

### **ATTACHMENT 3: Addendum to Queensland Rail's "West Moreton Reference Tariff Reset Capital Submission" (June 2013)**

Advice arising out of the WorleyParsons review of the West Moreton Reference Tariff Capital and Maintenance Costs has resulted in the three amendments to Queensland Rail's '*AU1 West Moreton Reference Tariff Reset Capital Submission*' which was provided to the QCA on 28 June 2013. The following four pages replace their equivalent pages in that submission:

- Page 9 – Western System Asset Replacement: Amended volumes relating to the historical amount of track reconditioning and turnout replacements that were performed.
- Page 22 - Drain Renewals: The original drain renewal location has been replaced with a higher priority location.
- Pages 34 and 35 – AU1 Wayside Equipment Projects – The original project plan contained data for the overarching long term strategy. This new update has had further peer review and has been amended to ensure the designed locations protect all train movements.

# Pre AU1 Asset Renewal Projects

## 3. Western System Asset Replacement

**Project Cost (\$'000):** \$23,581 (excl. Capitalised Interest)

This project commenced in 2006/07 and will continue until 2015/16. The total project cost is estimated to be \$40,976,000 – note that \$1,832,000 of this amount was spent in 2006/07 and will not be claimed in this submission as it is already included in the opening asset value.

### Timelines:

**Construction:** 2006/07 to 2015/16

Corridor	2007/08 (\$'000)	2008/09 (\$'000)	2009/10 (\$'000)	2010/11 (\$'000)	2011/12 (\$'000)	2012/13 (\$'000)	Total (\$'000)
Track Reconditioning	3.500km		0.000km	3.419km	5.589km	7.607km	20.115km
Turnout Replacements	8		0	4	5	2	19
Rosewood - Macalister	3,593	51	0	3,577	6,724	9,636	23,581

RAB	2007/08 (\$'000)	2008/09 (\$'000)	2009/10 (\$'000)	2010/11 (\$'000)	2011/12 (\$'000)	2012/13 (\$'000)	Total (\$'000)
Rosewood - Macalister	3,593	51	0	3,577	6,724	9,636	23,581
Capitalised Interest	179	3	0	178	335	480	1,175
<b>Claimed</b>	<b>3,772</b>	<b>54</b>	<b>0</b>	<b>3,755</b>	<b>7,059</b>	<b>10,116</b>	<b>24,756</b>

### Description of Project and Benefits:

#### **Project Scope:**

The objective of this project is to improve reliability and increase the longevity of the West Moreton System. This involves the upgrade of 22.715km of track to 50kg rail on concrete sleepers (including 2.600km of track carried out in 2006/07 not shown in the table above) and the replacement of 19 turnouts, upgrading them to 60kg steel on concrete sleepers.

#### **Project Benefits:**

- Improve the reliability of track through a reduction in track under speed restriction and below rail delays
- Reduces the likelihood of broken rail derailments, thereby improving safety
- Reduces exposure to service defects which require shutdowns to remove defective rail and expensive welding in, and match grinding of, the inserted closure rails
- Reduces maintenance requirements of inspections, resurfacing and grinding

#### **All Traffics / Coal Specific:**

The works that comprised this project were undertaken specifically to benefit coal carrying customers on the West Moreton System.

#### **Delivery Provider:**

All works undertaken have been delivered by internal Queensland Rail resources.

#### **Contact Officer:**

Project Manager.

## 5. Drain Renewals

**Project Cost (\$'000):** \$515 (excl. Capitalised Interest)

**Timelines:**

**Planning:** 2013  
**Construction:** 2013/14

Corridor	2013/14 (\$'000)	2014/15 (\$'000)	2015/16 (\$'000)	2016/17 (\$'000)	Total (\$'000)
Rosewood - Macalister	515	0	0	0	515

RAB	2013/14 (\$'000)	2014/15 (\$'000)	2015/16 (\$'000)	2016/17 (\$'000)	Total (\$'000)
Rosewood - Macalister	515	0	0	0	515
Capitalised Interest	18	0	0	0	18
<b>Claimed</b>	<b>533</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>533</b>

**Description of Project and Benefits:**

**Project Scope:**

- Replace one old cast-in-situ drain that has exposed reinforcement in the roof of five of the six barrels, and a sagging and broken floor. This drain is located at 55.270km Jondaryan to Dalby on the Western Line.

**Project Benefits:**

Replacing old drain failing under traffic will reduce the risk of complete culvert failure which would result in transit time delays and/or derailments. There will also be a corresponding reduction in costs associated with the inspection and maintenance of this asset.

**All Traffics / Coal Specific:**

The works that comprise this project will be undertaken to benefit all users of the West Moreton System.

**Delivery Provider:**

An external contractor under the management of Queensland Rail will be engaged to complete this project except for the track work which will be undertaken by Queensland Rail.

**Contact Officer:**

Manager Engineering and Regional Services West.

# AU1 Wayside Equipment Projects

## 13. Corridor and Asset Protection Strategy

**Project Cost (\$'000):** \$1,069 (excl. Capitalised Interest)

**Timelines:**

**Planning:** 2013/14  
**Construction:** 2013/14 to 2016/17

Corridor	2013/14 (\$'000)	2014/15 (\$'000)	2015/16 (\$'000)	2016/17 (\$'000)	Total (\$'000)
Toowoomba - Macalister	312	757	0	0	1,069

RAB	2013/14 (\$'000)	2014/15 (\$'000)	2015/16 (\$'000)	2016/17 (\$'000)	Total (\$'000)
Rosewood - Macalister	312	757	0	0	1,069
Capitalised Interest	11	26	0	0	37
<b>Claimed</b>	<b>323</b>	<b>783</b>	<b>0</b>	<b>0</b>	<b>1,106</b>

**Description of Project and Benefits:**

**Project Scope:**

Install corridor asset protection systems to improve asset reliability.

This project includes two major deliverables:

- Deliverable 1: Field equipment/systems
- Deliverable 2: IAMPS, field equipment/systems integration into control

Wayside devices to include:

- Dragging Equipment Detector (DED)
- Hot Bearing Detectors (HBD) and Hot Wheel Detector (HWD)
- Wheel Impact Load Detectors (WILD)
- Overload Audit Device (OAD)
- Automatic Equipment Identification (AEI)

Wayside detection asset protection systems are used to identify mechanical defects in rollingstock and operational errors early and provide timely warnings to above and below rail operators.

Mechanical defects or operational errors on rolling stock can adversely affect the rail infrastructure and subsequent operational effectiveness and safe running of services.

Early identification and intervention of operational and mechanical errors will reduce the risk of damage to the rail network and rolling stock. Examples of mechanical defects are dragging equipment, flat wheel defects, wheel bearing and brake failure. Examples of operational errors are the running of overloaded trains, imbalanced loads on wagons and over length trains on the network.

Implementation of strategically located wayside detection systems will allow network controllers and above and below rail operators to take a proactive approach to preventing asset damage and ensuring rail safety. Additional benefits include the improvement in the reliability of existing

infrastructure, a reduction in breakdown maintenance and improved on time running of trains through greater availability of the system.

It is proposed to upgrade or install the following:

Site	Type	Proposed Location	Stopping Zones (approximate)		Cost (\$'000)
			UP	DOWN	
1	HBD, HWD DED WILD AEI	23.700km (Western)	23.700km to 26.700km	20.700km to 23.700km	330
2	HBD, HWD DED OAD AEI	67.000km (Main) or other suitable locn between Rosewood and Murphy's Ck	67.000km to 70.000km	67.000km to 65.500km	630
3	DED	4 locations to protect major assets/bridges (west of Oakey, Lockyer Ck, Rangeview and one at Springbluff)			109
				<b>Total Cost</b>	<b>1,069</b>

**Project Benefits:**

- Optimise and maximise corridor asset protection for rail operations
- Optimise the equipment systems used to maximise its effects to our long term business objectives
- Rationalise the systems and site locations wherever possible to maximise the benefits of centralisation
- Improved trackside safety due to reduced breakdown maintenance
- Improved reliability of rail operations resulting in improved on time running

**All Traffics / Coal Specific:**

The works that comprise this project will be undertaken specifically to benefit coal carrying customers on the West Moreton System.

**Delivery Provider:**

Work for this project will be undertaken by an external contractor managed by Queensland Rail.

**Contact Officer:**

Technology Manager.