

# **Dampier Public Wharf Expansion – Load-out Facility and Lay-down Area, Port of Dampier**

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**Western Stevedores Pty Ltd**

**Report and Recommendations  
of the Environmental Protection Authority**

**Environmental Protection Authority  
Perth, Western Australia  
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# Contents

	<b>Page</b>
<b>1. Introduction.....</b>	<b>1</b>
<b>2. The proposal.....</b>	<b>1</b>
<b>3. Consultation.....</b>	<b>5</b>
<b>4. Relevant environmental factors .....</b>	<b>6</b>
4.1 Flora and vegetation.....	6
4.2 Specially Protected (Threatened) fauna .....	8
<b>5. Conclusions .....</b>	<b>8</b>
<b>6. Other advice .....</b>	<b>9</b>
<b>7. Recommendations .....</b>	<b>9</b>

**Tables**

Table 1. Key Characteristics of the proposal .....	5
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**Figures**

- 1. Location Map
- 2. Project Layout
- 3. Original Proposal
- 4. Broad-scale Vegetation Map

**Appendices**

- 1. References
- 2. Recommended Environmental Conditions and Proponent’s Commitments

# 1. Introduction

This report provides the advice and recommendations of the Environmental Protection Authority (EPA) to the Minister for the Environment and Heritage on the environmental factors relevant to a proposal by Western Stevedores Pty Ltd to expand facilities at the Dampier Public Wharf.

The EPA was advised of the proposal in August 2001. Based on the information provided, the EPA considered that while the proposal had the potential to have an effect on the environment, the proposal could be readily managed to meet the EPA's environmental objectives. Consequently it was notified in *The West Australian* newspaper on Monday, 24 September 2001 that, subject to preparation of a suitable Environmental Protection Statement (EPS) document, the EPA intended to set the level of assessment at EPS.

The proponent has prepared the EPS (Astron, 2001), which accompanies this report. The EPA considers that the proposal described can be managed in an acceptable manner subject to the commitments to the proposal being legally binding.

The EPA has therefore determined under Section 40 (1) that the level of assessment for the proposal is EPS, and this report provides the EPA advice and recommendations in accordance with Section 44 (1).

# 2. The proposal

The proposal is described in detail in Section 2 of the proponent's "Dampier Public Wharf, Proposed Loading Facility and Laydown Area, Environmental Protection Statement" document (Astron, 2001). The proposal involves an expansion of the existing Dampier Public Wharf (Figure 1) to provide improved facilities capable of servicing the future needs of industry in the area. The key components of the proposal are:

- construction of a 60-81 m long load-out facility south of the existing wharf (Stage 1, Figure 2);
- cut and fill operations to create a land backing to the facility (1.9 ha, of which 0.8 ha is reclaimed land); and
- quarrying of a 4.1 ha cargo lay-down and storage area (Stage 2, Figure 2).

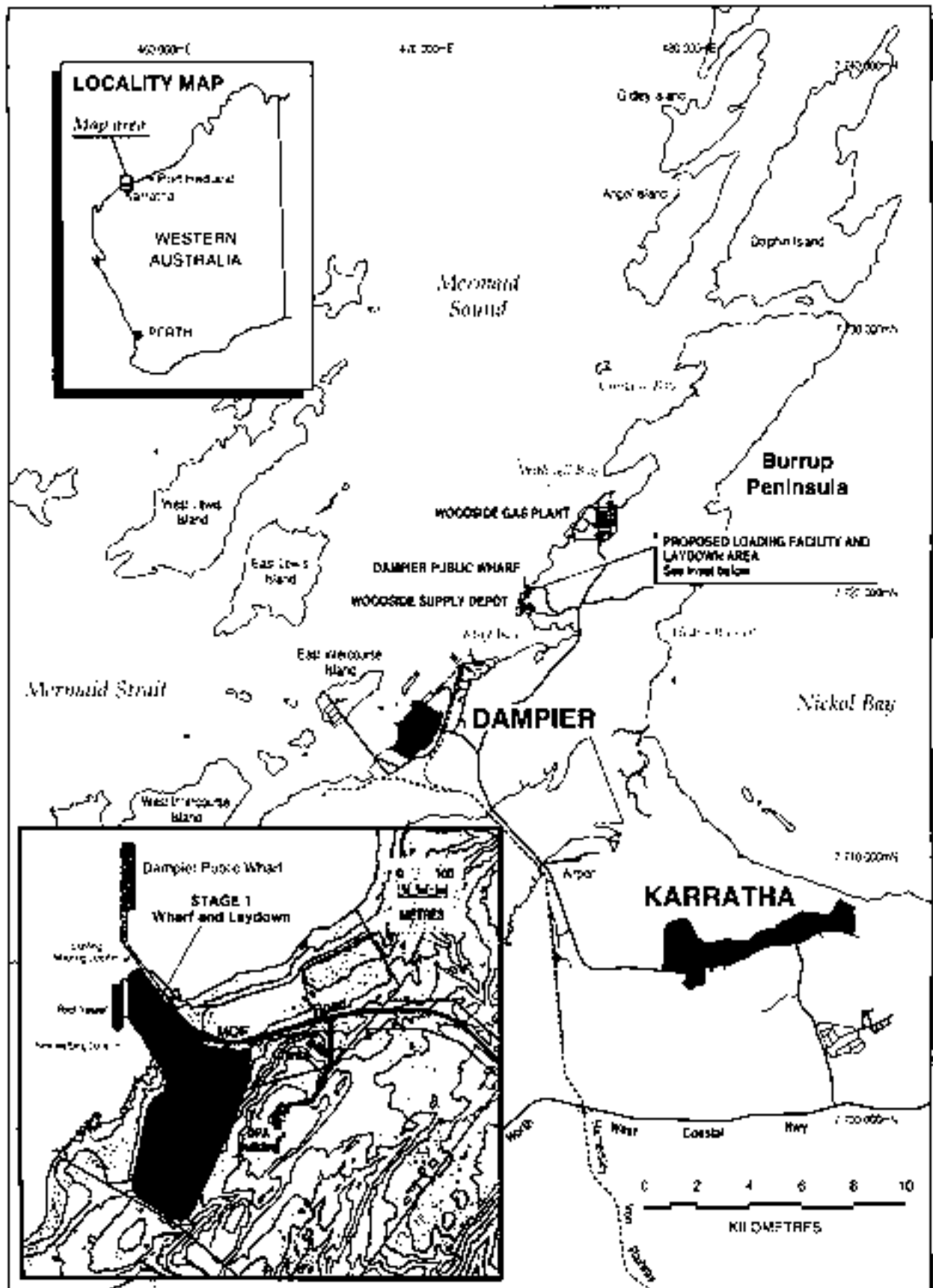
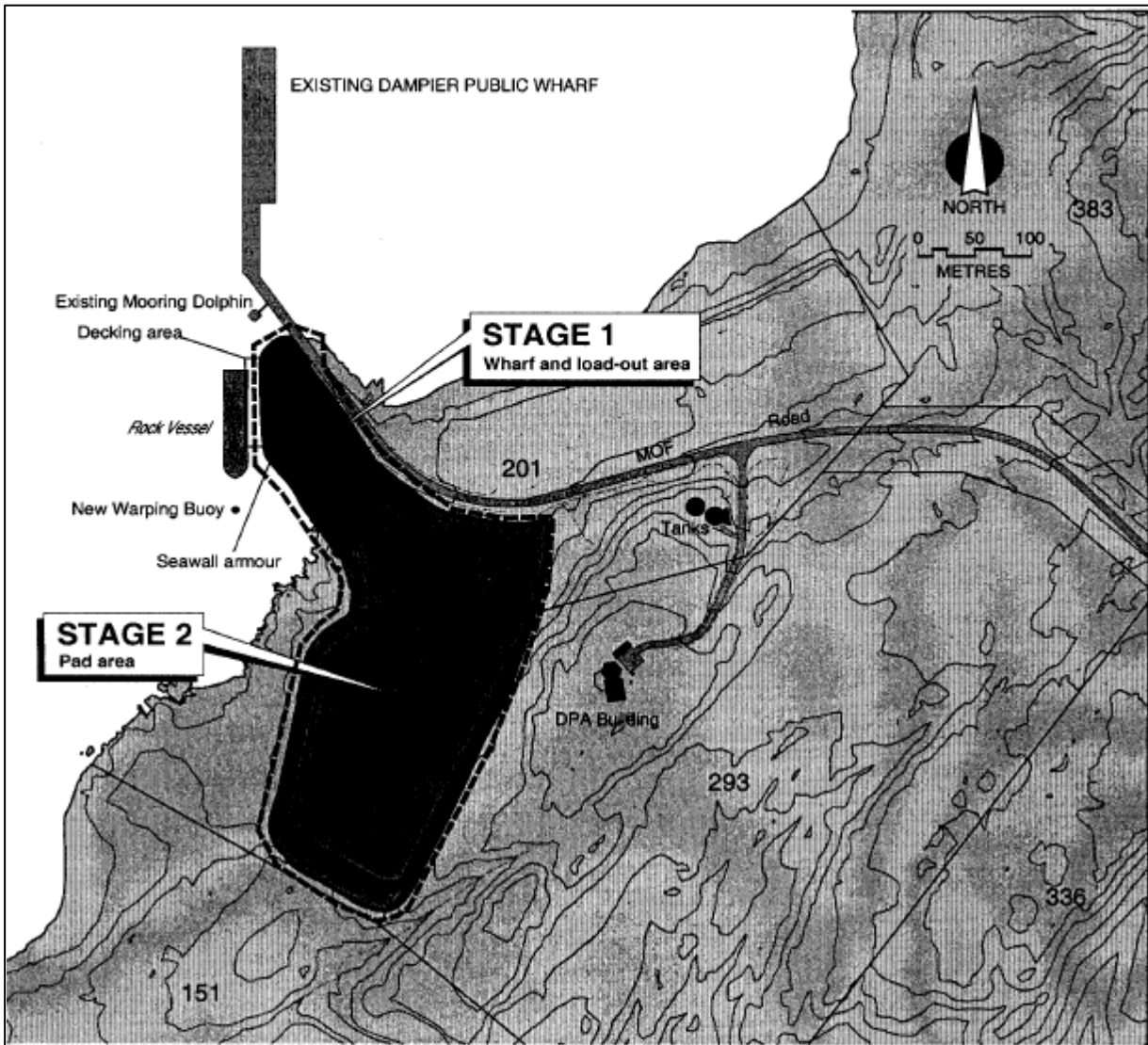


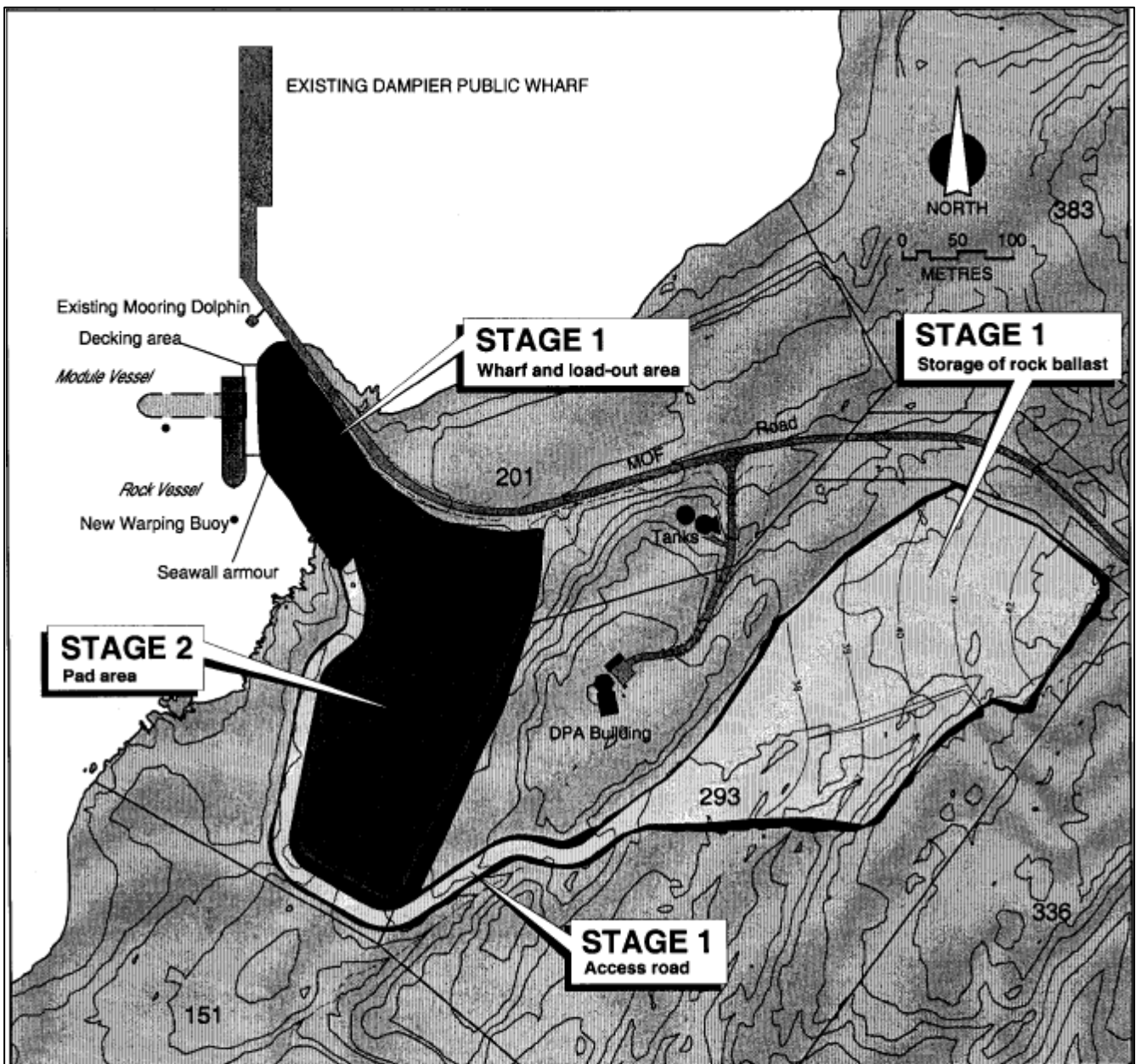
Figure 1 Location Map (Source: Astron, 2001)



**STAGE 1  
WHARF AND LOAD-OUT (1.9ha)**  
 PAD AREA 7700m<sup>2</sup>  
 VOLUME OF MATERIAL  
 REMOVED = 35800m<sup>3</sup>  
 PLACED = 38650m<sup>3</sup>  
 FILL AREA TO  
 R.L. +4.1m AHD

**STAGE 2 (4.9ha)  
PAD AREA**  
 PAD AREA 41300m<sup>2</sup>  
 VOLUME OF MATERIAL  
 REMOVED = 720500m<sup>3</sup>

*Figure 2 Project Layout (Source: Astron, 2001)*



**STAGE 1  
WHARF AND LOAD-OUT (1.9Ha)**

PAD AREA 7700m<sup>2</sup>  
 VOLUME OF MATERIAL  
 REMOVED = 35800m<sup>3</sup>  
 PLACED = 38650m<sup>3</sup>  
 FILL AREA TO  
 R.L. +4.1m AHD

**STAGE 1 (7.8Ha)  
STORAGE OF ROCK BALLAST**

PAD AREA 65000m<sup>2</sup>  
 VOLUME OF MATERIAL  
 REMOVED = 48400m<sup>3</sup>  
 PLACED = 81200m<sup>3</sup>

**STAGE 1  
ACCESS ROAD (1.4Ha)**

ROAD AREA 10250m<sup>2</sup>  
 VOLUME OF MATERIAL  
 REMOVED = 38500m<sup>3</sup>  
 16m WIDE HAUL ROAD  
 1in1 BATTERS (TYP)  
 MAX LONG. GRADE 10%

**STAGE 2 (4.9 Ha)  
PAD AREA**

PAD AREA 41300m<sup>2</sup>  
 VOLUME OF MATERIAL  
 REMOVED = 720500m<sup>3</sup>

Figure 3 Original Proposal (Source: earlier draft of Astron, 2001)

The main characteristics of the proposal are summarised in Table 1 below.

**Table 1. Key Characteristics of the proposal**

<b>Characteristics</b>	<b>Description</b>
Project Purpose	To construct a load-out facility and lay-down area and to provide rock from the construction of the lay-down as ballast for the Woodside sub-sea pipeline.
Project Life	18 months
Area of seabed reclamation	0.75 ha
Area of land formed behind loading facility	1.9 ha
Lay-down area	4.1 ha
Earthwork quantities (approx.)	
Land-backed load out facility	Cut 35,800m <sup>3</sup> Fill 38,650m <sup>3</sup>
Rock storage area	Cut 720,500m <sup>3</sup>
• Berth Face Length	60-81 m
• Deck Face Thickness	850 mm
• Deck Width	31.5 m
• Pile Material / Grade	Steel / G350
• Pile Size	600 mm diameter
• Deck Elevation	4.1 m AHD
Plant facilities	Administration building Crushing plant
Plant operation	Daylight hours 7 days per week
Construction Period	8 months
Ballast mining rate	3,000 tonnes per day
Water Supply source	Scheme water supply
Workforce	Construction 30 (peak)

### 3. Consultation

During the preparation of the EPS, the proponent consulted with Government agencies and companies with a direct interest in the project and with other key stakeholders. Consultation was also undertaken with the local community via a press release made to the local paper inviting comment. The organisations consulted, the comments received and the proponent’s response are included in Section 5 of the EPS (Astron, 2001).

It should be noted that as a result of issues raised during consultation, the extent of the proposal was substantially scaled back, and the environmental impacts reduced accordingly. On early advice from the EPA relating to impacts on flora and vegetation, the proponent has withdrawn from its original intent to construct a 7.8 ha rock ballast storage area to the east (Stage 1 “Storage of rock ballast”



area of Figure 3). This has approximately halved the area of land disturbance and hence reduced the impact on significant flora species and vegetation types.

## 4. Relevant environmental factors

The summary of all of the environmental factors and their management is outlined in the Executive Summary section of the EPS (pages ix-xiv, Astron, 2001).

In the EPA's opinion the following are the environmental factors relevant to the proposal:

- a) Flora and vegetation – clearing for the lay-down area and the land backing of the load-out facility; and;
- b) Specially Protected (Threatened) fauna – destruction of habitat of the Pilbara Olive Python.

### 4.1 Flora and vegetation

The EPA's environmental objectives for this factor are to:

- (i) maintain the abundance, species diversity, geographic distribution and productivity of vegetation communities; and
- (ii) protect Declared Rare and Priority Flora, consistent with the provisions of the *Wildlife Conservation Act 1950*.

The most significant impacts of vegetation clearing will be on the Priority 1 species *Terminalia supranitifolia* and two vegetation types of conservation value.

Through the consultation phase of this proposal, the impact on *Terminalia supranitifolia* was reduced by halving the initially proposed area of clearing, thus maintaining a population of this species in the area around the Dampier Public Wharf. Within the project area, 32 of 41 trees in the Stage 2 area are expected to be removed as a result of the proposal. However, the area that has been deleted from the proposal is considered to have more than 40 trees within it. While this general area is considered to contain one of the larger populations of this species, other populations do occur on the Burrup Peninsula and elsewhere. As a result, *Terminalia supranitifolia* will not be significantly affected by the proposal and a viable population will be maintained in the immediate vicinity of the project area.

Within fairly tight constraints, and in a particularly significant region, the proponent has endeavoured to reduce the impacts on significant vegetation types. Recent studies (that are yet to be published) suggest that the concept of what is significant vegetation on the Burrup Peninsula needs to be reconsidered and expanded. This is because there is a high degree of difference between the floristic composition of vegetation on the peninsula and the mainland, and because there is substantial variation within the peninsula itself. Within the project area there are two vegetation types that are considered to be of conservation significance due to their restricted range.

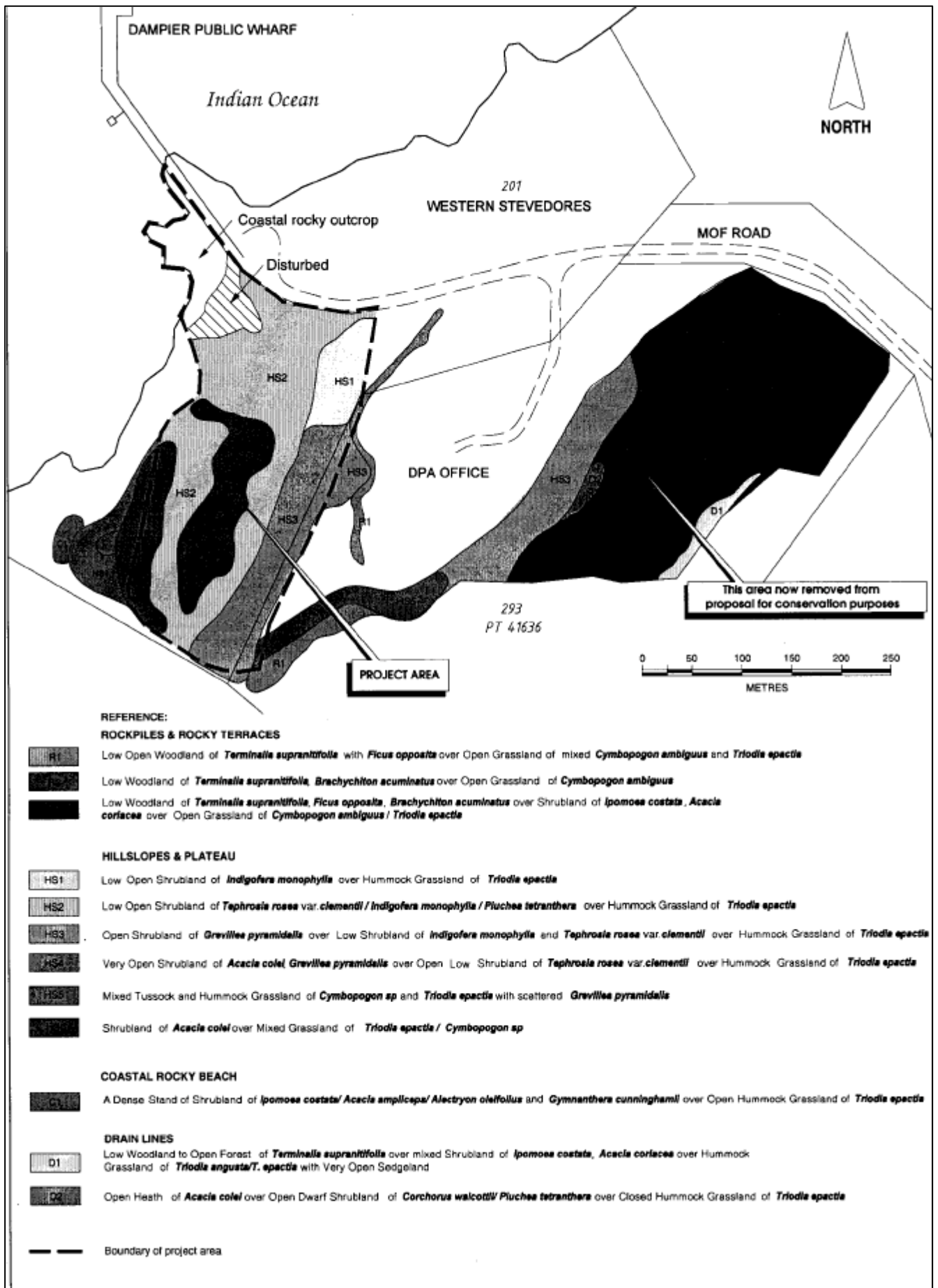


Figure 4 Broad-scale Vegetation Map (Source: Astron, 2001)

These are:

- (a) *Tephrosia rosea* var *clementii*, *Indigofera monophylla* “Burrup form” low shrubland over *Triodia epactia* “Burrup form” hummock grassland (represented within units HS1, HS2, HS3, and HS4 of Figure 4); and
- (b) *Terminalia supranitifolia* in abundance with *Ficus opposita* (represented within unit R1 of Figure 4).

The first type is known only from two or three other locations on the Burrup Peninsula and is found within much of the Stage 2 area, although a small area also occurs in the area to the east that has been deleted from the proposal. The second type also occurs on the Stage 2 area but is considered to be better represented on the area that has been deleted. Therefore, the EPA considers that with the deletion of the eastern area, the clearing of the remaining areas will not unduly compromise the EPA’s objectives for this factor.

Given that impact on flora and vegetation is primarily determined by extent of clearing and earthworks, continuing management measures are focussed on ensuring boundaries are adhered to and that offsite impacts (e.g. dust) are minimised. The proponent has given a commitment to implement these measures through a Terrestrial Flora and Management Plan (Commitments 3 and 4, Appendix 2).

## 4.2 Specially Protected (Threatened) fauna

The EPA’s environmental objective for this factor is to protect Specially Protected (threatened) fauna, consistent with the provisions of the *Wildlife Conservation Act 1950*.

The project area is likely to contain the Pilbara Olive Python (*Morelia olivacea barroni*), which is a Specially Protected (Threatened) fauna under the *Wildlife Conservation Act 1950*. The python prefers rock pile areas where it remains hidden for much of the time. This type of habitat occurs in and around the project area. It also occurs throughout the Burrup Peninsula generally. It is therefore likely that pythons would be affected through the destruction of areas of their preferred habitat and through increased activity in areas adjacent to habitat areas.

The EPA considers that any impact on the Pilbara Olive Python can be adequately managed via a relocation programme and education of staff and contractors. Prior to the start of construction, the size of the python population will be determined and the results used to develop a Fauna Management Plan (Commitment 7). This plan will include relocation procedures for any captured python and education of staff and contractors to prevent any unnecessary harm to the pythons. Noting the large home range of the python (50-100 ha), it is unlikely that the destruction of a relatively small area of habitat will significantly affect the general population.

## 5. Conclusions

Section 44 of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment and Heritage on the environmental factors relevant to the proposal and on the conditions and procedures to which the proposal should be subject, if implemented. In addition, the EPA may make recommendations as it sees fit.

The EPA notes that this is a construction proposal and that the key environmental impacts relate to the clearing and disturbance of land. These are immediate impacts that cannot be altered except through the design and layout of the project. The EPA considers that the proponent has reduced these impacts as far as is practicable through the consultation phase (in particular, by halving the area of disturbance) and has demonstrated in the EPS document that the residual impacts will not result in unacceptable loss of conservation values on the Burrup Peninsula.

In addition, specific management plans will be developed for flora and fauna prior to construction to ensure impacts are restricted to those areas directly affected. An overall Environmental Management Plan will also be developed to ensure that management strategies outlined in the EPS document are carried out.

## 6. Other advice

Given that one outcome of this assessment was that the eastern rock ballast storage area (shown as Stage 1 “Storage of rock ballast” on Figure 3) was deleted from the proposal, the EPA advises that there is now a presumption against any future proposal for clearing in this area. The eastern area was deleted in order that an adequate level of representation of flora, vegetation, and fauna was maintained. Any future proposal for clearing in this area is likely to lower the level of representation to unacceptable levels and so, in the EPA’s opinion on currently available information, would be unlikely to be environmentally acceptable.

If further development on the Burrup Peninsula is to be facilitated, then the establishment of a comprehensive and adequate reserve system for the peninsula needs to be given a high priority by Government. It has been long known that the Burrup Peninsula contains a number of significant natural, scenic, and cultural values. The EPA is concerned that the cumulative impact of individual developments is becoming difficult to assess, without adequate baseline information on these values and the assurance that representative areas will be protected from future development. For example, this and other recent proposals have required the clearing of the Priority 1 species flora *Terminalia supranitifolia*. If this continues, without securing adequate populations of this species in the conservation estate, then the increased threat on this species could increase its conservation listing to that of a “Declared Rare” species. This scenario also applies to other flora and fauna on the peninsula. Clearly this would have serious consequences for the environmental impact assessment of any further development proposals. Alternatively, other less environmentally sensitive areas, such as the Maitland Industrial Estate, could be developed.

## 7. Recommendations

The EPA considers that the proponent has demonstrated, in the EPS document, that the proposal can be managed in an environmentally acceptable manner and provides the following recommendations to the Minister for the Environment and Heritage:

1. That the Minister notes that the proposal being assessed is the Dampier Public Wharf Expansion – Load-out Facility and Lay-down Area, Port of Dampier.
2. That the Minister considers the report on the relevant environmental factors as set out in Sections 4.1 and 4.2.

3. That the Minister notes that the EPA has concluded that it is unlikely that the EPA's objectives would be compromised, provided there is satisfactory implementation by the proponent of the recommended conditions and proponent commitments as set out in Appendix 2.
4. That the Minister imposes the conditions and procedures recommended in Appendix 2 of this report.

## **Appendix 1**

### **References**

Astron (2001), *Western Stevedore, Dampier Public Wharf, Loadout and Laydown Area, Environmental Protection Statement*. Prepared by Astron Environmental Pty Ltd for Western Stevedores Pty Ltd, December 2001, Perth WA.

## **Appendix 2**

**Recommended Environmental Conditions**

**and Proponent's Commitments**

RECOMMENDED CONDITIONS AND PROCEDURES

**STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED  
(PURSUANT TO THE PROVISIONS OF THE  
ENVIRONMENTAL PROTECTION ACT 1986)**

DAMPIER PUBLIC WHARF EXPANSION – LOAD-OUT FACILITY AND LAY-DOWN  
AREA, PORT OF DAMPIER

**Proposal:** The construction of a land-backed load-out facility and a 4.1 hectare cargo lay-down and storage area at the Dampier Public Wharf, as documented in schedule 1 of this statement

**Proponent:** Western Stevedores Pty Ltd

**Proponent Address:** PO Box 140, NORTH FREMANTLE WA 6160

**Assessment Number:** 1421

**Report of the Environmental Protection Authority:** Bulletin 10XX

The proposal referred to above may be implemented subject to the following conditions and procedures:

**Procedural conditions**

**1 Implementation and Changes**

- 1-1 The proponent shall implement the proposal as documented in schedule 1 of this statement subject to the conditions of this statement.
- 1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.
- 1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is not substantial, the proponent may implement those changes upon receipt of written advice.



## **2 Proponent Commitments**

- 2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement.
- 2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of the conditions in this statement.

## **3 Proponent Nomination and Contact Details**

- 3-1 The proponent for the time being nominated by the Minister for the Environment and Heritage under section 38(6) or (7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal until such time as the Minister for the Environment and Heritage has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposal.
- 3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposal will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposal shall also be provided.
- 3-3 The nominated proponent shall notify the Department of Environmental Protection of any change of contact name and address within 60 days of such change.

## **4 Commencement and Time Limit of Approval**

- 4-1 The proponent shall provide evidence to the Minister for the Environment and Heritage within five years of the date of this statement that the proposal has been substantially commenced or the approval granted in this statement shall lapse and be void.

Note: The Minister for the Environment and Heritage will determine any dispute as to whether the proposal has been substantially commenced.

- 4-2 The proponent shall make application for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement to the Minister for the Environment and Heritage, on advice of the Environmental Protection Authority, prior to the expiration of the five-year period referred to in condition 4-1.

The application shall demonstrate that:

- the environmental factors of the proposal have not changed significantly;
- new, significant, environmental issues have not arisen; and
- all relevant government authorities have been consulted.

Note: The Minister for the Environment and Heritage may consider the grant of an extension of the time limit of approval not exceeding five years for the substantial commencement of the proposal.

## **Environmental conditions**

## **5 Compliance Audit**

- 5-1 The proponent shall prepare an audit program in consultation with and submit compliance reports to the Department of Environmental Protection which address:
- the implementation of the proposal as defined in schedule 1 of this statement;
  - evidence of compliance with the conditions and commitments; and
  - the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the *Environmental Protection Act 1986*, the Chief Executive Officer of the Department of Environmental Protection is empowered to audit the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement. Usually, the Department of Environmental Protection prepares an audit table which can be utilised by the proponent, if required, to prepare an audit program to ensure that the proposal is implemented as required. The Chief Executive Officer is responsible for the preparation of written advice to the proponent, which is signed off by either the Minister or, under an endorsed condition clearance process, a delegate within the Environmental Protection Authority or the Department of Environmental Protection that the requirements have been met.

## **Procedures**

- 1 Where a condition states "to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority", the Chief Executive Officer of the Department of Environmental Protection will obtain that advice for the preparation of written advice to the proponent.
- 2 The Environmental Protection Authority may seek advice from other agencies, as required, in order to provide its advice to the Chief Executive Officer of the Department of Environmental Protection.

## **Notes**

- 1 The Minister for the Environment and Heritage will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environmental Protection over the fulfilment of the requirements of the conditions.

## Schedule 1

### Dampier Public Wharf Expansion. (EPA Assessment No. 1421)

This project is located at the Dampier Public Wharf, on the Burrup Peninsula, near Dampier, Western Australia (Figure 1). The land is vested in the Dampier Public Wharf under Reserve 41636. The project straddles two locations: De Witt Location 201 (OP 16 683, 16.84 hectares) and De Witt Location 293 (OP 16 683, 24.24 hectares).

The project involves the construction of a rock load-out facility and lay-down area immediately south of the Dampier Public Wharf. The facility will align with the western face of the existing wharf structure. The load-out facility will consist of a reinforced concrete, suspended slab structure similar to the existing one. It will be supported on steel tubular piles which will be braced back to an anchorage on the land. Fenders shall be tubular rubbers mounted on a box structure to match the existing. Basic dimensions are provided below (Table 1).

The proposed loading facility will initially have a 60 metre face at a level equivalent to the existing structure. It will be a land-backed facility which will involve the reclaiming of approximately 0.75 hectares of seabed. Approximately 1.9 hectares of land will be formed behind the loading facility.

The project also includes the quarrying of rock and the extension of the lay-down space behind the wharf by about 4.1 hectares. A total of 6.3 hectares of useable land will be created.

**Table 1: Key characteristics of approved proposal/project**

Characteristics	Description
Project Purpose	To construct a load-out facility and lay-down area and to provide rock from the construction of the lay-down as ballast for the Woodside sub-sea pipeline.
Project Life	18 months
Area of seabed reclamation	0.75 ha approximately
Area of land formed behind loading facility	1.9 ha approximately
Lay-down area	4.1 ha approximately
Earthwork quantities	(Approximately)
Land-backed load out facility	Cut 35,800 cubic metres Fill 38,650 cubic metres
Rock storage area	Cut 720,500 cubic metres
• Berth Face Length	60-81 metres
• Deck Face Thickness	850 millimetres
• Deck Width	31.5 metres
• Pile Material / Grade	Steel / G350
• Pile Size	600 mm diameter
• Deck Elevation	4.1 metres – Australian Height Datum
Plant facilities	Administration building Crushing plant

<b>Characteristics</b>	<b>Description</b>
Plant operation	Daylight hours, 7 days per week
Construction Period	8 months approximately
Ballast mining rate	3,000 tonnes per day
Water Supply source	Scheme water supply
Workforce	Construction 30 (peak)

**Figures (attached)**

Figure 1 Project location.

Figure 2 Development staging and volumes of material to be cut and filled.

**Proponent's  
Environmental Management Commitments**

17 January 2002

**Dampier Public Wharf Expansion – Load-Out Facility  
and Lay-Down Area, Port of Dampier  
(Assessment No. 1421)**

**Western Stevedores Pty Ltd**

**PROPONENTS ENVIRONMENTAL MANAGEMENT COMMITMENTS**

No	Topic	Action	Objective	Timing	Advice
1	Environmental Management	<p>Prepare an Environmental Management Plan which addresses the following:</p> <ol style="list-style-type: none"> <li>1) Benthic flora and fauna impacts</li> <li>2) Marine water quality</li> <li>3) Waste management</li> <li>4) Oil and chemical spills</li> <li>5) Hazardous materials</li> <li>6) Ballast water discharge</li> <li>7) Noise emissions</li> <li>8) Vibration and Flyrock</li> <li>9) Dust management</li> <li>10) Surface water quality (monitoring and management)</li> <li>11) Risk – Public health and safety</li> </ol>	<ol style="list-style-type: none"> <li>1) Maintain ecological function, abundance, and species diversity in order to protect ecosystem health.</li> <li>2) Ensure that marine water quality is maintained to protect environmental values from construction and post-construction activities from the site in accordance with Environmental Quality Criteria defined in <i>Australian and New Zealand Water Quality Guidelines</i> (ANZECC 2000).</li> <li>3) To minimise, reuse or recycle waste where possible. To treat onsite or dispose offsite liquid and solid wastes at an appropriate landfill facility.</li> <li>4) Minimise the impacts of fuel or oil spillage during construction, operational and shipping movements to ensure that they do not adversely affect water quality.</li> <li>5) To ensure that hazardous goods and materials are stored and handled in accordance with relevant Worksafe guidelines.</li> <li>6) Minimise the risk of introduction of unwanted marine organisms</li> <li>7) Ensure noise levels comply with statutory requirements and acceptable standards.</li> <li>8) Protect the amenity for nearby land uses from vibration and flyrock impacts and to prevent harm to humans, infrastructure and the biological community that may occur through blasting activities.</li> <li>9) Ensure that dust levels at nearest critical premise are within EPA dust control criteria and amenity for nearby land uses is maintained in accordance with EPA Guidance</li> </ol>	Pre construction (prior to commencement of ground disturbance)	CALM, Shire of Roebourne, Dampier Port Authority, Worksafe.

No	Topic	Action	Objective	Timing	Advice
			<p>Statement No. 18. <i>Prevention of Air Quality Impacts for Land Development Sites.</i></p> <p>10) Ensure that water quality is maintained to protect ecological and aesthetic values of surface water from construction and post-construction activities from the site.</p> <p>11) Ensure that risks are addressed and managed to meet the EPA criteria for individual fatality risk off-site and the DMPR's requirements in respect of public safety.</p>		
2	Environmental Management Plan	Implement the approved Environmental Management Plan referred to in commitment 1.	To achieve the objectives of Commitment 1	Pre-construction	
3	Terrestrial Flora and Vegetation Management Plan	<p>Prepare a Terrestrial Flora and Vegetation Management Plan which addresses:</p> <p>1) Protection of remnant vegetation outside the construction area footprint, within the lease area.</p> <p>2) Protection of remnant vegetation in areas outside the lease area that are located in close proximity to the construction site.</p> <p>3) Training of staff and contractors on the importance of vegetation protection and in particular protection to priority listed flora both within and outside the lease area.</p> <p>4) Weed management</p>	To protect Declared Rare and Priority Flora, consistent with the provisions of the <i>Wildlife Conservation Act (1950)</i> .	Pre-construction	CALM
4	Terrestrial Flora and Vegetation Management Plan	Implement the approved Terrestrial Flora and Vegetation Management Plan referred to in commitment 3	To achieve the objectives of Commitment 3	Pre-construction	
5	Revegetation	<p>Prepare a Revegetation Management Plan which addresses:</p> <p>1) Revegetation of disturbed areas not being utilised for lay-down area; and</p> <p>2) Necessary earthworks and revegetation of benches.</p> <p>3) Stockpiling of topsoils.</p>	<p>Maintain biodiversity and ecosystem integrity.</p> <p>Minimise impacts on visual amenity</p>	During Construction	CALM
6	Revegetation	Implement Revegetation Management Plan	To achieve the objectives of Commitment 5	Post-Construction	



No	Topic	Action	Objective	Timing	Advice
		referred to in commitment 5			
7	Fauna management	Prepare a Fauna Management Plan to address the following: 1) Undertake trapping and relocation as necessary of the Pilbara Olive python. 2) Record Pebble Mound mouse mounds 3) Recording of encounters with native animals. In particular the Pilbara Olive Python ( <i>Morelia olivacea barroni</i> ) and the Pebble Mound Mouse ( <i>Pseudomys chapmani</i> ). 4) Training to staff and contractors in dealing with encounters with native animals, in particular the Pilbara Olive Python. 5) Relocation strategy of any animals captured.	To minimise accidental death of native fauna and to protect native fauna, consistent with the provisions of the <i>Wildlife Conservation Act (1950)</i>	Pre-Construction (prior to commencement of ground disturbance.	CALM
8	Fauna Management Plan	Implement the approved Fauna Management Plan referred to in commitment 7	Achieve the objectives of Commitment no 7	Pre-Construction.	
9	Aboriginal Heritage Management Plan	Prepare an Aboriginal Heritage Management Plan which addresses the following key elements: 1) Protection of existing sites. 2) Reporting mechanisms for the recording of any new sites that are identified during pre-construction or during construction 3) Training for staff and contractors to ensure that they are aware of the significance and importance of Aboriginal or cultural sites.	To comply with the Aboriginal Heritage Act (1972) and other statutory requirements in relation to areas of cultural or historical significance.	Pre-construction	DIA
10	Aboriginal Heritage Management Plan	Implement the approved Aboriginal Heritage Management Plan referred to in commitment 9	To achieve the objectives of Commitment 9	Pre-construction	DIA

**Abbreviations**

CALM	Department of Conservation and Land Management
EPA	Environmental Protection Authority
DMPR	Department of Mineral and Petroleum Resources
ANZECC	Australian and New Zealand Environment and Conservation Council
DIA	Department of Indigenous Affairs