in accordance with the requirements of the VTMP(C). The requirements of the VTMP(C) – Contractor plans will be outlined in the VTMP(C). The overall VTMP(C) does not replace any requirement for any regulatory documentation required by MSQ or the RHM.

The VTMP(C) – Contractor plans will be updated for any changes to planned operations or construction methodology or the Port Procedures and Information for Shipping. Ports North and the RHM shall be consulted in the preparation of each update and once complete, the contractor will submit each update to the RHM for approval.

The contractor will be responsible for identifying and obtaining approvals required under Queensland and Commonwealth legislation to undertake dredging and construction works.

<table>
<thead>
<tr>
<th>Element</th>
<th>VTMP(C) - Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management objective</td>
<td>• Prepare, maintain, implement and monitor a VTMP(C) – Contractor plans for dredging operations and marine construction works.</td>
</tr>
<tr>
<td>Applicability</td>
<td>• Contractors undertaking marine operations involving dredgers and marine equipment.</td>
</tr>
<tr>
<td>Performance criteria</td>
<td>• Safe navigation and reduce risk of disruption for shipping</td>
</tr>
<tr>
<td></td>
<td>• Safe navigation and reduce risk of disruption for boating including recreational, tourism and commercial fishing</td>
</tr>
<tr>
<td></td>
<td>• Reduce risk of damage to infrastructure and aids to navigation</td>
</tr>
<tr>
<td></td>
<td>• Vessel strike to marine fauna avoided or minimised and reported to the greatest practical extent.</td>
</tr>
<tr>
<td>Monitoring and reporting</td>
<td>• The contractor shall consult with the RHM and submit specific Look Ahead Work Schedules for approval. These schedules, to be approved by the RHM, shall specifically include and describe the following:</td>
</tr>
<tr>
<td></td>
<td>− Location, activities and program for the works (i.e. include expected routes)</td>
</tr>
<tr>
<td></td>
<td>− Number and type of construction vessels greater than 35m LOA to be deployed</td>
</tr>
<tr>
<td></td>
<td>− Number and type of construction vessels less than 35m LOA to be deployed</td>
</tr>
<tr>
<td></td>
<td>− Consideration of shipping schedules, and port operating hours to ensure that impacts on peak operational periods are minimised</td>
</tr>
<tr>
<td></td>
<td>− Weather and/or night time constraints</td>
</tr>
<tr>
<td></td>
<td>• Contractor is to develop VTMP(C) – Contractor plans in line with the VTMP(C) and report back on performance</td>
</tr>
<tr>
<td></td>
<td>• Contractor to report back on VTMP(C) – Contractor plans at construction progress meetings including for those items required by the VTMP(C)</td>
</tr>
<tr>
<td></td>
<td>• VTS to record non-conformance and incidents from marine construction activities.</td>
</tr>
</tbody>
</table>
Management actions – Preparing a VTMP(C) – Contractor

- Comply with the requirements of the VTMP(C)
- Consult with Ports North, RHM, MSQ and other relevant regulatory authorities in preparing and updating the VTMP(C) – Contractor plans
- Consider the requirements of Port Procedures and Information for Shipping – Cairns.

Management actions – The VTMP(C) – Contractor shall include the following:

- Protection and management of shipping and port operations
- Protection and management of recreational and commercial fishing craft
- Protection of existing port structures and assets including existing navigation aids/markers
- Pilotage requirements and program for obtaining pilotage exemption certificates as appropriate
- Workplace health and safety requirements
- Induction and training procedures
- Site security and compliance with the Maritime Security Plan for the Port of Cairns
- Communication protocols and procedures with Ports North, RHM, VTS and other parties
- Temporary marine structures and navigation aids
- Bunkering and refuelling procedures
- Maintenance of construction vessels
- Emergency procedures (including cyclone and extreme weather contingency plans).

Management actions – Details of construction vessels:

- The vessel name, registration, dimensions, draft, tonnage, lifting capacity, etc
- Valid Certificate of Survey or a valid permit issued by MSQ pursuant to the Transport Operations (Maritime Safety) Act 1994
- Description of how each vessel will be crewed, operated and used for the project.

Corrective action

- Contractor to revise the VTMP(C) – Contractor plans to reflect any deficiencies identified during construction from
  - changes to planned operations and construction methodology
  - changes to the Port Procedures and Information for Shipping
  - any directive from Ports North, RHM or MSQ.
- Contractor to prepare plan in consultation with Ports North, RHM and MSQ

Responsibility

- Contractor to conduct vessel operations in accordance with the approved VTMP(C)
- Ports North to monitor contractor’s performance against VTMP(C) in consultation with RHM and MSQ
- MSQ VTS to record non-conformance and incidents.
C3.10.4 Implementation

C3.10.4.1 Preparation and Approvals

The appointed contractors will prepare specific procedures for their work packages that meet the requirements of this VTMP(C) and in accordance with the requirements of any Queensland and Commonwealth Government approval permits and conditions.

The contractors also shall include the requirements of Ports North, MSQ and the RHM.

C3.10.4.2 Operations and Monitoring

Each contractor, involved in the construction of the project using vessels or marine equipment will be responsible for:

- Liaising with vessel crews to implement and monitor the VTMP(C) – Contractor
- Complying with the provisions of the VTMP(C) – Contractor
- Carrying out regular inspection and monitoring activities to ensure adherence to proper marine safety measures.

C3.10.4.3 Reporting

Each contractor involved in the construction of the project will be responsible for establishing a VTMP(C) file folder that contains necessary documentation pertaining to vessel traffic management, particularly the latest and approved version of the VTMP(C). The folder should also contain monitoring data and information in relation to the management of the VTMP(C).

C3.10.4.4 Review, Update and Improvement of VTMP(C) – Contractor

A copy of the latest approved VTMP(C) – Contractor will be kept on-site by the contractor for the duration of the works and be easily accessible.

During the works, Ports North would also hold a copy of the latest approved version of the VTMP(C) and the contractor-specific VTMP(C) plans. The VTMP(C) – Contractor plans will be regularly reviewed in relation to conditions encountered and updated as appropriate.

The RHM will be consulted for the review and update of the VTMP(C) – Contractor.

C3.11 References