

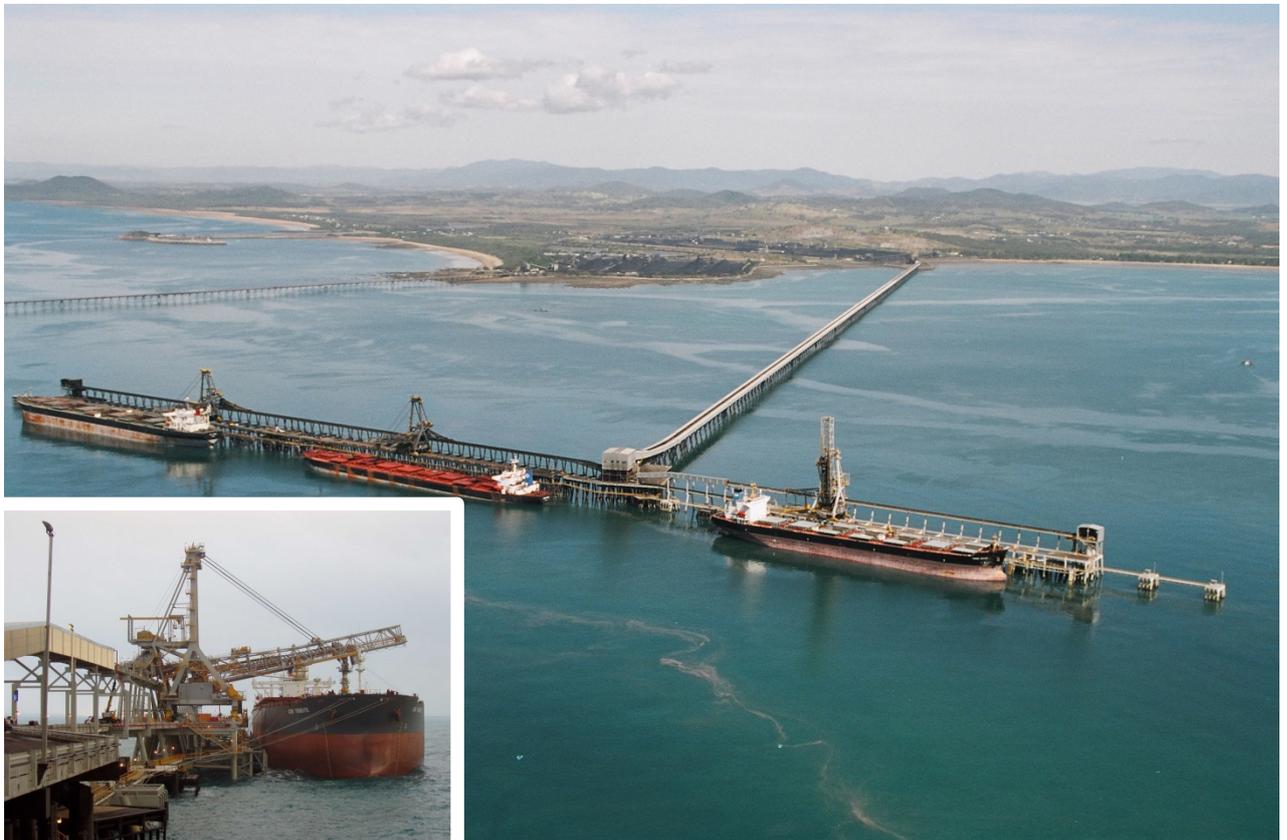
# DBCT Management Limited

Rehabilitation DBCT Report Update

Rehabilitation Valuation 2015

H350126-00000-224-230-0001, Rev 0

18<sup>th</sup> September 2015



DBCT MANAGEMENT



 **HATCH**



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## 1. Explanatory Note

### 1.1 Exclusive Use

This report has been prepared by Hatch at the request of DBCT Management Limited (“Client”) exclusively for its use.

The basis of Hatch’s engagement by the Client is that Hatch’s liability, whether under the law of contract, tort, statute, equity or otherwise, is limited as set out in the terms of the engagement.

### 1.2 Third Parties

It is not possible to make a proper assessment of this report without a clear understanding of the terms of engagement under which the report has been prepared, including the scope of the instructions and directions given to and the assumptions made by the consultant who has prepared the report.

The report is a report scoped in accordance with instructions given by or on behalf of Client. The report may not address issues which would need to be addressed with a third party if that party’s particular circumstances, requirements and experience with such reports were known and may make assumptions about matters of which a third party is not aware.

Hatch therefore does not assume responsibility for the use of, or reliance on, the report by any third party and the use of, or reliance on, the report by any third party is at the risk of that party.

### 1.3 Existing Property: Inherent Risk

The owner or prospective purchaser of an existing property or asset necessarily assumes the risk of there being defects inherent in the asset. An engineer’s report can assist an owner or prospective purchaser in making an assessment of that risk but does not eliminate that risk.

A report of this nature is not a certification, warranty or guarantee.

### 1.4 Limited Scope

The limited scope of Hatch’s brief in this matter, including the limited scope of investigation requested by Client, means that the report necessarily concentrates on readily apparent major items.

Amongst other things, Hatch’s brief expressly excludes investigation or advice in relation to the actual or potential presence of pollution, contamination or asbestos, or the actual or potential risk of any incident affecting the safety of operation.



## 1.5 Limits on Investigation and Information

The extent of investigation required to provide a comprehensive report on the matters the subject of this report would normally be significantly greater than has been carried out to provide this report. Where site inspections have been made, they have been limited in their scope to external visual inspections. No detailed testing or inspection etc. was carried out. Except as expressly stated otherwise, the inspections Hatch has made and the report do not cover defects that are not reasonably discoverable on a visual inspection, including defects in inaccessible places and latent defects. The inspections made have been limited to a subset of all the assets and operations and the list of assets and operations that have been inspected has been agreed with Client.

The report is also based on information provided to Hatch by other parties. The report is provided strictly on the basis that the information that has been provided is accurate, complete and adequate.

Hatch takes no responsibility and disclaims all liability whatsoever for any loss or damage that the Client may suffer resulting from any conclusions based on information provided to Hatch, except to the extent that Hatch expressly indicates in the report that it has verified the information to its satisfaction.

## 1.6 Limits on Cost Indications

Since Hatch has no control over the cost of labour, materials, equipment or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, any indication of costs is made on the basis of Hatch's experience and qualifications and represents its best judgment as an experienced and qualified professional consultant, familiar with the relevant industry, but Hatch cannot and does not guarantee that proposals, bids or actual construction costs will not vary from cost indications given.

## 1.7 No Comment on Commercial Feasibility

The findings, observations and conclusions expressed by Hatch are not, and should not be considered as, an opinion concerning the commercial feasibility of the property or asset.

## 1.8 Compliance with Building Codes etc.

Building Codes, Regulations and Standards, including with respect to fire protection measures are in a state of continuous change and may have changed since the original construction. Buildings constructed in accordance with the codes and regulations in force at the time may not comply with current codes and regulations. The report may give an indication and/or example of areas of non-compliance with current codes and regulations but it does not by any means provide a comprehensive analysis of compliance with current codes and regulations.

The implications of current non-compliance with applicable Codes, Regulations and Standards are a matter for legal advice.





## 1.9 Legal Documents etc.

The report may contain various remarks about and observations on legal documents and arrangements such as contracts, supply arrangements, leases, licences, permits and authorities. A consulting engineer can make remarks and observations about the technical aspects and implications of those documents and general remarks and observations of a non-legal nature about the contents of those documents. However, as a Consulting Engineer, Hatch is not qualified, cannot express and should not be taken as in any way expressing any opinion or conclusion about the legal status, validity, enforceability, effect, completeness or effectiveness of those arrangements or documents or whether what is provided for is effectively provided for. They are matters for legal advice.

## 1.10 Level of Materiality

If the reader should become aware of any inaccuracy in or change to any of the facts, findings or assumptions made either in Hatch's report or elsewhere, the reader should inform Hatch so that it can assess its significance and review its comments and recommendations.

Nothing in this report shall be read or applied so as to purport to exclude, restrict or modify, or have the effect of excluding, restricting or modifying the application of all or any of the provisions of the Trade Practices Act 1974 or any other legislation which by law cannot be excluded, restricted or modified.

This report, in whole or in part, may only be reproduced or published with the prior written permission of Hatch, and this explanatory statement must accompany every copy of this report.



## 2. Introduction

DBCT Management Limited have commissioned Hatch to develop a valuation for the projected cost of rehabilitation of the plant and facilities at Dalrymple Bay Coal Terminal (DBCT). The projection includes –

- Stages 1-6,
- additional Stage 6 items,
- the Short Gain expansion and Stage 7X Phase 1, 2, and 3,
- NECAP 2009-2015 + SR1 Replacement Project, and
- Water quality improvement Phase 2 and Phase 3 works.

The purpose of the projection is to allow DBCT Management Limited to consider a rehabilitation value for DBCT according to clause 22 of the Port Services Agreement (the “contract”).

We understand that the definition of “Rehabilitation” incorporated within the DBCT Port Services Agreement to be -

“**Rehabilitate**” means to:

- a) Remove the Plant and other structures, fixtures, fittings, plant and equipment from the Onshore Land and Offshore Land and dispose of them in accordance with applicable laws; and
- b) Remediate the Onshore Land and Offshore Land to its natural state and condition as existed prior to any development or construction activity having occurred on the Premises.

### 2.1 Rehabilitation Clause 22

#### 2.1.1 Rehabilitation

##### 2.1.1.1 DBCT Holdings May Require Primary Lessee to Rehabilitate

**Subject to clause 22.2:**

- a) *If DBCT Holdings has given written notice to the Primary Lessee at least 5 years before the expiration of the term of the Onshore Sub-Lease that DBCT Holdings requires the Primary Lessee to Rehabilitate, then unless the Primary Leases are terminated before the expiration of the Term by the Primary Lessee under clause 21 or under clause 10.1 of the Primary Leases, the Primary Lessee must Rehabilitate the Premises at its cost within 3 years after the end of the Onshore Sub-Lease;*
- b) *If the Primary Leases are terminated by DBCT Holdings after the 20<sup>th</sup> anniversary of the commencement date of the Primary Leases for the default of the Primary Lessee, and DBCT Holdings gives written notice to the Primary Lessee no later than 90 days after the date of such termination that DBCT Holdings requires the Primary Lessee to Rehabilitate, the Primary Lessee must Rehabilitate the Premises at its cost as soon as possible (and in any event within 3 years) after receipt of such notice (but the*



*Primary Lessee is only obliged to Rehabilitate the Premises if DBCT Holdings does not intend to operate DBCT or to otherwise dispose of DBCT for use as a coal terminal); or*

- c) *If the Primary Leases are surrendered by the Primary Lessee and DBCT Holdings accepts such surrender conditional upon the Primary Lessee Rehabilitating the Premises, the Primary Lessee must Rehabilitate the Premises at its cost prior to such surrender becoming effective, and in any event within 3 years after DBCT Holdings gives notice of such conditional acceptance.*

*Where a notice is given by DBCT Holdings under clause 22.1(a), the Primary Lessee may commence to Rehabilitate the Premises before the end of the term of the Onshore Sub-Lease to the extent that doing so does not adversely affect its performance of any Project Document, User Agreement or the OMA.*

#### **2.1.1.2 Rights of Access**

- a) *The Primary Lessee's obligations under clause 22.1 are subject to DBCT Holdings providing or procuring for the Primary Lessee and its representatives such rights of access to the Premises as are necessary for the Primary Lessee to perform those obligations.*
- b) *The Primary Lessee must at its cost obtain and maintain any public liability or other insurances reasonably required by DBCT Holdings while performing its obligation under this clause 22.*

#### **2.1.1.3 Rehabilitation Plan**

Within 120 days of receipt of notice from DBCT Holdings requiring the Primary Lessee to Rehabilitate, the Primary Lessee must deliver to DBCT Holdings a plan ("**Rehabilitation Plan**") which sets out:

- a) *The scope of Rehabilitation work proposed to be carried out;*
- b) *Sets out a program for carrying out the Rehabilitation;*
- c) *Any other matter which DBCT Holdings may reasonably require.*

#### **2.1.1.4 Manner of Carrying out Rehabilitation**

The Primary Lessee must:

- a) *Rehabilitate in accordance with any applicable laws;*
- b) *Rehabilitate in accordance with DBCT Holdings' reasonable conditions and requirements;*
- c) *Provide such reports regarding Rehabilitation that DBCT Holdings may reasonably require.*



### 2.1.1.5 *Reducing Scope of Works*

DBCT Holdings may direct or allow the Primary Lessee to perform less work than set out in the Rehabilitation Plan provided that in doing so the costs incurred by the Primary Lessee are not increases.

## 2.2 Purpose of a rehabilitation asset register

The purpose of this report is to provide DBCT Management with a valuation so as to satisfy the requirements of Clause 22 of the Port Services Agreement.

## 3. Rehabilitation Analysis

### 3.1 Sources of data

The primary sources of data for the asset lists for this study included;

- Final Report, Rehabilitation for Dalrymple Bay Coal Terminal (DBCT), Babcock and Brown Infrastructure (BBI), 29 October 2009, Reference H331488 (HM5501), Revision 4
- Regulated Asset Base spreadsheet, DBCT RAB 2015-16.XLS, provided Fri 11/09/2015 3:35 PM by Mr David Hull, General Manager Corporate and Project Controls, DBCT Management Pty Ltd
- An opinion of the costs of rehabilitation derived from other similar projects recently completed by Hatch.

### 3.2 Methodology

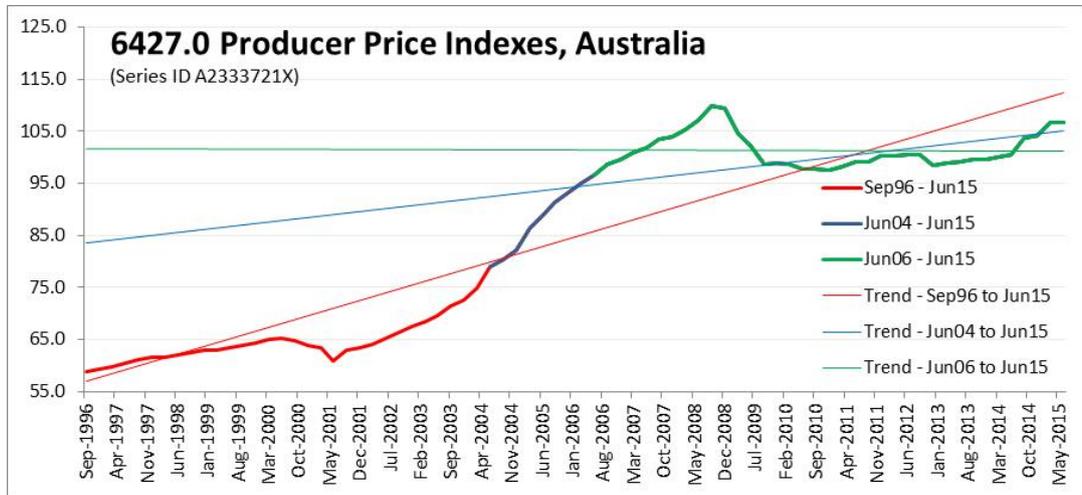
Rehabilitation cost is calculated as a percentage of the unit replacement cost for each asset. In effect, the cost of de-construction is directly linked to the cost of construction.

For the purposes of this report, the RC (Replacement Costs) as opposed to the ORC (Optimised Replacement Costs) for Dalrymple Bay Coal Terminal (DBCT) were derived from the Final Report, Rehabilitation for Dalrymple Bay Coal Terminal (DBCT) (29 October 2009, Reference H331488 (HM5501), Revision 4).

The values defined within this report were contemplated against the Regulated Asset Base spreadsheet, DBCT RAB 2015-16.XLS, provided Fri 11/09/2015 3:35 PM by Mr David Hull, General Manager Corporate and Project Controls, DBCT Management Pty Ltd and additional works completed since 2009.

These disparate costs were brought to a common (Jun-2015) datum through the application of the ABS 6427.0 Producer Price Indexes, Australia (Table 17. Output of the Construction industries, subdivision and class index numbers, Series ID A2333721X).

The Index has shown significant volatility over the past 10 years as shown below.



Hence, the escalation for works completed in Jun-2004 and Jun-2006 have been contemplated from the date of their completion to the defined datum (Jun-2015) and not through the simple application of a trend line on the Index since 2004.

### 3.3 Rehabilitation Treatment Type

The rehabilitation treatment types have been determined to allow for all rehabilitation conditions, from “leave as is” to “remove and full rehabilitation”. The table below details the 11 available treatment types along with the percentage of unit cost attributed to the treatment. The value within the range specified depends upon the scenario and asset type.

Treatment	Cost of Treatment Range <i>(as a % of unit cost)</i>	Description
Demolition and Complete Removal	30% - 80%	Demolition and complete removal of asset above and below ground
Demolition and Removal to Ground Level	10% - 30%	Demolition of asset and remove to ground level leaving sub terrain parts of asset (e.g. foundations) intact.
Fill voids	20% - 80%	Fill in assets such as dams with soil
Fill voids and Rehabilitation	100.00%	Fill in assets such as dams with soil and restore site to original condition
Leave as is	0% - 80%	“Make safe” and leave asset in current condition
Mothball (20 years)		Shutdown and secure asset to remain in place for 20 years, with future potential to become operational again. This contemplates the employment of 8 security and 8 maintenance personnel at \$100,000 each per annum plus \$1,000,000 in spare per annum over 20 years.



Treatment	Cost of Treatment Range <i>(as a % of unit cost)</i>	Description
		Inflation assumed at 5% and the discount rate of 10% to bring the annuity back to a PV.
Removal from Site	5% - 80%	Removal from site as a whole
Removal to Seabed Level	50% - 60%	This refers to the pier assets, it involves cutting off the pylons 500mm below seabed level and leaving the remainder
Remove and Full Rehabilitation	10% - 100%	Restore site to original condition
Remove and Scrap	0% - 40%	Remove asset as a whole and salvage, it is assumed the salvage value is 5%, therefore the resulting net cost is the removal cost less 5%
Scrap and remove foundations	10% - 40%	Remove asset as a whole, as well as sub terrain foundations, and salvage. It assumed the salvage value is 5%, therefore the resulting net cost is the removal cost less 5%



### 3.4 Jetty Rehabilitation Costs

When the original 2009 report was developed for consideration of Jetty Rehabilitation, expert advice was sought from American Pile Cutting (see attached brochure at Appendix A).

Given the constraints imposed upon us for the completion of this report, we have not sought further advice from American Pile Cutting but rather provide the original 2009 cost estimate.

American Pile Cutting provided the following estimate of costs which are incorporated in Section 5.1 (highlighted) of this report.

#### Assumptions (Hatch)

Length of DBCT Jetty (km)	3.85	km	
Total number of piles	1617	from DBCT project team	
Allowance for weather delays	30%	assumption	
Fuel cost	\$ 1.20	per litre	
Fuel cost	\$ 4.55	per gallon	1 litres = 0.264172052 US gallons
Crane Hire	\$ 8,000.00	per day	\$500 per crane per hr - 2 required

#### Decking Removal:

Total volume of decking structure	11,550	m3
Total demolition per day	300	m3
Theoretical estimated days for removal of decking	39	
Total wet weather days	12	
Total days required (incl weather delays)	51	
Labour and equipment cost per day	\$ 9,800.00	based on 10 man gang

#### Crush and Removal:

Laydown area size	250,000	m2
Total volume for crushing and removal (deck)	11,550	m3
Estimate of loads non crushable	475	

#### Assumptions (American Pile)

Cost per pile	\$ 1,183	per pile (\$750 plus consumables)
Allowance per day	\$ 1,500	per day for unforeseen stoppages
Fuel use	15	gallons per day
Productivity (piles / day)	32	estimated 4 piles per hour from American pile
Total theoretical days required	51	calculation
Total wet weather days	16	calculation
Total days required (incl weather delays)	67	calculation

Item	Description	Unit	Qty	Rate	Total	Comment
<b>1</b>	<b>Pile Removal</b>					
1a	Labour and Equipment cost for pile removal	per pile	1617	\$ 1,183	\$ 1,913,450	Based on American Pile quote
1b	Wet weather delays	per day	16	\$ 1,500	\$ 24,000	Based on American Pile quote
1c	Equipment shipping cost	40ft cont.	2	\$ 15,000	\$ 30,000	Based on one 40ft shipping container (return)
1d	Fuel cost	litres	2896	\$ 1.20	\$ 3,475	Based on 15 gallons per day usage
1e	Crane Hire	days	67	\$ 8,000	\$ 536,000	Based on two cranes
1f	Power Supply	allowance	1	\$ 100,000	\$ 100,000	Allowance for power supply
1g	Accom/airfares for pile removal staff	days	67	\$ 1,500	\$ 130,500	Based on 3 staff incl airfares
1h	Demolition/cutting piles into transportable sections	hours	32340	\$ 70	\$ 2,263,800	Based upon cutting the piles into transportable sections
<b>2</b>	<b>Removal of decking structure</b>					
2a	Labour and Equipment cost	per day	39	\$ 9,800	\$ 382,200	Based on a team of 10
2b	Wet weather delays	days	12	\$ 4,800	\$ 57,600	Based on a team of 11
2c	Crane Hire	days	51	\$ 8,000	\$ 408,000	Based on two cranes
<b>3</b>	<b>Transport from jetty to laydown area</b>					
3a	Transport of decking	m3	11,550	\$ 55	\$ 635,250	Based on estimated volume of decking
3b	Transport of piles	m3	38,808	\$ 55	\$ 2,134,440	Based on whole length piles
<b>4</b>	<b>Crush and Removal costs</b>					
4a	Laydown area crush and uncrushable material	m2	250,000	\$ 25	\$ 6,250,000	Flat area for crushing and load operation
4b	Crush, screen & load	m3	11,550	\$ 65	\$ 750,750	Volume based on estimate of decking
4c	Haul & dump	m3	11,550	\$ 55	\$ 635,250	Volume based on estimate of decking
4d	Dump charges (deck only)	m3	11,550	\$ 84	\$ 970,200	Based upon regional council dump rates
4e	Dump charges (piles only)	m3	19,404	\$ 84	\$ 1,629,936	Based upon regional council dump rates
4f	Load elements not crushable	per load	475	\$ 650	\$ 308,750	Based on estimated number of loads for piles
4g	Haul elements not crushable	per load	475	\$ 1,950	\$ 926,250	Based on estimated number of loads for piles
	Project Management and Site Supervision		1	\$ 150,000	\$ 150,000	
	Project Contingency		10%	\$ 2,023,985	\$ 2,023,985	

**Total estimated cost** **\$ 22,260,000**



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### 3.5 Scenarios

Three scenarios have been developed to compare rehabilitation options, these are:

- Mothball
- Do Minimal
- Full Rehabilitation

The following table represents the rehabilitation treatment type by across all scenarios for each asset item.

Asset Type	Rehabilitation Scenarios		
	<i>Mothball</i>	<i>Do Minimal</i>	<i>Full Rehabilitation</i>
Belt Feeders	Mothball (20 years)	Remove and Scrap	Remove and Scrap
Berth Dolphin System	Mothball (20 years)	Removal to Seabed Level	Removal from Site
Berth Dredging	Mothball (20 years)	Leave as is	Leave as is
Berth- Slurry Return	Mothball (20 years)	Remove and Scrap	Remove and Scrap
Berth Wharf	Mothball (20 years)	Removal to Seabed Level	Demolition and Complete Removal
Berth Wharf Bridge	Mothball (20 years)	Removal to Seabed Level	Demolition and Complete Removal
Buildings	Mothball (20 years)	Remove and Scrap	Demolition and Complete Removal
Bunds	Mothball (20 years)	Demolition and Removal to Ground Level	Remove and Full Rehabilitation
Civil and Concrete Works	Mothball (20 years)	Demolition and Removal to Ground Level	Demolition and Complete Removal
Computer System	Mothball (20 years)	Remove and Scrap	Remove and Scrap
Conveyor	Mothball (20 years)	Remove and Scrap	Scrap and remove foundations



Asset Type	Rehabilitation Scenarios		
	<i>Mothball</i>	<i>Do Minimal</i>	<i>Full Rehabilitation</i>
Dams	Mothball (20 years)	Leave as is	Fill voids and Rehabilitation
Diesel Supply	Mothball (20 years)	Removal from Site	Remove and Full Rehabilitation
Drainage	Mothball (20 years)	Fill voids	Remove and Full Rehabilitation
Drive Station	Mothball (20 years)	Remove and Scrap	Scrap and remove foundations
Dust Suppression	Mothball (20 years)	Remove and Scrap	Scrap and remove foundations
Earthworks	Mothball (20 years)	Demolition and Removal to Ground Level	Remove and Full Rehabilitation
Electrical	Mothball (20 years)	Demolition and Removal to Ground Level	Remove and Full Rehabilitation
Environmental Upgrade	Leave as is	Leave as is	Leave as is
Ethernet	Mothball (20 years)	Removal from Site	Removal from Site
Jetty	Mothball (20 years)	Removal to Seabed Level	Demolition and Complete Removal
Moisture Analysers	Mothball (20 years)	Remove and Scrap	Remove and Scrap
Other (land cost, etc)	Leave as is	Leave as is	Leave as is
Power Supply	Mothball (20 years)	Remove and Scrap	Remove and Scrap
QR Kwik Drop	Mothball (20 years)	Remove and Scrap	Scrap and remove foundations
Rail Receiving Pit	Mothball (20 years)	Fill voids	Remove and Full Rehabilitation
Reclaimer	Mothball (20 years)	Remove and Scrap	Remove and Scrap
Reclamation	Mothball (20 years)	Leave as is	Leave as is
Road	Mothball (20 years)	Removal from Site	Remove and Full Rehabilitation



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Asset Type	Rehabilitation Scenarios		
	<i>Mothball</i>	<i>Do Minimal</i>	<i>Full Rehabilitation</i>
Sample Station	Mothball (20 years)	Remove and Scrap	Scrap and remove foundations
Services/Consultants	Leave as is	Leave as is	Leave as is
Sewerage	Mothball (20 years)	Demolition and Removal to Ground Level	Remove and Full Rehabilitation
Ship Loader	Mothball (20 years)	Remove and Scrap	Remove and Scrap
Spares	Leave as is	Leave as is	Leave as is
Stacker	Mothball (20 years)	Remove and Scrap	Remove and Scrap
Stacker/ Reclaimer	Mothball (20 years)	Remove and Scrap	Remove and Scrap
Stockpile Spray System	Mothball (20 years)	Remove and Scrap	Remove and Scrap
Substations	Mothball (20 years)	Remove and Scrap	Scrap and remove foundations
Surge Bin	Mothball (20 years)	Remove and Scrap	Scrap and remove foundations
Transfer Station	Mothball (20 years)	Remove and Scrap	Scrap and remove foundations
Transfer Tower Platform	Mothball (20 years)	Remove and Scrap	Scrap and remove foundations
Water Supply	Mothball (20 years)	Remove and Scrap	Remove and Scrap



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## 4. Summary Results

The following table outlines the results by stage and scenario across the full DBCT project.

Stage	Mothball	Minimal	Full Rehabilitation
	(\$000's Jun-2015)		
Stages 1 - 6	See section 3.2	\$238,000	\$473,000
Stage 6 Additional Items	See section 3.2	\$200	\$800
Short Term Gain	See section 3.2	\$600	\$5,300
Stage 7X - Phase 1	See section 3.2	\$67,000	\$121,000
Stage 7X - Phase 2/3	See section 3.2	\$77,000	\$139,000
NECAP 2009-2015 + SR1 Replacement Project	See section 3.2	\$9,000	\$28,000
Water quality improvement Phase 2 and Phase 3 works	See section 3.2	\$47,600	\$59,500
<b>Total Cost (\$000's)</b>	<b>\$34,600</b>	<b>\$439,400</b>	<b>\$826,600</b>





## 5. Detailed Results

### 5.1 Rehabilitation Estimate - Stages 1 - 6

Do Minimal Projected Cost (\$'000)	Full Rehabilitation Projected Cost (\$'000)
\$238,000	\$473,000

#### Assumptions:

- 1) DBCT Asset Valuation Stage 1 - 6 only
- 2) QCA data used as per final determination (2004)
- 3) Unit costs in \$AUD June-2015, unless stated

	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Do Minimal		Full Rehabilitation	
				Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
<b>Rail Loop &amp; Receiving</b>							
Rail Receiving Pit 1	\$5,534	Rail Receiving Pit	\$7,481	Fill voids	\$5,985	Remove and Full Rehabilitation	\$7,481
Conveyor C1	\$871	Conveyor	\$1,178	Remove and Scrap	\$118	Scrap and remove foundations	\$236
Rail Receiving Pit 2	\$5,007	Rail Receiving Pit	\$6,769	Fill voids	\$5,415	Remove and Full Rehabilitation	\$6,769
Conveyor C2	\$675	Conveyor	\$913	Remove and Scrap	\$91	Scrap and remove foundations	\$183
Electrical	\$2,052	Electrical	\$2,774	Demolition and Removal to Ground Level	\$277	Remove and Full Rehabilitation	\$555





	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
RRP1 - Civil and Concrete Works	\$10,490	Civil and Concrete Works	\$14,181	Demolition and Removal to Ground Level	\$4,254	Demolition and Complete Removal	\$7,091
RRP2 - Civil and Concrete Works	\$9,547	Civil and Concrete Works	\$12,907	Demolition and Removal to Ground Level	\$3,872	Demolition and Complete Removal	\$6,453
<b>Inloading</b>							
Conveyor S1	\$3,553	Conveyor	\$4,803	Remove and Scrap	\$480	Scrap and remove foundations	\$961
S1 to S3 Transfer Station	\$550	Transfer Station	\$744	Remove and Scrap	\$149	Scrap and remove foundations	\$223
Conveyor S3	\$8,482	Conveyor	\$11,467	Remove and Scrap	\$1,147	Scrap and remove foundations	\$2,293
S3 to R7/R8 Transfer Stn	\$580	Transfer Station	\$784	Remove and Scrap	\$157	Scrap and remove foundations	\$235
Redundant Transfer Stn T3	\$390	Transfer Station	\$527	Remove and Scrap	\$105	Scrap and remove foundations	\$158
S3 to R5/R6 Transfer Stn	\$976	Transfer Station	\$1,319	Remove and Scrap	\$264	Scrap and remove foundations	\$396
Redundant Transfer Stn T5	\$403	Transfer Station	\$545	Remove and Scrap	\$109	Scrap and remove foundations	\$163
S3 to R3/R4 Transfer Stn	\$823	Transfer Station	\$1,113	Remove and Scrap	\$223	Scrap and remove foundations	\$334
S3 to S5 Transfer Station	\$443	Transfer Station	\$599	Remove and Scrap	\$120	Scrap and remove foundations	\$180
S3 to R2/S6A Transfer Stn	\$465	Transfer Station	\$629	Remove and Scrap	\$126	Scrap and remove foundations	\$189





	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
Conveyor S2	\$3,671	Conveyor	\$4,963	Remove and Scrap	\$496	Scrap and remove foundations	\$993
S2 to S4 Transfer Station	\$775	Transfer Station	\$1,048	Remove and Scrap	\$210	Scrap and remove foundations	\$314
Conveyor S4	\$6,592	Conveyor	\$8,912	Remove and Scrap	\$891	Scrap and remove foundations	\$1,782
S4 to R7/R8 Transfer Stn	\$507	Transfer Station	\$685	Remove and Scrap	\$137	Scrap and remove foundations	\$206
S4 to R5/R6 Transfer Stn	\$878	Transfer Station	\$1,187	Remove and Scrap	\$237	Scrap and remove foundations	\$356
S4 to R3/R4 Transfer Stn	\$871	Transfer Station	\$1,178	Remove and Scrap	\$236	Scrap and remove foundations	\$353
S4 to S5 Transfer Station	\$561	Transfer Station	\$758	Remove and Scrap	\$152	Scrap and remove foundations	\$228
S4 to R2/S6A Transfer Stn	\$707	Transfer Station	\$956	Remove and Scrap	\$191	Scrap and remove foundations	\$287
Electrical	\$8,108	Electrical	\$10,961	Demolition and Removal to Ground Level	\$1,096	Remove and Full Rehabilitation	\$2,192
<b>Stockyard</b>							
Conveyor S6A	\$1,314	Conveyor	\$1,776	Remove and Scrap	\$178	Scrap and remove foundations	\$355
S6A/S6 Transfer Station	\$926	Transfer Station	\$1,252	Remove and Scrap	\$250	Scrap and remove foundations	\$376
Conveyor S6	\$5,331	Conveyor	\$7,207	Remove and Scrap	\$721	Scrap and remove foundations	\$1,441
Stacker ST2	\$18,971	Stacker	\$25,647	Remove and Scrap	\$0	Remove and Scrap	\$5,129
Conveyor R1	\$4,301	Conveyor	\$5,815	Remove and Scrap	\$581	Scrap and remove foundations	\$1,163





	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
Stacker/Reclaimer SR1	\$25,216	Stacker/ Reclaimer	\$34,089	Remove and Scrap	\$0	Remove and Scrap	\$6,818
R1/R2 Drive Station	\$3,536	Drive Station	\$4,780	Remove and Scrap	\$478	Scrap and remove foundations	\$956
Conveyor R2	\$4,715	Conveyor	\$6,374	Remove and Scrap	\$637	Scrap and remove foundations	\$1,275
Reclaimer RL1	\$15,717	Reclaimer	\$21,248	Remove and Scrap	\$0	Remove and Scrap	\$4,250
Conveyor S5	\$5,455	Conveyor	\$7,375	Remove and Scrap	\$737	Scrap and remove foundations	\$1,475
Stacker ST1	\$16,101	Stacker	\$21,767	Remove and Scrap	\$0	Remove and Scrap	\$4,353
Conveyor R3	\$4,715	Conveyor	\$6,374	Remove and Scrap	\$637	Scrap and remove foundations	\$1,275
Stack/Recl SR2 (ex RL2)	\$24,917	Stacker/ Reclaimer	\$33,685	Remove and Scrap	\$0	Remove and Scrap	\$6,737
R3/R4 Drive Station	\$1,848	Drive Station	\$2,498	Remove and Scrap	\$250	Scrap and remove foundations	\$500
Conveyor R4	\$4,715	Conveyor	\$6,374	Remove and Scrap	\$637	Scrap and remove foundations	\$1,275
Stacker/Reclaimer SR3	\$19,647	Stacker/ Reclaimer	\$26,561	Remove and Scrap	\$0	Remove and Scrap	\$5,312
Conveyor R5	\$5,071	Conveyor	\$6,855	Remove and Scrap	\$686	Scrap and remove foundations	\$1,371
Stacker/Reclaimer SR4	\$27,820	Stacker/ Reclaimer	\$37,610	Remove and Scrap	\$0	Remove and Scrap	\$7,522
R5/R6 Drive Station	\$2,079	Drive Station	\$2,811	Remove and Scrap	\$281	Scrap and remove foundations	\$562
Conveyor R6	\$5,071	Conveyor	\$6,855	Remove and Scrap	\$686	Scrap and remove foundations	\$1,371





	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
Stacker/Reclaimer SR5	\$19,647	Stacker/ Reclaimer	\$26,561	Remove and Scrap	\$0	Remove and Scrap	\$5,312
Electrical	\$22,662	Electrical	\$30,637	Demolition and Removal to Ground Level	\$3,064	Remove and Full Rehabilitation	\$6,127
Bulk Earthworks - Stage 1	\$12,768	Earthworks	\$17,261	Demolition and Removal to Ground Level	\$3,452	Remove and Full Rehabilitation	\$5,178
Bulk Earthworks - Stage 2	\$1,090	Earthworks	\$1,474	Demolition and Removal to Ground Level	\$295	Remove and Full Rehabilitation	\$442
Bulk Earthworks - Stage 3	\$4,770	Earthworks	\$6,449	Demolition and Removal to Ground Level	\$1,290	Remove and Full Rehabilitation	\$1,935
Bulk Earthworks - Stage 5	\$1,374	Earthworks	\$1,858	Demolition and Removal to Ground Level	\$372	Remove and Full Rehabilitation	\$557
Drainage Stage 1	\$975	Drainage	\$1,318	Fill voids	\$264	Remove and Full Rehabilitation	\$395
Drainage Stage 3	\$16,296	Drainage	\$22,031	Fill voids	\$4,406	Remove and Full Rehabilitation	\$6,609
Drainage Stage 5	\$3,181	Drainage	\$4,300	Fill voids	\$860	Remove and Full Rehabilitation	\$1,290
<b>Outloading</b>							
Conveyor L1	\$4,090	Conveyor	\$5,529	Remove and Scrap	\$553	Scrap and remove foundations	\$1,106
L1/L3 Transfer Station	\$516	Transfer Station	\$698	Remove and Scrap	\$140	Scrap and remove foundations	\$209
Conveyor L3	\$4,169	Conveyor	\$5,636	Remove and Scrap	\$564	Scrap and remove foundations	\$1,127
Surge Bin 1	\$4,821	Surge Bin	\$6,518	Remove and Scrap	\$1,955	Scrap and remove foundations	\$2,607





	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
Sample Station 1	\$2,077	Sample Station	\$2,808	Remove and Scrap	\$562	Scrap and remove foundations	\$842
Belt Feeders BF5 & BF7	\$2,104	Belt Feeders	\$2,844	Remove and Scrap	\$427	Remove and Scrap	\$427
Conveyor L5	\$33,063	Conveyor	\$44,698	Remove and Scrap	\$4,470	Scrap and remove foundations	\$8,940
L5/L6 Drive Station	\$3,106	Drive Station	\$4,199	Remove and Scrap	\$420	Scrap and remove foundations	\$840
Conveyor L7	\$7,366	Conveyor	\$9,958	Remove and Scrap	\$996	Scrap and remove foundations	\$1,992
Shiploader SL1	\$42,504	Ship Loader	\$57,461	Remove and Scrap	\$0	Remove and Scrap	\$11,492
L7 Drive Station	\$513	Drive Station	\$694	Remove and Scrap	\$69	Scrap and remove foundations	\$139
Conveyor L2	\$4,224	Conveyor	\$5,710	Remove and Scrap	\$571	Scrap and remove foundations	\$1,142
L2/L4 Transfer Station	\$854	Transfer Station	\$1,155	Remove and Scrap	\$231	Scrap and remove foundations	\$346
Conveyor L4	\$4,719	Conveyor	\$6,380	Remove and Scrap	\$638	Scrap and remove foundations	\$1,276
Surge Bin 2	\$10,278	Surge Bin	\$13,895	Remove and Scrap	\$4,168	Scrap and remove foundations	\$5,558
Sample Station 2	\$2,083	Sample Station	\$2,816	Remove and Scrap	\$563	Scrap and remove foundations	\$845
Belt Feeders BF6 & BF 8	\$2,969	Belt Feeders	\$4,014	Remove and Scrap	\$602	Remove and Scrap	\$602
Conveyor L6A	\$1,646	Conveyor	\$2,225	Remove and Scrap	\$223	Scrap and remove foundations	\$445
L6A/L6 Transfer Station	\$950	Transfer Station	\$1,284	Remove and Scrap	\$257	Scrap and remove foundations	\$385





	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
Conveyor L6	\$34,154	Conveyor	\$46,173	Remove and Scrap	\$4,617	Scrap and remove foundations	\$9,235
Conveyor L8	\$8,675	Conveyor	\$11,728	Remove and Scrap	\$1,173	Scrap and remove foundations	\$2,346
Shiploader SL2	\$42,504	Ship Loader	\$57,461	Remove and Scrap	\$0	Remove and Scrap	\$11,492
L8 Drive Station	\$538	Drive Station	\$727	Remove and Scrap	\$73	Scrap and remove foundations	\$145
Conveyor L17	\$6,079	Conveyor	\$8,218	Remove and Scrap	\$822	Scrap and remove foundations	\$1,644
Shiploader SL3	\$42,504	Ship Loader	\$57,461	Remove and Scrap	\$0	Remove and Scrap	\$11,492
L17 Drive Station	\$574	Drive Station	\$776	Remove and Scrap	\$78	Scrap and remove foundations	\$155
Berth 1/2 Slurry Return	\$950	Berth- Slurry Return	\$1,284	Remove and Scrap	\$257	Remove and Scrap	\$385
Berth 3 Slurry Return	\$664	Berth- Slurry Return	\$898	Remove and Scrap	\$180	Remove and Scrap	\$269
Industrial Water Supply	\$2,101	Water Supply	\$2,840	Remove and Scrap	\$142	Remove and Scrap	\$1,136
Electrical	\$14,660	Electrical	\$19,819	Demolition and Removal to Ground Level	\$1,982	Remove and Full Rehabilitation	\$3,964
Jetty	\$69,323	Jetty	\$93,718	Removal to Seabed Level	\$22,260	Demolition and Complete Removal	\$74,974
Transfer Tower Platform - Stage 1	\$3,792	Transfer Tower Platform	\$5,126	Remove and Scrap	\$1,025	Scrap and remove foundations	\$1,025
Transfer Tower Platform - Stage 3	\$2,671	Transfer Tower Platform	\$3,611	Remove and Scrap	\$722	Scrap and remove foundations	\$722





	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
Transfer Tower Platform - Stage 6	\$1,372	Transfer Tower Platform	\$1,855	Remove and Scrap	\$371	Scrap and remove foundations	\$371
Berth 1 Wharf Bridge - Stage 1	\$1,424	Berth Wharf Bridge	\$1,925	Removal to Seabed Level	\$963	Demolition and Complete Removal	\$1,155
Berth 1 Wharf Bridge - Stage 3	\$701	Berth Wharf Bridge	\$948	Removal to Seabed Level	\$474	Demolition and Complete Removal	\$569
Berth 1 Wharf - Stage 1	\$17,963	Berth Wharf	\$24,284	Removal to Seabed Level	\$14,570	Demolition and Complete Removal	\$19,427
Berth 1 Wharf - Stage 3	\$3,829	Berth Wharf	\$5,176	Removal to Seabed Level	\$3,106	Demolition and Complete Removal	\$4,141
Berth 2 Wharf - Stage 2	\$24,850	Berth Wharf	\$33,595	Removal to Seabed Level	\$20,157	Demolition and Complete Removal	\$26,876
Berth 2 Wharf - Stage 3	\$5,744	Berth Wharf	\$7,765	Removal to Seabed Level	\$4,659	Demolition and Complete Removal	\$6,212
Berth 3 Wharf Bridge	\$1,858	Berth Wharf Bridge	\$2,512	Removal to Seabed Level	\$1,256	Demolition and Complete Removal	\$1,507
Berth 3 Wharf	\$16,802	Berth Wharf	\$22,715	Removal to Seabed Level	\$13,629	Demolition and Complete Removal	\$18,172
Berth 1 Dolphin System	\$20,568	Berth Dolphin System	\$27,806	Removal to Seabed Level	\$16,684	Removal from Site	\$22,245
Berth 2 Dolphin System	\$20,061	Berth Dolphin System	\$27,120	Removal to Seabed Level	\$16,272	Removal from Site	\$21,696
Berth 3 Dolphin System	\$17,822	Berth Dolphin System	\$24,094	Removal to Seabed Level	\$14,456	Removal from Site	\$19,275
Berth 1 Dredging	\$10,872	Berth Dredging	\$14,698	Leave as is	\$0	Leave as is	\$0





	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Do Minimal		Full Rehabilitation	
				Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
Berth 2 Dredging	\$11,962	Berth Dredging	\$16,171	Leave as is	\$0	Leave as is	\$0
Berth 3 Dredging	\$6,313	Berth Dredging	\$8,535	Leave as is	\$0	Leave as is	\$0
<b>Electrical</b>							
Substations	\$25,367	Substations	\$34,294	Remove and Scrap	\$6,859	Scrap and remove foundations	\$10,288
Communications (Ethernet)	\$3,618	Ethernet	\$4,891	Removal from Site	\$245	Removal from Site	\$245
Computer System	\$5,839	Computer System	\$7,894	Remove and Scrap	\$395	Remove and Scrap	\$395
<b>Buildings</b>							
Substations	\$5,047	Buildings	\$6,823	Remove and Scrap	\$1,365	Demolition and Complete Removal	\$2,047
<b>Other Civil Works</b>							
Dust Suppression	\$1,449	Dust Suppression	\$1,959	Remove and Scrap	\$196	Scrap and remove foundations	\$392
Industrial Water Supply	\$4,652	Water Supply	\$6,289	Remove and Scrap	\$314	Remove and Scrap	\$2,516
Stockpile Spray System	\$10,600	Stockpile Spray System	\$14,330	Remove and Scrap	\$1,433	Remove and Scrap	\$2,866
Diesel Supply	\$24	Diesel Supply	\$32	Removal from Site	\$2	Remove and Full Rehabilitation	\$3
Industrial Dam - Stage 1	\$2,564	Dams	\$3,466	Leave as is	\$2,773	Fill voids and Rehabilitation	\$3,466
Industrial Dam - Stage 3	\$2,497	Dams	\$3,376	Leave as is	\$2,701	Fill voids and Rehabilitation	\$3,376
Quarry Dam	\$15,108	Dams	\$20,424	Leave as is	\$16,340	Fill voids and Rehabilitation	\$20,424





	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
Sewerage	\$377	Sewerage	\$510	Demolition and Removal to Ground Level	\$51	Remove and Full Rehabilitation	\$51
Reclamation - Stage 1	\$9,534	Reclamation	\$12,889	Leave as is	\$0	Leave as is	\$2,578
Reclamation - Stage 3	\$3,492	Reclamation	\$4,721	Leave as is	\$0	Leave as is	\$944
<b>Contribution to External Services</b>							
Road Alligator Ck to Site	\$300	Road	\$406	Removal from Site	\$41	Remove and Full Rehabilitation	\$41
Supply of 33kV mains to site boundary	\$1,000	Power Supply	\$1,352	Remove and Scrap	\$135	Remove and Scrap	\$270
QR Kwik Drop Contributions	\$1,238	QR Kwik Drop	\$1,674	Remove and Scrap	\$84	Scrap and remove foundations	\$167
<b>Non Infrastructure, Buildings &amp; Site Improvements</b>	<b>\$4,880</b>		<b>\$6,597</b>				
<b>Up Front Financial Costs</b>	<b>\$19,493</b>		<b>\$26,352</b>				
<b>Interest During Construction</b>	<b>\$85,853</b>		<b>\$116,065</b>				
<b>Sharing of Unexplained Difference</b>	<b>\$27,750</b>		<b>\$37,515</b>				
<b>Subtotal (Base Infrastructure)</b>	<b>\$1,107,804</b>		<b>\$1,497,639</b>		<b>\$237,564</b>		<b>\$472,991</b>
<b>Spares (Asset 2)</b>							
<b>Rail Loop &amp; Receival</b>							
Rail Receival Pit 1	\$215	Spares	\$291	Leave as is	\$0	Leave as is	\$0
Conveyor C1	\$34	Spares	\$46	Leave as is	\$0	Leave as is	\$0
Rail Receival Pit 2	\$195	Spares	\$264	Leave as is	\$0	Leave as is	\$0
Conveyor C2	\$26	Spares	\$35	Leave as is	\$0	Leave as is	\$0
Electrical	\$80	Spares	\$108	Leave as is	\$0	Leave as is	\$0
<b>Inloading</b>							
Conveyor S1	\$138	Spares	\$187	Leave as is	\$0	Leave as is	\$0
S1 to S3 Transfer Station	\$4	Spares	\$5	Leave as is	\$0	Leave as is	\$0
Conveyor S3	\$330	Spares	\$446	Leave as is	\$0	Leave as is	\$0



	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
S3 to R5/R6 Transfer Stn	\$8	Spares	\$11	Leave as is	\$0	Leave as is	\$0
S3 to R3/R4 Transfer Stn	\$6	Spares	\$8	Leave as is	\$0	Leave as is	\$0
S3 to S5 Transfer Station	\$3	Spares	\$4	Leave as is	\$0	Leave as is	\$0
S3 to R2/S6A Transfer Stn	\$4	Spares	\$5	Leave as is	\$0	Leave as is	\$0
Conveyor S2	\$143	Spares	\$193	Leave as is	\$0	Leave as is	\$0
S2 to S4 Transfer Station	\$6	Spares	\$8	Leave as is	\$0	Leave as is	\$0
Conveyor S4	\$256	Spares	\$346	Leave as is	\$0	Leave as is	\$0
S4 to R5/R6 Transfer Stn	\$7	Spares	\$9	Leave as is	\$0	Leave as is	\$0
S4 to R3/R4 Transfer Stn	\$7	Spares	\$9	Leave as is	\$0	Leave as is	\$0
S4 to S5 Transfer Station	\$4	Spares	\$5	Leave as is	\$0	Leave as is	\$0
S4 to R2/S6A Transfer Stn	\$5	Spares	\$7	Leave as is	\$0	Leave as is	\$0
Electrical	\$315	Spares	\$426	Leave as is	\$0	Leave as is	\$0
<b>Stockyard</b>							
Conveyor S6A	\$51	Spares	\$69	Leave as is	\$0	Leave as is	\$0
S6A/S6 Transfer Station	\$7	Spares	\$9	Leave as is	\$0	Leave as is	\$0
Conveyor S6	\$207	Spares	\$280	Leave as is	\$0	Leave as is	\$0
Stacker ST2	\$737	Spares	\$996	Leave as is	\$0	Leave as is	\$0
Conveyor R1	\$167	Spares	\$226	Leave as is	\$0	Leave as is	\$0
Stacker/Reclaimer SR1	\$980	Spares	\$1,325	Leave as is	\$0	Leave as is	\$0
R1/R2 Drive Station	\$27	Spares	\$37	Leave as is	\$0	Leave as is	\$0
Conveyor R2	\$183	Spares	\$247	Leave as is	\$0	Leave as is	\$0
Reclaimer RL1	\$611	Spares	\$826	Leave as is	\$0	Leave as is	\$0
Conveyor S5	\$212	Spares	\$287	Leave as is	\$0	Leave as is	\$0
Stacker ST1	\$626	Spares	\$846	Leave as is	\$0	Leave as is	\$0
Conveyor R3	\$183	Spares	\$247	Leave as is	\$0	Leave as is	\$0
Stack/Recl SR2 (ex RL2)	\$968	Spares	\$1,309	Leave as is	\$0	Leave as is	\$0
R3/R4 Drive Station	\$14	Spares	\$19	Leave as is	\$0	Leave as is	\$0





	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
Conveyor R4	\$183	Spares	\$247	Leave as is	\$0	Leave as is	\$0
Stacker/Reclaimer SR3	\$764	Spares	\$1,033	Leave as is	\$0	Leave as is	\$0
Conveyor R5	\$197	Spares	\$266	Leave as is	\$0	Leave as is	\$0
Stacker/Reclaimer SR4	\$1,081	Spares	\$1,461	Leave as is	\$0	Leave as is	\$0
R5/R6 Drive Station	\$16	Spares	\$22	Leave as is	\$0	Leave as is	\$0
Conveyor R6	\$197	Spares	\$266	Leave as is	\$0	Leave as is	\$0
Stacker/Reclaimer SR5	\$764	Spares	\$1,033	Leave as is	\$0	Leave as is	\$0
Electrical	\$881	Spares	\$1,191	Leave as is	\$0	Leave as is	\$0
<b>Outloading</b>							
Conveyor L1	\$159	Spares	\$215	Leave as is	\$0	Leave as is	\$0
L1/L3 Transfer Station	\$4	Spares	\$5	Leave as is	\$0	Leave as is	\$0
Conveyor L3	\$162	Spares	\$219	Leave as is	\$0	Leave as is	\$0
Surge Bin 1	\$37	Spares	\$50	Leave as is	\$0	Leave as is	\$0
Sample Station 1	\$81	Spares	\$110	Leave as is	\$0	Leave as is	\$0
Belt Feeders BF5 & BF7	\$82	Spares	\$111	Leave as is	\$0	Leave as is	\$0
Conveyor L5	\$1,285	Spares	\$1,737	Leave as is	\$0	Leave as is	\$0
L5/L6 Drive Station	\$24	Spares	\$32	Leave as is	\$0	Leave as is	\$0
Conveyor L7	\$286	Spares	\$387	Leave as is	\$0	Leave as is	\$0
Shiploader SL1	\$1,536	Spares	\$2,077	Leave as is	\$0	Leave as is	\$0
L7 Drive Station	\$4	Spares	\$5	Leave as is	\$0	Leave as is	\$0
Conveyor L2	\$164	Spares	\$222	Leave as is	\$0	Leave as is	\$0
L2/L4 Transfer Station	\$7	Spares	\$9	Leave as is	\$0	Leave as is	\$0
Conveyor L4	\$183	Spares	\$247	Leave as is	\$0	Leave as is	\$0
Surge Bin 2	\$80	Spares	\$108	Leave as is	\$0	Leave as is	\$0
Sample Station 2	\$81	Spares	\$110	Leave as is	\$0	Leave as is	\$0
Belt Feeders BF6 & BF 8	\$115	Spares	\$155	Leave as is	\$0	Leave as is	\$0
Conveyor L6A	\$64	Spares	\$87	Leave as is	\$0	Leave as is	\$0





	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
L6A/L6 Transfer Station	\$7	Spares	\$9	Leave as is	\$0	Leave as is	\$0
Conveyor L6	\$1,327	Spares	\$1,794	Leave as is	\$0	Leave as is	\$0
Conveyor L8	\$337	Spares	\$456	Leave as is	\$0	Leave as is	\$0
Shiploader SL2	\$1,536	Spares	\$2,077	Leave as is	\$0	Leave as is	\$0
L8 Drive Station	\$4	Spares	\$5	Leave as is	\$0	Leave as is	\$0
Conveyor L17	\$236	Spares	\$319	Leave as is	\$0	Leave as is	\$0
Shiploader SL3	\$1,536	Spares	\$2,077	Leave as is	\$0	Leave as is	\$0
L17 Drive Station	\$4	Spares	\$5	Leave as is	\$0	Leave as is	\$0
Berth 1/2 Slurry Return	\$37	Spares	\$50	Leave as is	\$0	Leave as is	\$0
Berth 3 Slurry Return	\$26	Spares	\$35	Leave as is	\$0	Leave as is	\$0
Industrial Water Supply	\$33	Spares	\$45	Leave as is	\$0	Leave as is	\$0
Electrical	\$570	Spares	\$771	Leave as is	\$0	Leave as is	\$0
<b>Electrical</b>							
Substations	\$986	Spares	\$1,333	Leave as is	\$0	Leave as is	\$0
Communications (Ethernet)	\$141	Spares	\$191	Leave as is	\$0	Leave as is	\$0
Computer System	\$227	Spares	\$307	Leave as is	\$0	Leave as is	\$0
<b>Other Civil Works</b>							
Dust Suppression	\$23	Spares	\$31	Leave as is	\$0	Leave as is	\$0
Industrial Water Supply	\$72	Spares	\$97	Leave as is	\$0	Leave as is	\$0
Stockpile Spray System	\$165	Spares	\$223	Leave as is	\$0	Leave as is	\$0
<b>Subtotal (Spares)</b>	<b>\$22,463</b>		<b>\$30,368</b>		<b>\$0</b>		<b>\$0</b>
<b>Other (Asset 3)</b>							
Land	\$2,310	Other	\$3,123	Leave as is	\$0	Leave as is	\$0
<b>Subtotal (Other)</b>	<b>\$2,310</b>		<b>\$3,123</b>		<b>\$0</b>		<b>\$0</b>





	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
<b>Grand Total (CH Formulas) (All asset valuations plus unexplained difference)</b>	\$1,132,577		\$1,531,129		\$237,564		\$472,991
<b>plus rounding error difference between QCA spreadsheet and CH formulas</b>	\$7		\$7				
<b>Grand Total (\$000) (All asset valuations plus unexplained difference)</b>	\$1,132,584		\$1,531,136		\$237,564		\$472,991





## 5.2 Rehabilitation Estimate - Stage 6 Additional Works

Do Minimal Projected Cost (\$'000)	Full Rehabilitation Projected Cost (\$'000)
\$200	\$800

**Assumptions:**

- 1) DBCT Asset Valuation Stage 6 Additional items only
- 2) Estimate of cost based on previously collected CH data
- 3) Unit costs in \$AUD June-2015, unless stated

	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Do Minimal		Full Rehabilitation	
				Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>							
<b>Rail Loop &amp; Reveal</b>							
Rail Reveal Water Supply Upgrade	\$1,310	Water Supply	\$1,771	Remove and Scrap	\$89	Remove and Scrap	\$708
<b>Inloading</b>							
Moisture Analysers	\$770	Moisture Analysers	\$1,041	Remove and Scrap	\$52	Remove and Scrap	\$52
<b>Stockyard</b>							
<b>Outloading</b>							
Item 90 (SL3 luff equaliser)	\$50	Ship Loader	\$68	Remove and Scrap	\$0	Remove and Scrap	\$14
(L17 Drive Tower Brake Pulley Platform Modifications)	\$45	Conveyor	\$61	Remove and Scrap	\$6	Scrap and remove foundations	\$12
Item 89 (Sime brake guards)	\$4	Environmental Upgrade	\$5	Leave as is	\$0	Leave as is	\$0
<b>Electrical</b>							



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	(\$'000) Unit cost 2004	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Do Minimal		Full Rehabilitation	
				Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Issue 13 (DIP certification)	\$1	Environmental Upgrade	\$1	Leave as is	\$0	Leave as is	\$0
<b>Interest During Construction</b>							
<b>Subtotal (Base Infrastructure)</b>	<b>\$2,180</b>		<b>\$2,947</b>		<b>\$147</b>		<b>\$786</b>
<b>Spares (Asset 2)</b>							
<b>Subtotal (Spares)</b>	<b>\$0</b>		<b>\$0</b>		<b>\$0</b>		<b>\$0</b>
<b>Other (Asset 3)</b>							
Stage 6 Defects/ Omissions	\$150	Other	\$203	Leave as is	\$0	Leave as is	\$0
Agglomeration Trial	\$50	Other	\$68	Leave as is	\$0	Leave as is	\$0
Contingency @ 5%	\$120	Other	\$162	Leave as is	\$0	Leave as is	\$0
<b>Subtotal (Other)</b>	<b>\$320</b>		<b>\$433</b>		<b>\$0</b>		<b>\$0</b>
<b>Grand Total (\$000)</b>	<b>\$2,500</b>		<b>\$3,380</b>		<b>\$147</b>		<b>\$786</b>



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### 5.3 Rehabilitation Estimate - Short Gain Expansion

Do Minimal Projected Cost (\$'000)	Full Rehabilitation Projected Cost (\$'000)
\$600	\$5,300

#### Assumptions:

- 1) DBCT Asset Valuation Short Gain only
- 2) Estimate of cost based on previously collected CH data
- 3) Unit costs in \$AUD June-2015, unless stated

	(\$'000) Unit cost 2006	Equipment Type	(\$'000) Unit cost @ 30 June 2015	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
					Do Minimal Projected Cost (\$'000)	Full Rehabilitation Projected Cost (\$'000)	
<b>Base Infrastructure (Asset 1)</b>							
<b>Stockyard</b>							
Reclaimer RL1	\$17,698	Reclaimer	\$17,901	Remove and Scrap	\$0	Remove and Scrap	\$3,580
Shiploader SL3 Upgrade	\$2,477	Ship Loader	\$2,505	Remove and Scrap	\$0	Remove and Scrap	\$501
Conveyor R1 Refurbishment	\$5,719	Conveyor	\$5,784	Remove and Scrap	\$578	Scrap and remove foundations	\$1,157
<b>Other Costs</b>	\$4,889	Other	\$4,945	Leave as is	\$0	Leave as is	\$0
<b>Project Management Costs</b>	\$1,741	Other	\$1,761	Leave as is	\$0	Leave as is	\$0
<b>Interest During Construction</b>							
<b>Subtotal (Base Infrastructure)</b>	<b>\$32,524</b>	<b>\$0</b>	<b>\$32,896</b>		<b>\$578</b>		<b>\$5,238</b>
<b>Spares (Asset 2)</b>							
<b>Subtotal (Spares)</b>	<b>\$0</b>		<b>\$0</b>		<b>\$0</b>		<b>\$0</b>
<b>Other (Asset 3)</b>							
<b>Subtotal (Other)</b>	<b>\$0</b>		<b>\$0</b>		<b>\$0</b>		<b>\$0</b>
<b>Grand Total (\$000)</b>	<b>\$32,524</b>		<b>\$32,896</b>		<b>\$578</b>		<b>\$5,238</b>



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## 5.4 Rehabilitation Estimate - Stage 7X (Phase 1)

Do Minimal Projected Cost (\$'000)	Full Rehabilitation Projected Cost (\$'000)
\$67,000	\$121,000

**Assumptions:**

- 1) DBCT Asset Valuation Stage 7X Phase 1 Only
- 2) Unit costs based on data collected from DBCT 7X Project Team
- 3) Unit costs in \$AUD June-2015, unless stated

	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Base Infrastructure (Asset 1)</b>									
<b>Rail Loop &amp; Reveal Inloading</b>									
Third Inloading System (incl RRP3/BF11)	\$59,946,831		\$59,947						
P040 Conveyor Idlers		\$282,296	\$0	\$282	Conveyor	Remove and Scrap	\$28	Scrap and remove foundations	\$56
P041 Conveyor Belts		\$257,536	\$0	\$258	Conveyor	Remove and Scrap	\$26	Scrap and remove foundations	\$52
P043 Conveyor Pulleys		\$268,804	\$0	\$269	Conveyor	Remove and Scrap	\$27	Scrap and remove foundations	\$54
P049 Wagon Vibrator		\$1,750,738	\$0	\$1,751	QR Kwik Drop	Remove and Scrap	\$88	Scrap and remove foundations	\$175



	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
C003 Rail Receival Pit		\$22,028,637	\$0	\$22,029	Rail Receival Pit	Fill voids	\$17,623	Remove and Full Rehabilitation	\$22,029
C095 IL3 Punch List		\$2,107,397	\$0	\$2,107	Conveyor	Remove and Scrap	\$211	Scrap and remove foundations	\$421
Misc Supply		\$321,485	\$0	\$321	Other	Leave as is	\$0	Leave as is	\$0
IL3 Touch up Painting		\$215,527	\$0	\$216	Other	Leave as is	\$0	Leave as is	\$0
C061 Minor Mechanical Works		\$632,919	\$0	\$633	Conveyor	Remove and Scrap	\$63	Scrap and remove foundations	\$127
C005 IL3		\$32,081,492	\$0	\$32,081	Conveyor	Remove and Scrap	\$3,208	Scrap and remove foundations	\$6,416
Conveyor S11	\$21,877,668		\$21,878						
P040 Conveyor Idlers		\$481,558	\$0	\$482	Conveyor	Remove and Scrap	\$48	Scrap and remove foundations	\$96
P041 Conveyor Belts		\$552,022	\$0	\$552	Conveyor	Remove and Scrap	\$55	Scrap and remove foundations	\$110
P042 Conveyor Drives		\$947,380	\$0	\$947	Electrical	Demolition and Removal to Ground Level	\$95	Remove and Full Rehabilitation	\$189
P043 Conveyor Pulleys		\$166,847	\$0	\$167	Conveyor	Remove and Scrap	\$17	Scrap and remove foundations	\$33
C095 IL3 Punch List		\$434,065	\$0	\$434	Conveyor	Remove and Scrap	\$43	Scrap and remove foundations	\$87



	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Misc Supply		\$40,215	\$0	\$40	Conveyor	Remove and Scrap	\$4	Scrap and remove foundations	\$8
IL3 Touch up Painting		\$550,000	\$0	\$550	Other	Leave as is	\$0	Leave as is	\$0
C038 Access Roads and Hay Point Underpass		\$2,848,865	\$0	\$2,849	Road	Removal from Site	\$285	Remove and Full Rehabilitation	\$285
C061 Minor Mechanical Works		\$49,494	\$0	\$49	Conveyor	Remove and Scrap	\$5	Scrap and remove foundations	\$10
C005 IL3		\$15,807,222	\$0	\$15,807	Conveyor	Remove and Scrap	\$1,581	Scrap and remove foundations	\$3,161
Conveyor S13	\$69,460,967		\$69,461						
P040 Conveyor Idlers		\$643,746	\$0	\$644	Conveyor	Remove and Scrap	\$64	Scrap and remove foundations	\$129
P041 Conveyor Belts		\$411,516	\$0	\$412	Conveyor	Remove and Scrap	\$41	Scrap and remove foundations	\$82
P042 Conveyor Drives		\$525,808	\$0	\$526	Electrical	Demolition and Removal to Ground Level	\$53	Remove and Full Rehabilitation	\$105
P043 Conveyor Pulleys		\$829,872	\$0	\$830	Conveyor	Remove and Scrap	\$83	Scrap and remove foundations	\$166
C091/092 Inloading 1/2 Modification		\$641,272	\$0	\$641	Conveyor	Remove and Scrap	\$64	Scrap and remove foundations	\$128
C001 Supply New Yard Machines		\$530,660	\$0	\$531	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$106



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						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
C095 IL3 Punch List		\$3,969,255	\$0	\$3,969	Conveyor	Remove and Scrap	\$397	Scrap and remove foundations	\$794
Misc Supply		\$384,404	\$0	\$384	Conveyor	Remove and Scrap	\$38	Scrap and remove foundations	\$77
IL3 Touch up Painting		\$550,000	\$0	\$550	Other	Leave as is	\$0	Leave as is	\$0
C061 Minor Mechanical Works		\$549,892	\$0	\$550	Conveyor	Remove and Scrap	\$55	Scrap and remove foundations	\$110
C005 IL3		\$60,424,542	\$0	\$60,425	Conveyor	Remove and Scrap	\$6,042	Scrap and remove foundations	\$12,085
Modifications to Existing Inloading System 1	\$11,373,485		\$11,373						
P039 TW Chutes		\$903,480	\$0	\$903	Conveyor	Remove and Scrap	\$90	Scrap and remove foundations	\$181
P040 Conveyor Idlers		\$127,853	\$0	\$128	Conveyor	Remove and Scrap	\$13	Scrap and remove foundations	\$26
P043 Conveyor Pulleys		\$190,414	\$0	\$190	Conveyor	Remove and Scrap	\$19	Scrap and remove foundations	\$38
C091/092 Inloading 1/2 Modification		\$7,707,298	\$0	\$7,707	Conveyor	Remove and Scrap	\$771	Scrap and remove foundations	\$1,541
IL3 Touch up Painting		\$215,527	\$0	\$216	Other	Leave as is	\$0	Leave as is	\$0
C061 Minor Mechanical Works		\$24,750	\$0	\$25	Conveyor	Remove and Scrap	\$2	Scrap and remove foundations	\$5



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						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
C005 IL3		\$2,204,163	\$0	\$2,204	Conveyor	Remove and Scrap	\$220	Scrap and remove foundations	\$441
Modifications to Existing Inloading System 2	\$11,455,096		\$11,455						
P039 TW Chutes		\$1,004,919	\$0	\$1,005	Conveyor	Remove and Scrap	\$100	Scrap and remove foundations	\$201
P040 Conveyor Idlers		\$79,074	\$0	\$79	Conveyor	Remove and Scrap	\$8	Scrap and remove foundations	\$16
P043 Conveyor Pulleys		\$190,414	\$0	\$190	Conveyor	Remove and Scrap	\$19	Scrap and remove foundations	\$38
C091/092 Inloading 1/2 Modification		\$7,707,299	\$0	\$7,707	Conveyor	Remove and Scrap	\$771	Scrap and remove foundations	\$1,541
IL3 Touch up Painting		\$215,526	\$0	\$216	Other	Leave as is	\$0	Leave as is	\$0
C005 IL3		\$2,257,864	\$0	\$2,258	Conveyor	Remove and Scrap	\$226	Scrap and remove foundations	\$452
<b>Stockyard</b>									
Bund 5A	\$33,778,530		\$33,779						
P012 Bund Rail		\$601,213	\$0	\$601	Bunds	Demolition and Removal to Ground Level	\$180	Remove and Full Rehabilitation	\$240
P073 Stockpile Sprays		\$131,880	\$0	\$132	Stockpile Spray System	Remove and Scrap	\$13	Remove and Scrap	\$26



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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
C013/014 Bund 5A/Bund 6		\$31,161,164	\$0	\$31,161	Bunds	Demolition and Removal to Ground Level	\$9,348	Remove and Full Rehabilitation	\$12,464
C002 Preparatory Earthworks		\$1,884,273	\$0	\$1,884	Earthworks	Demolition and Removal to Ground Level	\$377	Remove and Full Rehabilitation	\$565
Conveyor S7	\$11,516,313		\$11,516						
P040 Conveyor Idlers		\$946,989	\$0	\$947	Conveyor	Remove and Scrap	\$95	Scrap and remove foundations	\$189
P041 Conveyor Belts		\$858,596	\$0	\$859	Conveyor	Remove and Scrap	\$86	Scrap and remove foundations	\$172
P042 Conveyor Drives		\$990,980	\$0	\$991	Electrical	Demolition and Removal to Ground Level	\$99	Remove and Full Rehabilitation	\$198
P043 Conveyor Pulleys		\$251,359	\$0	\$251	Conveyor	Remove and Scrap	\$25	Scrap and remove foundations	\$50
C095 IL3 Punch List		\$334,923	\$0	\$335	Conveyor	Remove and Scrap	\$33	Scrap and remove foundations	\$67
Misc Supply		\$31,030	\$0	\$31	Conveyor	Remove and Scrap	\$3	Scrap and remove foundations	\$6
C061 Minor Mechanical Works		\$32,480	\$0	\$32	Conveyor	Remove and Scrap	\$3	Scrap and remove foundations	\$6





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						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
C005 IL3		\$8,069,956	\$0	\$8,070	Conveyor	Remove and Scrap	\$807	Scrap and remove foundations	\$1,614
Stacker ST3	\$13,159,556		\$13,160						
C001 Supply New Yard Machines		\$13,227,442	\$0	\$13,227	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$2,645
Owner's Cost		-\$73,438	\$0	-\$73	Other	Leave as is	\$0	Leave as is	\$0
Misc Supply		\$5,552	\$0	\$6	Other	Leave as is	\$0	Leave as is	\$0
Bund 6	\$20,373,967		\$20,374						
P012 Bund Rail		\$612,347	\$0	\$612	Bunds	Demolition and Removal to Ground Level	\$184	Remove and Full Rehabilitation	\$245
P073 Stockpile Sprays		\$178,669	\$0	\$179	Stockpile Spray System	Remove and Scrap	\$18	Remove and Scrap	\$36
C013/014 Bund 5A/Bund 6		\$18,017,224	\$0	\$18,017	Bunds	Demolition and Removal to Ground Level	\$5,405	Remove and Full Rehabilitation	\$7,207
C002 Preparatory Earthworks		\$1,545,727	\$0	\$1,546	Earthworks	Demolition and Removal to Ground Level	\$309	Remove and Full Rehabilitation	\$464
C061 Minor Mechanical Works		\$20,000	\$0	\$20	Bunds	Demolition and Removal to Ground Level	\$6	Remove and Full Rehabilitation	\$8
Conveyor R7	\$11,048,156		\$11,048						
P040 Conveyor Idlers		\$953,880	\$0	\$954	Conveyor	Remove and Scrap	\$95	Scrap and remove foundations	\$191



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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
P041 Conveyor Belts		\$880,142	\$0	\$880	Conveyor	Remove and Scrap	\$88	Scrap and remove foundations	\$176
P042 Conveyor Drives		\$960,130	\$0	\$960	Electrical	Demolition and Removal to Ground Level	\$96	Remove and Full Rehabilitation	\$192
P043 Conveyor Pulleys		\$318,604	\$0	\$319	Conveyor	Remove and Scrap	\$32	Scrap and remove foundations	\$64
C018 Conveyor R7/L1/L2		\$7,935,400	\$0	\$7,935	Conveyor	Remove and Scrap	\$794	Scrap and remove foundations	\$1,587
Transfer Tower R7/8	\$9,159,740		\$9,160						
C018 Conveyor R7/L1/L2		\$9,159,740	\$0	\$9,160	Conveyor	Remove and Scrap	\$916	Scrap and remove foundations	\$1,832
Conveyor L1 Extension	\$2,767,259		\$2,767						
P040 Conveyor Idlers		\$208,984	\$0	\$209	Conveyor	Remove and Scrap	\$21	Scrap and remove foundations	\$42
P041 Conveyor Belts		\$84,200	\$0	\$84	Conveyor	Remove and Scrap	\$8	Scrap and remove foundations	\$17
P043 Conveyor Pulleys		\$41,346	\$0	\$41	Conveyor	Remove and Scrap	\$4	Scrap and remove foundations	\$8
C018 Conveyor R7/L1/L2		\$2,399,803	\$0	\$2,400	Conveyor	Remove and Scrap	\$240	Scrap and remove foundations	\$480



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						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
C061 Minor Mechanical Works		\$32,926	\$0	\$33	Conveyor	Remove and Scrap	\$3	Scrap and remove foundations	\$7
Conveyor L2 Extension	\$2,742,599		\$2,743						
P040 Conveyor Idlers		\$208,983	\$0	\$209	Conveyor	Remove and Scrap	\$21	Scrap and remove foundations	\$42
P041 Conveyor Belts		\$92,467	\$0	\$92	Conveyor	Remove and Scrap	\$9	Scrap and remove foundations	\$18
P043 Conveyor Pulleys		\$41,346	\$0	\$41	Conveyor	Remove and Scrap	\$4	Scrap and remove foundations	\$8
C018 Conveyor R7/L1/L2		\$2,399,803	\$0	\$2,400	Conveyor	Remove and Scrap	\$240	Scrap and remove foundations	\$480
Dismantle/Relocate/Modify SR4 to RL2	\$18,004,514		\$18,005						
P039 TW Chutes		\$732,755	\$0	\$733	Conveyor	Remove and Scrap	\$73	Scrap and remove foundations	\$147
P042 Conveyor Drives		\$257,490	\$0	\$257	Electrical	Demolition and Removal to Ground Level	\$26	Remove and Full Rehabilitation	\$51
P056 Slew Drives		\$222,957	\$0	\$223	Electrical	Demolition and Removal to Ground Level	\$22	Remove and Full Rehabilitation	\$45
P065/066 Bucketwheel and Boom		\$4,401,278	\$0	\$4,401	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$880



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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
P088 Hose Reelers		\$199,026	\$0	\$199	Conveyor	Remove and Scrap	\$20	Scrap and remove foundations	\$40
C020 SR4 to RL2 Conversion		\$12,148,598	\$0	\$12,149	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$2,430
Misc Supply		\$35,560	\$0	\$36	Conveyor	Remove and Scrap	\$4	Scrap and remove foundations	\$7
C061 Minor Mechanical Works		\$6,850	\$0	\$7	Conveyor	Remove and Scrap	\$1	Scrap and remove foundations	\$1
Stacker Reclaimer SR 5 Upgrade	\$3,747,867		\$3,748						
P042 Conveyor Drives		\$455,900	\$0	\$456	Electrical	Demolition and Removal to Ground Level	\$46	Remove and Full Rehabilitation	\$91
P043 Conveyor Pulleys		\$51,047	\$0	\$51	Conveyor	Remove and Scrap	\$5	Scrap and remove foundations	\$10
P056 Slew Drives		\$222,957	\$0	\$223	Electrical	Demolition and Removal to Ground Level	\$22	Remove and Full Rehabilitation	\$45
C017 Upgrade SR5		\$3,007,503	\$0	\$3,008	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$602
Misc Supply		\$10,460	\$0	\$10	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$2
Conveyor R4 Upgrade	\$9,208,256		\$9,208						
P040 Conveyor Idlers		\$375,376	\$0	\$375	Conveyor	Remove and Scrap	\$38	Scrap and remove foundations	\$75



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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
P041 Conveyor Belts		\$23,497	\$0	\$23	Conveyor	Remove and Scrap	\$2	Scrap and remove foundations	\$5
P042 Conveyor Drives		\$905,340	\$0	\$905	Electrical	Demolition and Removal to Ground Level	\$91	Remove and Full Rehabilitation	\$181
P043 Conveyor Pulleys		\$184,360	\$0	\$184	Conveyor	Remove and Scrap	\$18	Scrap and remove foundations	\$37
C023 Upgrade Conveyor R4		\$7,679,683	\$0	\$7,680	Conveyor	Remove and Scrap	\$768	Scrap and remove foundations	\$1,536
C061 Minor Mechanical Works		\$40,000	\$0	\$40	Conveyor	Remove and Scrap	\$4	Scrap and remove foundations	\$8
New Stacker Reclaimer SR3A	\$25,600,073		\$25,600						
C001 Supply New Yard Machines		\$25,543,634	\$0	\$25,544	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$5,109
Owner's Cost		-\$150,000	\$0	-\$150	Other	Leave as is	\$0	Leave as is	\$0
Misc Supply		\$31,544	\$0	\$32	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$6
C061 Minor Mechanical Works		\$174,895	\$0	\$175	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$35
New Stacker Reclaimer SR4A	\$24,500,698		\$24,501						
C001 Supply New Yard Machines		\$24,464,700	\$0	\$24,465	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$4,893
Owner's Cost		-\$150,000	\$0	-\$150	Other	Leave as is	\$0	Leave as is	\$0
Misc Supply		\$11,104	\$0	\$11	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$2
C061 Minor Mechanical Works		\$174,894	\$0	\$175	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$35



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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Yard Machine Anti-Collision System	\$1,627,787		\$1,628						
C036/051 Control Systems/Anti Collision		\$1,627,787	\$0	\$1,628	Electrical	Demolition and Removal to Ground Level	\$163	Remove and Full Rehabilitation	\$326
Upgrade Stockyard Water Reticulation System	\$1,537,985		\$1,538						
P063 Piping		\$633,725	\$0	\$634	Water Supply	Remove and Scrap	\$32	Remove and Scrap	\$253
P077 Water Pump		\$70,242	\$0	\$70	Water Supply	Remove and Scrap	\$4	Remove and Scrap	\$28
C061 Minor Mechanical Works		\$179,257	\$0	\$179	Water Supply	Remove and Scrap	\$9	Remove and Scrap	\$72
C005 IL3		\$654,761	\$0	\$655	Water Supply	Remove and Scrap	\$33	Remove and Scrap	\$262
<b>Outloading</b>									
Shiploader SL1 Upgrade	\$8,651,624		\$8,652						
P070 Shiploader Drives		\$674,336	\$0	\$674	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$135
C028/C057 Upgrade Shiploaders		\$7,901,267	\$0	\$7,901	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$1,580
Misc Supply		\$76,021	\$0	\$76	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$15
Shiploader SL2 Upgrade	\$3,677,882		\$3,678						
P070 Shiploader Drives		\$169,425	\$0	\$169	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$34
C028/C057 Upgrade Shiploaders		\$3,480,157	\$0	\$3,480	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$696
Misc Supply		\$28,300	\$0	\$28	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$6
Belt Feeder BF5 & Conveyor L1/L3 Upgrade	\$5,133,046		\$5,133						



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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
P042 Conveyor Drives		\$1,190,180	\$0	\$1,190	Electrical	Demolition and Removal to Ground Level	\$119	Remove and Full Rehabilitation	\$238
P043 Conveyor Pulleys		\$155,615	\$0	\$156	Conveyor	Remove and Scrap	\$16	Scrap and remove foundations	\$31
P071 Hagglands Drives		\$719,001	\$0	\$719	Electrical	Demolition and Removal to Ground Level	\$72	Remove and Full Rehabilitation	\$144
C019 Upgrades to BF5/BF7/L1/L2/L3/L4		\$3,030,722	\$0	\$3,031	Belt Feeders	Remove and Scrap	\$455	Remove and Scrap	\$455
C061 Minor Mechanical Works		\$37,528	\$0	\$38	Conveyor	Remove and Scrap	\$4	Scrap and remove foundations	\$8
Belt Feeder BF7 & Conveyor L2/L4 Upgrade	\$4,970,922		\$4,971						
P042 Conveyor Drives		\$1,049,057	\$0	\$1,049	Electrical	Demolition and Removal to Ground Level	\$105	Remove and Full Rehabilitation	\$210
P043 Conveyor Pulleys		\$155,615	\$0	\$156	Conveyor	Remove and Scrap	\$16	Scrap and remove foundations	\$31
P071 Hagglands Drives		\$719,001	\$0	\$719	Electrical	Demolition and Removal to Ground Level	\$72	Remove and Full Rehabilitation	\$144
C019 Upgrades to BF5/BF7/L1/L2/L3/L4		\$3,030,722	\$0	\$3,031	Belt Feeders	Remove and Scrap	\$455	Remove and Scrap	\$455
C061 Minor Mechanical Works		\$16,527	\$0	\$17	Conveyor	Remove and Scrap	\$2	Scrap and remove foundations	\$3



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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Sample Plant Upgrade	\$394,733		\$395						
C061 Minor Mechanical Works		\$394,733	\$0	\$395	Sample Station	Remove and Scrap	\$79	Scrap and remove foundations	\$118
Berth 4 Dredging	\$4,092,763		\$4,093						
Berth 4 Dredging		\$4,092,763	\$0	\$4,093	Other	Leave as is	\$0	Leave as is	\$0
Berth 4 Geotech Investigation	\$1,469,956		\$1,470						
Berth 4 Dredging		\$1,469,956	\$0	\$1,470	Other	Leave as is	\$0	Leave as is	\$0
<b>Electrical</b>									
High Voltage Power Upgrade	\$25,565,466		\$25,565						
P004/053/054/055 Transformers		\$2,811,480	\$0	\$2,811	Electrical	Demolition and Removal to Ground Level	\$281	Remove and Full Rehabilitation	\$562
P044/048 Switchgear/Circuit Breaker		\$5,497,827	\$0	\$5,498	Electrical	Demolition and Removal to Ground Level	\$550	Remove and Full Rehabilitation	\$1,100
P008/047 Switch rooms/HV Cable		\$2,139,322	\$0	\$2,139	Electrical	Demolition and Removal to Ground Level	\$214	Remove and Full Rehabilitation	\$428
C035/C015 HV Power Upgrade		\$14,924,663	\$0	\$14,925	Electrical	Demolition and Removal to Ground Level	\$1,492	Remove and Full Rehabilitation	\$2,985
Misc Supply		\$10,246	\$0	\$10	Electrical	Demolition and Removal to Ground Level	\$1	Remove and Full Rehabilitation	\$2



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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
C061 Minor Mechanical Works		\$181,928	\$0	\$182	Electrical	Demolition and Removal to Ground Level	\$18	Remove and Full Rehabilitation	\$36
Control System Upgrade	\$3,729,038		\$3,729						
C036/051 Control Systems/Anti Collision		\$3,729,038	\$0	\$3,729	Electrical	Demolition and Removal to Ground Level	\$373	Remove and Full Rehabilitation	\$746
<b>Buildings</b>									
<b>Other Civil Works</b>									
Construct Site Dams	\$10,336,845		\$10,337						
C011 Construct Site Dams		\$10,336,845	\$0	\$10,337	Dams	Leave as is	\$8,269	Fill voids and Rehabilitation	\$10,337
<b>Construction Facilities</b>									
Construction Facilities and Services	\$9,386,924		\$9,387						
Construction Facilities		\$4,500,288	\$0	\$4,500	Other	Leave as is	\$0	Leave as is	\$0
Owner's Cost		\$1,776,648	\$0	\$1,777	Other	Leave as is	\$0	Leave as is	\$0
C038 Access Roads and Hay Point Underpass		\$3,109,988	\$0	\$3,110	Road	Removal from Site	\$311	Remove and Full Rehabilitation	\$311
<b>EPCM Services</b>									
EPCM Services	\$91,242,600		\$91,243						
EPCM (CH)		\$88,359,274	\$0	\$88,359	Other	Leave as is	\$0	Leave as is	\$0
EPCM (Other)		\$2,618,472	\$0	\$2,618	Other	Leave as is	\$0	Leave as is	\$0
Owner's Cost		\$211,629	\$0	\$212	Other	Leave as is	\$0	Leave as is	\$0
Misc Supply		\$50,000	\$0	\$50	Other	Leave as is	\$0	Leave as is	\$0
C061 Minor Mechanical Works		\$3,225	\$0	\$3	Other	Leave as is	\$0	Leave as is	\$0
<b>Owners Costs</b>									
Owner's Cost	\$27,059,927		\$27,060						
Owner's Cost		\$27,020,521	\$0	\$27,021	Other	Leave as is	\$0	Leave as is	\$0
Misc Supply		\$39,406	\$0	\$39	Other	Leave as is	\$0	Leave as is	\$0



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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Subtotal (Base Infrastructure)</b>	<b>\$357,425,098</b>	<b>\$357,425,098</b>	<b>\$357,425</b>	<b>\$558,599</b>			<b>\$66,329</b>		<b>\$120,942</b>
<b>Spares (Asset 2)</b>									
<b>Capital Spares</b>	<b>\$2,665,510</b>		<b>\$2,666</b>						
P040 Conveyor Idlers		\$18,797	\$0	\$19	Spares	Leave as is	\$0	Leave as is	\$0
P041 Conveyor Belts		\$71,008	\$0	\$71	Spares	Leave as is	\$0	Leave as is	\$0
P042 Conveyor Drives		\$567,770	\$0	\$568	Spares	Leave as is	\$0	Leave as is	\$0
P043 Conveyor Pulleys		\$606,762	\$0	\$607	Spares	Leave as is	\$0	Leave as is	\$0
Capital Spares		\$1,401,173	\$0	\$1,401	Spares	Leave as is	\$0	Leave as is	\$0
<b>Subtotal (Spares)</b>	<b>\$2,665,510</b>	<b>\$2,665,510</b>	<b>\$2,666</b>	<b>\$2,666</b>			<b>\$0</b>		<b>\$0</b>
<b>Other (Asset 3)</b>									
<b>Subtotal (Other)</b>		<b>\$0</b>					<b>\$0</b>		<b>\$0</b>
<b>Grand Total (\$000)</b>	<b>\$360,090,608</b>	<b>\$360,090,608</b>	<b>\$360,091</b>	<b>\$561,265</b>			<b>\$66,329</b>		<b>\$120,942</b>



## 5.5 Rehabilitation Estimate - Stage 7X (Phase 2/3)

Do Minimal Projected Cost (\$'000)	Full Rehabilitation Projected Cost (\$'000)
\$77,000	\$139,000

**Assumptions:**

- 1) DBCT Asset Valuation Stage 7X Phase 2/3 Only
- 2) Unit costs based on data collected from DBCT 7X Project Team
- 3) Unit costs in \$AUD June-2015, unless stated

	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation
				Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy
<b>Base Infrastructure (Asset 1)</b>					
<b>Rail Loop &amp; Reveal</b>					
<b>Inloading</b>					
Modifications to Inloading Conveyors (IL1/IL2) for MCU Compliance					
Environment - Inloading Mods	\$1,245	Conveyor	Remove and Scrap	\$125	Scrap and remove foundations \$249
Miscellaneous Works	\$752	Conveyor	Remove and Scrap	\$75	Scrap and remove foundations \$150
Miscellaneous Orders	\$451	Conveyor	Remove and Scrap	\$45	Scrap and remove foundations \$90
Conveyor R8					
P084 - Conveyor Idlers	\$997	Conveyor	Remove and Scrap	\$100	Scrap and remove foundations \$199
P085 - Conveyor Belts	\$767	Conveyor	Remove and Scrap	\$77	Scrap and remove foundations \$153



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	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
				Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
P087 - Conveyor Pulleys	\$351	Conveyor	Remove and Scrap	\$35	Scrap and remove foundations	\$70
P042 - Conveyor Drives	\$949	Electrical	Demolition and Removal to Ground Level	\$95	Remove and Full Rehabilitation	\$190
P043 - Conveyor Pulleys	\$59	Conveyor	Remove and Scrap	\$6	Scrap and remove foundations	\$12
C031 - Conveyors R8/S8	\$11,718	Conveyor	Remove and Scrap	\$1,172	Scrap and remove foundations	\$2,344
Miscellaneous Works	\$100	Conveyor	Remove and Scrap	\$10	Scrap and remove foundations	\$20
Miscellaneous Orders	\$103	Conveyor	Remove and Scrap	\$10	Scrap and remove foundations	\$21
<b>Stockyard</b>						
Bund 4A						
P072 - Berth 4A Rail	\$623	Bunds	Demolition and Removal to Ground Level	\$187	Remove and Full Rehabilitation	\$249
P073 - Stockpile Sprays	\$203	Bunds	Demolition and Removal to Ground Level	\$61	Remove and Full Rehabilitation	\$81
C011 - General Earthworks	\$184	Earthworks	Demolition and Removal to Ground Level	\$37	Remove and Full Rehabilitation	\$55
C030 - Bund 4A	\$36,385	Bunds	Demolition and Removal to Ground Level	\$10,915	Remove and Full Rehabilitation	\$14,554
C068 - Material Preparation	\$4,648	Bunds	Demolition and Removal to Ground Level	\$1,394	Remove and Full Rehabilitation	\$1,859





	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
				Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Miscellaneous Orders	\$180	Bunds	Demolition and Removal to Ground Level	\$54	Remove and Full Rehabilitation	\$72
Conveyor S8 Including Transfers to S3 and S4						
P084 - Conveyor Idlers	\$1,086	Conveyor	Remove and Scrap	\$109	Scrap and remove foundations	\$217
P085 - Conveyor Belts	\$923	Conveyor	Remove and Scrap	\$92	Scrap and remove foundations	\$185
P086 - Conveyor Drives	\$991	Electrical	Demolition and Removal to Ground Level	\$99	Remove and Full Rehabilitation	\$198
P087 - Conveyor Pulleys	\$251	Conveyor	Remove and Scrap	\$25	Scrap and remove foundations	\$50
C031 - Conveyors R8/S8	\$13,397	Conveyor	Remove and Scrap	\$1,340	Scrap and remove foundations	\$2,679
Miscellaneous Works	\$100	Conveyor	Remove and Scrap	\$10	Scrap and remove foundations	\$20
Miscellaneous Orders	\$15	Conveyor	Remove and Scrap	\$2	Scrap and remove foundations	\$3
Install and Modify SR3 to SR6						
P085 - Conveyor Belts	\$120	Conveyor	Remove and Scrap	\$12	Scrap and remove foundations	\$24
P086 - Conveyor Drives	\$391	Electrical	Demolition and Removal to Ground Level	\$39	Remove and Full Rehabilitation	\$78
P087 - Conveyor Pulleys	\$120	Conveyor	Remove and Scrap	\$12	Scrap and remove foundations	\$24
C021 - SR3 to SR6 Relocation/ Conversion	\$16,946	Conveyor	Remove and Scrap	\$1,695	Scrap and remove foundations	\$3,389





	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
				Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Miscellaneous Works	\$150	Conveyor	Remove and Scrap	\$15	Scrap and remove foundations	\$30
Miscellaneous Orders	\$225	Conveyor	Remove and Scrap	\$23	Scrap and remove foundations	\$45
New Stacker ST4						
P088 - Hose Reeler for SR6	\$196	Stacker	Remove and Scrap	\$0	Remove and Scrap	\$39
C001 - Stacker ST4	\$12,085	Stacker	Remove and Scrap	\$0	Remove and Scrap	\$2,417
Miscellaneous Works	\$150	Stacker	Remove and Scrap	\$0	Remove and Scrap	\$30
<b>Outloading</b>						
Modifications to Outloading Conveyors (OL1/OL2) for MCU Compliance						
Environment - OL1/2 Upgrades	\$333	Conveyor	Remove and Scrap	\$33	Scrap and remove foundations	\$67
New Outloading System - Onshore Component - Surge Bin 3						
C027 - OL3 Onshore Works	\$30,736	Surge Bin	Remove and Scrap	\$9,221	Scrap and remove foundations	\$12,295
Miscellaneous Works	\$750	Surge Bin	Remove and Scrap	\$225	Scrap and remove foundations	\$300
New Outloading System - Onshore Component - Conveyor L11						
P084 - Conveyor Idlers	\$657	Conveyor	Remove and Scrap	\$66	Scrap and remove foundations	\$131
P085 - Conveyor Belts	\$278	Conveyor	Remove and Scrap	\$28	Scrap and remove foundations	\$56
P086 - Conveyor Drives	\$489	Electrical	Demolition and Removal to Ground Level	\$49	Remove and Full Rehabilitation	\$98





	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
				Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
P087 - Conveyor Pulleys	\$175	Conveyor	Remove and Scrap	\$18	Scrap and remove foundations	\$35
C027 - OL3 Onshore Works	\$12,809	Conveyor	Remove and Scrap	\$1,281	Scrap and remove foundations	\$2,562
Miscellaneous Works	\$150	Conveyor	Remove and Scrap	\$15	Scrap and remove foundations	\$30
Miscellaneous Orders	\$54	Conveyor	Remove and Scrap	\$5	Scrap and remove foundations	\$11
New Outloading System - Onshore Component - Conveyor L11A						
P084 - Conveyor Idlers	\$168	Conveyor	Remove and Scrap	\$17	Scrap and remove foundations	\$34
P085 - Conveyor Belts	\$87	Conveyor	Remove and Scrap	\$9	Scrap and remove foundations	\$17
P086 - Conveyor Drives	\$457	Electrical	Demolition and Removal to Ground Level	\$46	Remove and Full Rehabilitation	\$91
P087 - Conveyor Pulleys	\$170	Conveyor	Remove and Scrap	\$17	Scrap and remove foundations	\$34
C027 - OL3 Onshore Works	\$4,542	Conveyor	Remove and Scrap	\$454	Scrap and remove foundations	\$908
Miscellaneous Works	\$150	Conveyor	Remove and Scrap	\$15	Scrap and remove foundations	\$30
New Outloading System - Onshore Component - Transfer Towers						
P039 - Chutes	\$1,100	Transfer Station	Remove and Scrap	\$220	Scrap and remove foundations	\$330
C027 - OL3 Onshore Works	\$14,570	Transfer Station	Remove and Scrap	\$2,914	Scrap and remove foundations	\$4,371





	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
				Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Miscellaneous Works	\$50	Transfer Station	Remove and Scrap	\$10	Scrap and remove foundations	\$15
New Outloading System - Onshore Component - Conveyor L13						
P085 - Conveyor Belts	\$154	Conveyor	Remove and Scrap	\$15	Scrap and remove foundations	\$31
P084 - Conveyor Idlers	\$321	Conveyor	Remove and Scrap	\$32	Scrap and remove foundations	\$64
P086 - Conveyor Drives	\$919	Electrical	Demolition and Removal to Ground Level	\$92	Remove and Full Rehabilitation	\$184
P087 - Conveyor Pulleys	\$181	Conveyor	Remove and Scrap	\$18	Scrap and remove foundations	\$36
C027 - OL3 Onshore Works	\$10,028	Conveyor	Remove and Scrap	\$1,003	Scrap and remove foundations	\$2,006
Miscellaneous Works	\$150	Conveyor	Remove and Scrap	\$15	Scrap and remove foundations	\$30
New Outloading System - Onshore Component - Belt Feeder BF15						
P084 - Conveyor Idlers	\$168	Belt Feeders	Remove and Scrap	\$25	Remove and Scrap	\$25
P085 - Conveyor Belts	\$61	Belt Feeders	Remove and Scrap	\$9	Remove and Scrap	\$9
P087 - Conveyor Pulleys	\$273	Belt Feeders	Remove and Scrap	\$41	Remove and Scrap	\$41
C027 - OL3 Onshore Works	\$4,077	Belt Feeders	Remove and Scrap	\$612	Remove and Scrap	\$612
Miscellaneous Works	\$50	Belt Feeders	Remove and Scrap	\$8	Remove and Scrap	\$8
Miscellaneous Orders	\$71	Belt Feeders	Remove and Scrap	\$11	Remove and Scrap	\$11
New Outloading System - Onshore Component - Belt Feeder BF17						
P084 - Conveyor Idlers	\$168	Belt Feeders	Remove and Scrap	\$25	Remove and Scrap	\$25
P085 - Conveyor Belts	\$61	Belt Feeders	Remove and Scrap	\$9	Remove and Scrap	\$9



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	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation
				Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy
P087 - Conveyor Pulleys	\$273	Belt Feeders	Remove and Scrap	\$41	Remove and Scrap \$41
C027 - OL3 Onshore Works	\$3,938	Belt Feeders	Remove and Scrap	\$591	Remove and Scrap \$591
Miscellaneous Works	\$50	Belt Feeders	Remove and Scrap	\$8	Remove and Scrap \$8
Miscellaneous Orders	\$71	Belt Feeders	Remove and Scrap	\$11	Remove and Scrap \$11
Land Reclamation Work					
C026 - Land Reclamation	\$9,089	Reclamation	Leave as is	\$0	Leave as is \$1,818
C068 - Material Preparation	\$5,423	Reclamation	Leave as is	\$0	Leave as is \$1,085
Jetty Extension Incl Conveyor L15 and L15A					
P081 - Transformers	\$850	Electrical	Demolition and Removal to Ground Level	\$85	Remove and Full Rehabilitation \$170
P084 - Conveyor Idlers	\$3,207	Conveyor	Remove and Scrap	\$321	Scrap and remove foundations \$641
P085 - Conveyor Belts	\$3,549	Conveyor	Remove and Scrap	\$355	Scrap and remove foundations \$710
P086 - Conveyor Drives	\$2,651	Electrical	Demolition and Removal to Ground Level	\$265	Remove and Full Rehabilitation \$530
P087 - Conveyor Pulleys	\$953	Conveyor	Remove and Scrap	\$95	Scrap and remove foundations \$191
P082 - Switchgear	\$1,381	Electrical	Demolition and Removal to Ground Level	\$138	Remove and Full Rehabilitation \$276
P079 - Jetty Maintenance Platform	\$980	Buildings	Remove and Scrap	\$196	Demolition and Complete Removal \$294
P080 - Mega Reel	\$1,000	Conveyor	Remove and Scrap	\$100	Scrap and remove foundations \$200
C029 - OL3 Offshore Works	\$209,683	Conveyor	Remove and Scrap	\$20,968	Scrap and remove foundations \$41,937





	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation
				Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy
Miscellaneous Works	\$666	Conveyor	Remove and Scrap	\$67	Scrap and remove foundations \$133
Miscellaneous Orders	\$315	Conveyor	Remove and Scrap	\$31	Scrap and remove foundations \$63
<b>Berth 4 incl L17 Head end Extension</b>					
P084 - Conveyor Idlers	\$443	Conveyor	Remove and Scrap	\$44	Scrap and remove foundations \$89
P085 - Conveyor Belts	\$232	Conveyor	Remove and Scrap	\$23	Scrap and remove foundations \$46
P087 - Conveyor Pulleys	\$174	Conveyor	Remove and Scrap	\$17	Scrap and remove foundations \$35
P050 - Berth 4 Rail	\$492	Conveyor	Remove and Scrap	\$49	Scrap and remove foundations \$98
P058 - Steel Piles for Berth 4	\$2,548	Conveyor	Remove and Scrap	\$255	Scrap and remove foundations \$510
C029 - OL3 Offshore Works	\$150,329	Conveyor	Remove and Scrap	\$15,033	Scrap and remove foundations \$30,066
Miscellaneous Works	\$250	Conveyor	Remove and Scrap	\$25	Scrap and remove foundations \$50
Miscellaneous Orders	\$394	Conveyor	Remove and Scrap	\$39	Scrap and remove foundations \$79
<b>Electrical</b>					
<b>Control System Upgrade</b>					
C036 - Control System Upgrade	\$2,903	Electrical	Demolition and Removal to Ground Level	\$290	Remove and Full Rehabilitation \$581
C051 - Anti Collision System	\$442	Electrical	Demolition and Removal to Ground Level	\$44	Remove and Full Rehabilitation \$88



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	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
				Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Miscellaneous Works	\$250	Electrical	Demolition and Removal to Ground Level	\$25	Remove and Full Rehabilitation	\$50
Miscellaneous Orders	\$667	Electrical	Demolition and Removal to Ground Level	\$67	Remove and Full Rehabilitation	\$133
<b>Buildings</b>						
Administration Building Extension						
C083 - Admin Building	\$1,617	Buildings	Remove and Scrap	\$323	Demolition and Complete Removal	\$485
Warehouse Facility						
P078 - Warehouse Extension	\$1,000	Buildings	Remove and Scrap	\$200	Demolition and Complete Removal	\$300
<b>Other Civil Works</b>						
Final Development of Row 8						
P047 - HV Cable	\$114	Electrical	Demolition and Removal to Ground Level	\$11	Remove and Full Rehabilitation	\$23
C015 - Misc Elect Servs	\$327	Electrical	Demolition and Removal to Ground Level	\$33	Remove and Full Rehabilitation	\$65
C011 - General Earthworks	\$333	Earthworks	Demolition and Removal to Ground Level	\$67	Remove and Full Rehabilitation	\$100
C068 - Material Preparation	\$362	Bunds	Demolition and Removal to Ground Level	\$109	Remove and Full Rehabilitation	\$145





	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation
				Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy
<b>Final Roadworks</b>					
C025 - Final Roadworks Part 1	\$7,237	Road	Removal from Site	\$724	Remove and Full Rehabilitation \$724
C094 - Final Roadworks Part 2	\$2,651	Road	Removal from Site	\$265	Remove and Full Rehabilitation \$265
C068 - Material Preparation	\$290	Road	Removal from Site	\$29	Remove and Full Rehabilitation \$29
Miscellaneous Works	\$250	Road	Removal from Site	\$25	Remove and Full Rehabilitation \$25
<b>Environmental Upgrade Works</b>					
Miscellaneous Works	\$1,672	Environmental Upgrade	Leave as is	\$0	Leave as is \$0
<b>Construction Facilities</b>					
<b>Construction Facilities</b>					
C011 - General Earthworks	\$373	Earthworks	Demolition and Removal to Ground Level	\$75	Remove and Full Rehabilitation \$112
C068 - Material Preparation	\$1,068	Earthworks	Demolition and Removal to Ground Level	\$214	Remove and Full Rehabilitation \$321
Construction Facilities	\$3,184	Buildings	Remove and Scrap	\$637	Demolition and Complete Removal \$955
Miscellaneous Orders	\$577	Other	Leave as is	\$0	Leave as is \$0
<b>EPCM Services</b>					
<b>EPCM Services</b>					
EPCM	\$86,017	Other	Leave as is	\$0	Leave as is \$0
Miscellaneous Orders	\$145	Other	Leave as is	\$0	Leave as is \$0
<b>Owners Costs</b>					
<b>Owner's Cost</b>					





	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation
				Do Minimal Projected Cost (\$'000)	Full Rehabilitation Projected Cost (\$'000)
Owners Costs	\$31,400	Other	Leave as is	\$0	\$0
<b>Subtotal (Base Infrastructure)</b>	<b>\$733,091</b>			<b>\$76,320</b>	<b>\$138,373</b>
<b>Spares (Asset 2)</b>					
<b>Capital Spares</b>					
P086 - Conveyor Drives	\$858	Spares	Leave as is	\$0	\$0
P087 - Conveyor Pulleys	\$659	Spares	Leave as is	\$0	\$0
Capital Spares	\$1,392	Spares	Leave as is	\$0	\$0
<b>Subtotal (Spares)</b>	<b>\$2,909</b>			<b>\$0</b>	<b>\$0</b>
<b>Other (Asset 3)</b>					
<b>Subtotal (Other)</b>	<b>\$0</b>			<b>\$0</b>	<b>\$0</b>
<b>Grand Total (\$000)</b>	<b>\$736,000</b>			<b>\$76,320</b>	<b>\$138,373</b>





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## 5.6 Rehabilitation Estimate - Water quality improvement Phase 2 and Phase 3 works

Do Minimal Projected Cost (\$'000)	Full Rehabilitation Projected Cost (\$'000)
\$47,600	\$59,500

### Assumptions:

- 1) DBCT Asset Valuation Water quality improvement Phase 2 and Phase 3 works only
- 2) Unit costs based on data collected from DBCT
- 3) Unit costs in \$AUD June-2015, unless stated

	Unit cost	(\$'000) Unit cost @ 30 June 2015	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation
							Do Minimal Projected Cost (\$'000)	Full Rehabilitation Projected Cost (\$'000)
New pipeline and pumps from Industrial Dam to Quarry Dam	\$6,165,000	\$6,165	\$6,165	\$6,165	Dams	Leave as is	\$4,932	Fill voids and Rehabilitation \$6,165
Industrial dam concrete structures	\$5,785,000	\$5,785	\$5,785	\$5,785	Dams	Leave as is	\$4,628	Fill voids and Rehabilitation \$5,785
New rail loop dam	\$26,885,000	\$26,885	\$26,885	\$26,885	Dams	Leave as is	\$21,508	Fill voids and Rehabilitation \$26,885
Expansion of quarry dam	\$9,410,000	\$9,410	\$9,410	\$9,410	Dams	Leave as is	\$7,528	Fill voids and Rehabilitation \$9,410
New pipeline from Quarry Dam to new Rail Loop Dam	\$6,205,000	\$6,205	\$6,205	\$6,205	Dams	Leave as is	\$4,964	Fill voids and Rehabilitation \$6,205
New WM1 Tank and Pump system	\$3,555,000	\$3,555	\$3,555	\$3,555	Dams	Leave as is	\$2,844	Fill voids and Rehabilitation \$3,555
New Flocculent plant	\$1,420,000	\$1,420	\$1,420	\$1,420	Dams	Leave as is	\$1,136	Fill voids and Rehabilitation \$1,420
<b>Subtotal (Base Infrastructure)</b>	<b>\$59,425,000</b>	<b>\$59,425</b>	<b>\$59,425</b>	<b>\$59,425</b>			<b>\$47,540</b>	<b>\$59,425</b>
<b>Spares</b>								
<b>Capital Spares</b>	\$0							



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	Unit cost	(\$'000) Unit cost @ 30 June 2015	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
<b>Subtotal (Spares)</b>	\$0	\$0	\$0	\$0			\$0		\$0
					<b>Other</b>				
<b>Subtotal (Other)</b>		\$0		\$0			\$0		\$0
<b>Grand Total (\$000)</b>	\$59,425,000	\$59,425	\$59,425	\$59,425			\$47,540		\$59,425



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## 5.7 Rehabilitation Estimate - NECAP 2009-2015 + SR1 Replacement Project

Do Minimal Projected Cost (\$'000)	Full Rehabilitation Projected Cost (\$'000)
\$9,000	\$28,000

### Assumptions:

- 1) DBCT Asset Valuation NECAP 2009-2015 + SR1 Replacement Project Only
- 2) Unit costs based on data collected from DBCT
- 3) Unit costs in \$AUD June-2015, unless stated

	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal		Full Rehabilitation	
							Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)	
<b>NECAP 2009-2015 + SR1 Replacement Project</b>										
<b>NECAP 2009</b>										
Site Wide Control & Communications System	\$4,796,807	\$4,796,807	\$4,797	\$2,205	Computer System	Remove and Scrap	\$110	Remove and Scrap	\$110	
Software Improvements	\$3,644,365	\$3,644,365	\$3,644	\$3,643	Computer System	Remove and Scrap	\$182	Remove and Scrap	\$182	
Safety Equipment	\$2,015,702	\$2,015,702	\$2,016	\$2,015	Other	Leave as is	\$0	Leave as is	\$0	
Wagon vibrator system	\$606,122	\$606,122	\$606	\$606	QR Kwik Drop	Remove and Scrap	\$30	Scrap and remove foundations	\$61	
<b>NECAP 2010</b>										
Wagon vibrator system	\$6,234,310	\$6,234,310	\$6,234	\$6,115	QR Kwik Drop	Remove and Scrap	\$306	Scrap and remove foundations	\$612	
Wagon vibrator system	\$3,090,393	\$3,090,393	\$3,090	\$3,031	QR Kwik Drop	Remove and Scrap	\$152	Scrap and remove foundations	\$303	





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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
							Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Warehouse Compound	\$63,754	\$63,754	\$64	\$63	Civil and Concrete Works	Demolition and Removal to Ground Level	\$19	Demolition and Complete Removal	\$32
Safety Equipment	\$1,362,276	\$1,362,276	\$1,362	\$1,354	Other	Leave as is	\$0	Leave as is	\$0
<b>NECAP 2011</b>									
Wagon vibrator system	\$124,323	\$124,323	\$124	\$121	QR Kwik Drop	Remove and Scrap	\$6	Scrap and remove foundations	\$12
Wagon vibrator system	\$45,904	\$45,904	\$46	\$45	QR Kwik Drop	Remove and Scrap	\$2	Scrap and remove foundations	\$4
Shiploader SL1	\$670,192	\$670,192	\$670	\$659	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$132
Shiploader SL2	\$576,299	\$576,299	\$576	\$567	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$113
Shiploader SL3	\$1,143,702	\$1,143,702	\$1,144	\$1,125	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$225
Marine Structures and Handbars	\$1,027,634	\$1,027,634	\$1,028	\$1,011	Berth Wharf	Removal to Seabed Level	\$607	Demolition and Complete Removal	\$809
Jetty - Maintenance Access Device	\$655,957	\$655,957	\$656	\$645	Jetty	Removal to Seabed Level	\$0	Demolition and Complete Removal	\$516
Site Wide Control & Communications System	\$110,154	\$110,154	\$110	\$71	Computer System	Remove and Scrap	\$4	Remove and Scrap	\$4
Software Improvements	\$487,325	\$487,325	\$487	\$316	Computer System	Remove and Scrap	\$16	Remove and Scrap	\$16
Safety Equipment	\$2,578,813	\$2,578,813	\$2,579	\$2,537	Other	Leave as is	\$0	Leave as is	\$0
<b>NECAP 2012</b>									



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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Rail Reveal Pit & Structure	\$986,137	\$986,137	\$986	\$978	Rail Reveal Pit	Fill voids	\$782	Remove and Full Rehabilitation	\$978
Wagon vibrator system	\$238,112	\$238,112	\$238	\$235	QR Kwik Drop	Remove and Scrap	\$12	Scrap and remove foundations	\$24
Vibrating Feeders 7, 8, 9, 10, 11, 12	\$969,622	\$969,622	\$970	\$958	QR Kwik Drop	Remove and Scrap	\$48	Scrap and remove foundations	\$96
R2 Conveyor	\$714,797	\$714,797	\$715	\$706	Conveyor	Remove and Scrap	\$71	Scrap and remove foundations	\$141
R3 Conveyor	\$708,548	\$708,548	\$709	\$700	Conveyor	Remove and Scrap	\$70	Scrap and remove foundations	\$140
Stacker Reclaimer SR2	\$3,724,606	\$3,724,606	\$3,725	\$3,694	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$739
Shiploader SL1	\$2,788,743	\$2,788,743	\$2,789	\$2,766	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$553
Shiploader SL2	\$2,210,033	\$2,210,033	\$2,210	\$2,192	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$438
Shiploader SL3	\$2,260,074	\$2,260,074	\$2,260	\$2,242	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$448
Marine Structures and Handbars	\$2,862,306	\$2,862,306	\$2,862	\$2,839	Berth Wharf	Removal to Seabed Level	\$1,703	Demolition and Complete Removal	\$2,271
Safety Equipment	\$2,286,797	\$2,286,797	\$2,287	\$2,268	Other	Leave as is	\$0	Leave as is	\$0
<b>NECAP 2013</b>									
Rail Reveal Pit & Structure	\$29,406	\$29,406	\$29	\$29	Rail Reveal Pit	Fill voids	\$23	Remove and Full Rehabilitation	\$29



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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Wagon vibrator system	\$311,447	\$311,447	\$311	\$308	QR Kwik Drop	Remove and Scrap	\$15	Scrap and remove foundations	\$31
S3 Transfer Towers to Yard Conveyors	\$437,455	\$437,455	\$437	\$433	Transfer Tower Platform	Remove and Scrap	\$87	Scrap and remove foundations	\$87
Inloading IL2 General	\$444,890	\$444,890	\$445	\$441	Conveyor	Remove and Scrap	\$44	Scrap and remove foundations	\$88
Inloading Sample Plants	\$322,147	\$322,147	\$322	\$319	Sample Station	Remove and Scrap	\$64	Scrap and remove foundations	\$96
Underpan Protection	\$514,263	\$514,263	\$514	\$509	Other	Leave as is	\$0	Leave as is	\$0
Stacker Reclaimer SR2	\$354,940	\$354,940	\$355	\$352	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$70
Shiploader SL1	\$31,356	\$31,356	\$31	\$31	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$6
Shiploader SL2	\$6,561	\$6,561	\$7	\$7	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$1
Shiploader SL3	\$12,496	\$12,496	\$12	\$12	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$2
Marine Structures and Handbars	\$16,314	\$16,314	\$16	\$16	Berth Wharf	Removal to Seabed Level	\$10	Demolition and Complete Removal	\$13
L3 Conveyor	\$287,801	\$287,801	\$288	\$285	Conveyor	Remove and Scrap	\$29	Scrap and remove foundations	\$57
L15 Conveyor	\$1,118,803	\$1,118,803	\$1,119	\$1,108	Conveyor	Remove and Scrap	\$111	Scrap and remove foundations	\$222





	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Do Minimal		Full Rehabilitation	
						Treatment and Rehabilitation Strategy	Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Site Wide Control & Communications System	\$2,797,429	\$2,797,429	\$2,797	\$2,331	Computer System	Remove and Scrap	\$117	Remove and Scrap	\$117
Safety Equipment	\$4,604,786	\$4,604,786	\$4,605	\$4,567	Other	Leave as is	\$0	Leave as is	\$0
<b>NECAP 2014</b>									
Wagon vibrator system	\$289,897	\$289,897	\$290	\$286	QR Kwik Drop	Remove and Scrap	\$14	Scrap and remove foundations	\$29
S1 Tunnel Mouth & Metal Detector Spillage Collection	\$417,455	\$417,455	\$417	\$412	Sample Station	Remove and Scrap	\$82	Scrap and remove foundations	\$124
L15 Conveyor	\$954,308	\$954,308	\$954	\$942	Conveyor	Remove and Scrap	\$94	Scrap and remove foundations	\$188
L8 Spreader Beam	\$942,490	\$942,490	\$942	\$931	Transfer Tower Platform	Remove and Scrap	\$186	Scrap and remove foundations	\$186
Operations Building	\$2,516,415	\$2,516,415	\$2,516	\$2,485	Buildings	Remove and Scrap	\$497	Demolition and Complete Removal	\$746
Safety Equipment	\$2,940,801	\$2,940,801	\$2,941	\$2,904	Other	Leave as is	\$0	Leave as is	\$0
Fire Protection Auto Sprinklers	\$1,061,094	\$1,061,094	\$1,061	\$1,048	Electrical	Demolition and Removal to Ground Level	\$105	Remove and Full Rehabilitation	\$210
<b>NECAP 2015</b>									
S/S Underpans to L1 Incline	\$771,701	\$771,701	\$772	\$772	Other	Leave as is	\$0	Leave as is	\$0
Stacker Reclaimer SR1	\$332,936	\$332,936	\$333	\$333	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$67
RL3 Ancillary Works	\$262,760	\$262,760	\$263	\$263	Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$53
Pulley Upgrade P98 for P23A - S&I	\$858,359	\$858,359	\$858	\$858	Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$172





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	Unit cost	Unit cost	(\$'000) Unit cost	(\$'000) Unit cost @ 30 June 2015	Equipment Type	Treatment and Rehabilitation Strategy	Do Minimal	Full Rehabilitation	
							Do Minimal Projected Cost (\$'000)	Treatment and Rehabilitation Strategy	Full Rehabilitation Projected Cost (\$'000)
Marine Structures and Handbars	\$4,417,754	\$4,417,754	\$4,418	\$4,418	Berth Wharf	Removal to Seabed Level	\$2,651	Demolition and Complete Removal	\$3,534
Offshore Treatment Plant	\$1,318,424	\$1,318,424	\$1,318	\$1,318	Ship Loader	Remove and Scrap	\$0	Remove and Scrap	\$264
Sample Plant 1	\$443,190	\$443,190	\$443	\$443	Sample Station	Remove and Scrap	\$89	Scrap and remove foundations	\$133
Safety Equipment	\$8,214,345	\$8,214,345	\$8,214	\$8,214	Other	Leave as is	\$0	Leave as is	\$0
Water Transfer System	\$1,748,297	\$1,748,297	\$1,748	\$1,748	Water Supply	Remove and Scrap	\$87	Remove and Scrap	\$699
Laydown Areas	\$852,723	\$852,723	\$853	\$853	Civil and Concrete Works	Demolition and Removal to Ground Level	\$256	Demolition and Complete Removal	\$426
<b>SR1 Replacement Project</b>									
Stacker Reclaimer SR1	\$52,362,895	\$52,362,895	\$52,363	\$51,710	Stacker/ Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$10,342
RL3 Ancillary Works	\$1,369,518	\$1,369,518	\$1,370	\$1,352	Reclaimer	Remove and Scrap	\$0	Remove and Scrap	\$270
<b>Subtotal (NECAP 2009-2015 + SR1 Replacement Project)</b>	<b>\$142,349,263</b>	<b>\$142,349,263</b>	<b>\$142,349</b>	<b>\$137,753</b>			<b>\$8,680</b>		<b>\$27,221</b>
<b>Grand Total (\$000)</b>	<b>\$142,349,263</b>	<b>\$142,349,263</b>	<b>\$142,349</b>	<b>\$137,753</b>			<b>\$8,680</b>		<b>\$27,221</b>



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# Appendix A

## American Pile Cutting Brochure



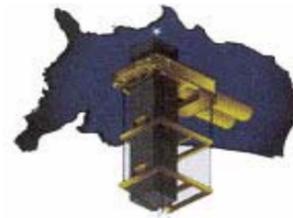
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Save Money!  
Up to 80%  
Save Time!  
Takes minutes, not hours



American Pile Cutting Inc.

National Headquarters:  
2958 Ivy Oak Court  
Buford, GA 30519  
majorgreg@hotmail.com

"APC did the job in 2 days, not 2 weeks."

-Claude Hess, Construction Mgr.  
Berkel and Co.

# American Pile Cutting Inc.

... a cut above the rest!

Your Best choice for Cutting Edge:

Pile Cutting  
Wire Sawing

Core Drilling  
Pile Crushing

Horizontal Curb Cutting

"The pile cutter was introduced to (BOH bros) on this project and it became a useful tool for the Peace River Bridge and subsequent projects."

-Lizabeth L. Howard, Asst. Project Mgr.  
BOH bros. Construction Co.

American Pile Cutting Inc.  
2958 Ivy Oak Court  
Buford, GA 30519  
800/976-7725 Toll-Free  
770/614-3893 Atlanta  
770/614-3795 FAX

# American Pile Cutting Inc.

AMERICAN PILE CUTTING INC.

... a cut above the rest!



Inside:  
Technology on the cutting edge  
An environmental success story



SERVING DOMESTIC AND INTERNATIONAL MARKETS





# Technology on the Cutting Edge

## Pile Cutting

Get your job *done* in 50% to 75 % of the time with our machinery!



Bay St. Louis, Mississippi. Contracted by Granite-Archer Westin.

Save Money!

Save Time!

Reduce Labor Costs!

**ELIMINATE** costly, time consuming, not to mention potentially dangerous cutting methods, involving chippers, jackhammers, compressors, diamond saws, and multiple laborers. Let American Pile Cutting Inc. cut piles on your next project!



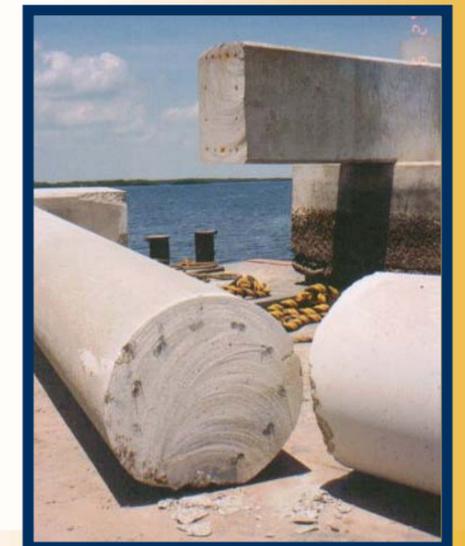
We cut piles ranging from 12 inches to 50 inches and are currently expanding our services to accommodate 60 inch piles. We commonly cut concrete precast piles, auger cast in place piles, pipe piles, and have even cut steel h-beams. We enjoy a challenge, adapting or modifying our cutter to suit specific situations.

# The Peace River Bridge Project

As featured in *Southeast Construction Magazine's* "Best of 2003 Awards" for Infrastructure



**APC** is part of a success story that combined major cost savings and environmentally friendly technology. Working in federally-protected manatee waters, APC minimized debris pollution with turbidity curtains surrounding the equipment barge. Water samples taken before, during and after each pile cut revealed minimal disturbance to the fragile environment. Using a combination of wire sawing and APC's patented pile cutter we were able to remove the 114 bents located both above and below the water. APC completed work on the 8,500-foot bridge in mere months.



The wire saw ensures a clean, reliable cut every time!

# PILE CRUSHING

When crushing up to 36 inches of exposed steel our typical production is approximately 80 piles per day, we have crushed 120 piles per day under ideal conditions.

**Efficient**



Our crushing blades fit round, square, or octagonal pre-stressed or cast in place piles from 12 inches to 36 inches in diameter.

## Before APC technology



The Pile Cutter eliminates costly and time consuming use of air compressors, chippers, jack hammers, and laborers.



**After**



**Fast  
Safe  
Versatile**

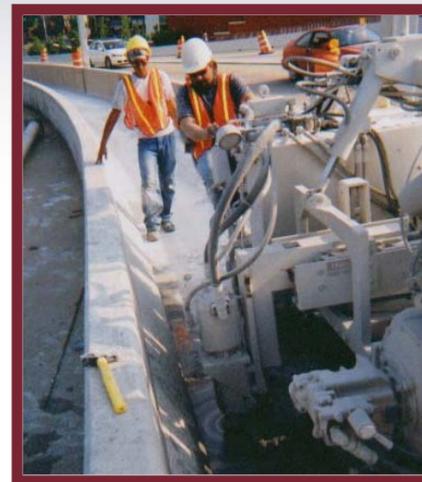
# Wire Saw



Less labor and equipment is needed to remove more material. Wire sawing will speed up production and allow you to complete the job sooner!

## Horizontal Cutting

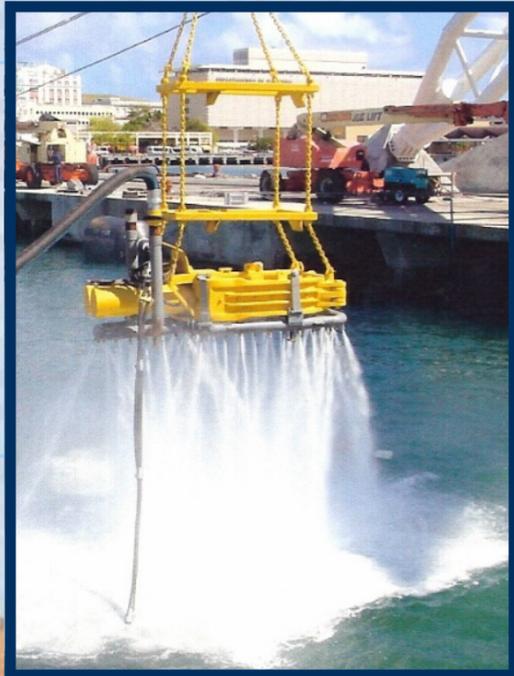
**Bridge Rails  
Road Curbs  
Lane Barriers**



# Technology on the Cutting edge

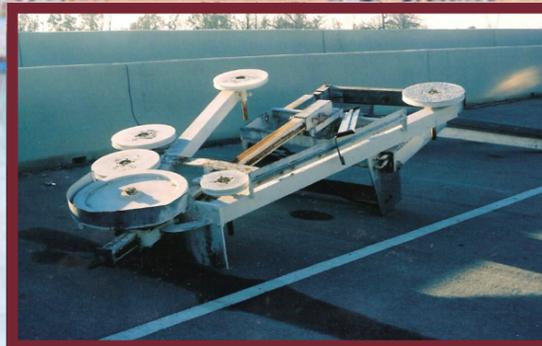
American Pile Cutting Inc.

## Innovative Underwater Technology



Environmental Concerns? - working in federally protected manatee waters, APC met all environmental standards while cutting and jetting 114 bents with 6-10 piles per bent.

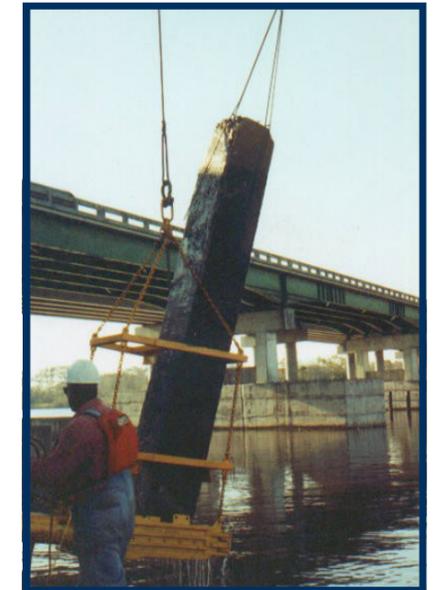
The water jet manifold can be added to any underwater operation in order to cut pilings well below the mud line. Shown here in San Juan, Puerto Rico.



APC also utilizes underwater wire saw technology in order to provide you with the best machines available.



Our machinery is powered by environmentally friendly **biodegradable** fuel. Look to APC for the most economical and efficient pile cutting technology while safeguarding the fragile environment on your next project.



Our pile cutter can safely saw off and gently remove piles located in environmentally protected waterways.