

Site Quality Audit Report

Job No.: <u>J013</u>	Project Manager: <u>Matthew Lloyd</u>	Start Date: <u>23/05/2019</u>	Project Stage: <u>On-going Rail Construction</u>
Audit Date: <u>23/05/2019</u>	Auditor: <u>Alvy Manguera</u>	Site: <u>Fastrak Project Site Office</u>	
Audit Report No. <u>IIA-001</u>	Observer: <u>Tejas Shah</u>	Auditee: <u>Dave Rumble, Jame Porteous, Lut Shafaq</u>	

Scope of Assessment:

The audit apply to all processes covered by the quality plan, inspection and test plans, construction procedures for the Project carried out by Fastrak on the on- going works for the Rail Track Construction in Inland Rail Project with the purpose to verify whether the quality management system is effectively implemented and maintained and whether quality related activities and results comply in accordance with the contract requirements and defined objectives of the project.

Summary of Audit Findings:

1. NCR-0001:

- a.) Welders Certificate of Steve Milner (QW008), Sitivene Kisina(QW009), Josh Toomey(J093), Haydon Jone(CON350) and Matt Hains (MH2284) who's performing welding for Turnout at Goobang Junction at Ch 452900 and 454400 was found not available during audit. Rail welders shall be certified by an accredited training organisation and have a proven history of compliant weld installation supplied by the contractor and agreed by the ARTC Project Manager.This is not in accordance to ETC-00-02 Clause 8.10.
- b.) Expired verification training certificate for Aluminothermic Rail Welding of Michael Olsen (Doc. No. 13/CO 1268) and Kolomaile Pahulu (Doc. No. 13/CO 1269). This is not in accordance to ETC-00-02 Clause 8.10. Refer **Appendix 1**

FASTRAK Response:

Corrective Action:

Preventive Action:

2. **NCR-0002** - Track removal works completed at Section Ch 472044 – 510846 and Turnout Construction at Goobang Junction at Ch 452900 and 454400 and found ITPs were not progressively signed-off as works were completed on site. This is not in accordance to INLink Quality Management Plan – 5-0012-240-PVP-00-PJ-0001 Clause 6. Please see marked up plan, incomplete signed off ITPs and lot register on **Appendix 2** of this report.
 - TURNOUT INSPECTION FORM not filled up during the time of audit considering works on site already completed at Goobang Junction at Ch 452900 and 454400. This is not in accordance to approved ITP No. 5-0012-240-PVP-00-TE-0062 line item 2.2, 2.3, 2.4 for the control and supporting documentation during inspection.

No. of Lots:

6 lots - Turnout Removal

8 lots - Track Removal

FASTRAK Response:

Corrective Action:

Preventive Action:

3. Observation – 001:

- a.) Weld Register not updated at the time of audit. Welds done by Welder Licence Nos. QW009, CON 310, CON 315, QW 008 not available on the weld register. Refer **Appendix 4**
- b.) No weld return sheet filled up for Welders licence J094 available during audit.
- c.) Suggest to add notes/comments on the weld return form for all welds removed due to defects the new weld return reference of rework for traceability.
- d.) Some of welders ID, location of weld (km/ chainage) did not match in the weld test sheet. Please refer **Appendix 4**
- e.) Weld Map not included list Quality Documentation Register. This is required as per ETC-00-02 Clause 8.10.

FASTRAK Response:

Corrective Action:

Preventive Action:

4. Observation 002:

Expired 12 monthly Competency Assessment of KK Operators for the testing of rail (Doc. Ref. AccredKK/24) of the Tester performing testing on site. It was noted the unexpired Ultrasonic Operator Licence card being presented during audit. Please refer **Appendix 5**

FASTRAK Response:

Corrective Action:

Preventive Action:

5. Observation – 003: Some forms mentioned on ITP No. 5-0012-240-PVP-00-TE-0061 (Track Construction) not available during audit.

- a.) Rail Inspection Form
- b.) Aluminothermic/ Thermit Welding Return

FASTRAK Response:

Corrective Action:

Preventive Action:

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6. **Observation -004** – No internal Audit conducted from the start of the project until the time of audit.

Noted:

Dave Rumble (Fastrak HSEQ Manager) will develop internal audit schedule and perform audit within Fastrak Quality Management System.

FASTRAK Response:

Corrective Action:

Preventive Action:

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7. **Observation-0005** - No drawing register being maintained by Fastrak team to track all incoming drawings to track the latest drawings from superseded across the project. This is not in accordance to ISO 9001 Clause 7.5 Control of Documents and INLink Quality Management Plan 5-0012-240-PVP-00-PJ-0001 Clause 10.3.

FASTRAK Response:

Corrective Action:

Preventive Action:

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8. **Observation-0006:** As noted on Calibration register maintained by Fastrak was found some incorrect information. The test dates of some equipments are one day earlier than what's mentioned on the certificates, some equipment not listed on the register, serial number on the register did not match with the certificate during the time of audit. Please refer Appendix 3 of this Report.

FASTRAK Response:

Corrective Action:

Preventive Action:

Number of NCRs Identified: 2

Number of Observations Identified: 6

Area	Item	Compliant	NCR / OBS	N/A	Comments
Management Systems					
Corporate Policies	Are Corporate policies displayed, including; Safety; Environment; Quality; Rehabilitation and Freedom of Association as a minimum?	Yes			Operate under the INLink HSEQ systems. This is in accordance with the BMD Subcontractor HSEQ Management Standard. This is in compliance with approved INLink Quality Management Plan5-0012-240-PVP-00-PJ-0001_0 Clause 7.2.
	Are the Policies up-to-date?			N/A	See above comments
	Are these and other policies discussed during inductions?	Yes			See above comments
Management Plans	Is the latest version of the IPMP available?	Yes			Operate under the INLink HSEQ systems. This is in accordance with the BMD Subcontractor HSEQ Management Standard.
	Is the latest version of the EMP available, if applicable?			N/A	
	Is the latest version of the QMP available, if applicable?	Yes			See above comments
	Is the latest of the SMP available, if applicable?			N/A	Separate audit for Safety and Enviromental
	What other Plans have been prepared?	Yes			Operate under the INLink HSEQ systems. This is in accordance with the BMD Subcontractor HSEQ Management Standard
	Have all of the Plans been signed-off by the PM?	Yes			
	Are all copies controlled?	Yes			
	Have they been reviewed by off-site management?	Yes			
Risk Management (HEQ-STD-00005)	Has a Tender Risk Assessment been undertaken and handed over to the project team?	Yes			
	Has a Risk Register been developed by the project team?	Yes			INLink Quality Risk Register will be forwarded to Fastrak team for information and reference
	Have Safety Hazards been identified?			N/A	Separate audit for Safety and Enviromental
	Have Environmental Aspects and Impacts been identified?			N/A	
	Has the Hierarchy of Control been used to mitigate and manage risks?	Yes			
	Have WMSs for projectactivities been developed from the Risk Register?	Yes			
	Have the WMS been communicated and signed-off by the workforce, including Subcontractors?	Yes			
	Has a JHA card been completed for each task?			N/A	Separate audit for Safety and Enviromental

Area	Item	Compliant	NCR / OBS	N/A	Comments
	Is the workforce regularly reviewing risks detailed on the JHA cards?			N/A	
	Are ABCs completed as per the project requirements?			N/A	
Objectives and Targets	Have Project HSEQ Objectives and Targets been established?	Yes			Operate under the INLink HSEQ systems. This is in accordance with the BMD Subcontractor HSEQ Management Standard.
	Are the targets being tracked and reported?				
	Are the HSE and Quality Overviews being completed and displayed?				
	Have all Project Objectives and Targets been communicated to the workforce?				
Roles and Responsibilities	Is staff on-site as nominated in the IPMP/Project Org. Chart?	Yes			
	Are staff aware of their roles and responsibilities?	Yes			
Training and Competency Management	Welders Qualification Certificates available?		NCR-001		a. Welders Certificate of Steve Milner (QW008), Sitivene Kisina(QW009), Josh Toomey(J093), Haydon Jone(CON350) and Matt Hains (MH2284) who's performing welding for Turnout at Goobang Junction at Ch 452900 and 454400 not available during audit. Rail welders shall be certified by an accredited training organisation and have a proven history of compliant weld installation supplied by the contractor and agreed by the ARTC Project Manager.This is not in accordance to ETC-00-02 Clause 8.10. b.Expired verification training certificate for Aluminothermic Rail Welding of Michael Olsen (Doc. No. 13/CO 1268) and Kolomaile Pahulu (Doc. No. 13/CO 1269). This is not in accordance to ETC-00-02 Clause 8.10. Refer Appendix 1
Document and Records Management	Are drawings and documents controlled via a register?		OBS-005		No drawing register being maintain by Fastrak team to track all incoming drawings and segregate the latest drawings from superseded across the project. This is not in accordance to ISO 9001 Clause 7.5 Control of Documents and INLink Quality Management Plan 5-0012-240-PVP-00-PJ-0001 Clause 10.3.
	Do documents in use correspond with the register?				

Area	Item	Compliant	NCR / OBS	N/A	Comments
	Are superseded documents marked "superseded" or removed from use?	Yes			
	Are drawings marked with the date received?	Yes			
	Are records legible, readily identifiable and retrievable?	Yes			
	Are files stored in accordance with the BMD Project Checklist for Forms and Templates?			N/A	Fastrack internal system
Quality					
Identification and Traceability	Has a Lot register been produced?	Yes			
	Is the Lot register up-to-date?	Yes			
	Are Lots opened for Works currently underway?	Yes			
	Do previous Lots conform?		NCR-002		Track removal works completed at Section Ch 472044 – 510846 and Turnout Construction at Goobang Junction at Ch 452900 and 454400 and found ITPs were not progressively signed-off as works were completed on site. This is not in accordance to INLink Quality Management Plan – 5-0012-240-PVP-00-PJ-0001 Clause 6. Please see marked up plan, incomplete signed off ITPs, and lot register on Appendix 2 of this report. -TURNOUT INSPECTION FORM not filled up during the time of audit considering works on site already completed at Goobang Junction at Ch 452900 and 454400. This is not in accordance to approved ITP No. 5-0012-240-PVP-00-TE-0062 line item 2.2, 2.3, 2.4 for the control and supporting documentation during inspection.
	Are completed Lots closed-out?				
	Are completed Lots under cover of a Conformance Report?				
	Are NCRs on Lots corrected and closed-out?	Yes			Refer relevant NCR-000002 – Commencement of cutting of track without approved ITP
	Others		OBS-001		a. Weld Register not updated at the time of audit. Welds done by Welder Licence Nos. QW009, CON 310, CON 315, QW 008 not available on the weld register.

Area	Item	Compliant	NCR / OBS	N/A	Comments
					b. No weld return sheet filled up for Welders licence J094 available during audit. c. Suggest to add notes/comments on the weld return form for all welds removed due to defects the new weld return reference of rework for traceability. d. Some of welders ID, location of weld (km/ chainage) did not match in the weld test sheet. Please refer Appendix 4 e. Weld Map not included list Quality Documentation Register. This is required as per ETC-00-02 Clause 8.10.
Inspection and Testing	Are ITP's completed for work activities and are they using the most current version?	Yes			
	Are ITPs being progressively signed-off as Works are completed?	No			Please refer above comments for NCR on completed lots.
	Are tests ordered on a test request?		OBS-002		Expired 12 monthly Competency Assessment of KK Operators for the testing of rail (Doc. Ref. AccredKK/24) of the Tester performing testing on site. It was noted the unexpired Ultrasonic Operator License card being presented during audit. Please refer Appendix 5
	Are all Hold Points (HPs) recorded in a register? Is the register up-to-date?	Yes			
	Has the Principal been notified in advance of the upcoming HPs?	Yes			
	Has a register for levels and survey equipment been produced?	Yes			
	Have the calibration records for equipment been obtained?		OBS-006		One (1) Total Station equipment no. 37210285 was found due for Calibration during the time of audit. Please refer Appendix 3 of this Report. This is not in compliance to INLink Quality Management Plan 5-0012-240-PVP-00-PJ-0001_0 Clause 6.6
	Is equipment in current service?	No			See above NCR – availability of Calibration Certificates
	Are 'As Constructed' survey records available?	Yes			
	Others		OBS-003		Some forms mentioned on ITP No. 5-0012-240-PVP-00-TE-0061 (Track Construction) not available during audit. a.) Rail Inspection Form b.) Aluminothermic/ Thermit Welding Return
Non-Conformances	Have all CAR (internal and Principal) been recorded?	Yes			

Area	Item	Compliant	NCR / OBS	N/A	Comments
	If conformity cannot be achieved through re-work, has the Principal been notified?			N/A	
	Are all non-conformances raised by the Principal completed and returned within the specified timeframe?	Yes			
	Has a project audit schedule been developed?	No	OBS-004		Dave Rumble (Fastrak HSEQ Manager) will develop internal audit schedule and
	Are audits being conducted as per the audit schedule?	No			See above observation

Appendix 1: Expired Welders Certificates

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Document number:
13/CO 1268

Verification of Training

This is to confirm that
MICHAEL OLSEN

Has successfully attended a training course on welding techniques including theory
and practical principles of

**RAILTECH – PLK CJ (RC)
for Aluminothermic Rail Welding**

This course has been conducted by
Railtech Australia Limited

This document is valid for a period of **36 months** from the date stated below

Dated: **August 22, 2013**

Classification: **Verified Welder**

Authorised by: Anthony Paroz
AP
Issued by: Railtech Australia
Limited

DISCLAIMER: At the time of training, the welder was found to be competent. Railtech Australia Limited accepts no responsibility for any claims arising from the workmanship of this welder

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Document number:
13/CO 1269

Verification of Training

This is to confirm that
KOLOMAILE PAHULU

Has successfully attended a training course on welding techniques including theory
and practical principles of

**RAILTECH – PLK CJ (RC)
for Aluminothermic Rail Welding**

This course has been conducted by
Railtech Australia Limited

This document is valid for a period of **36 months** from the date stated below

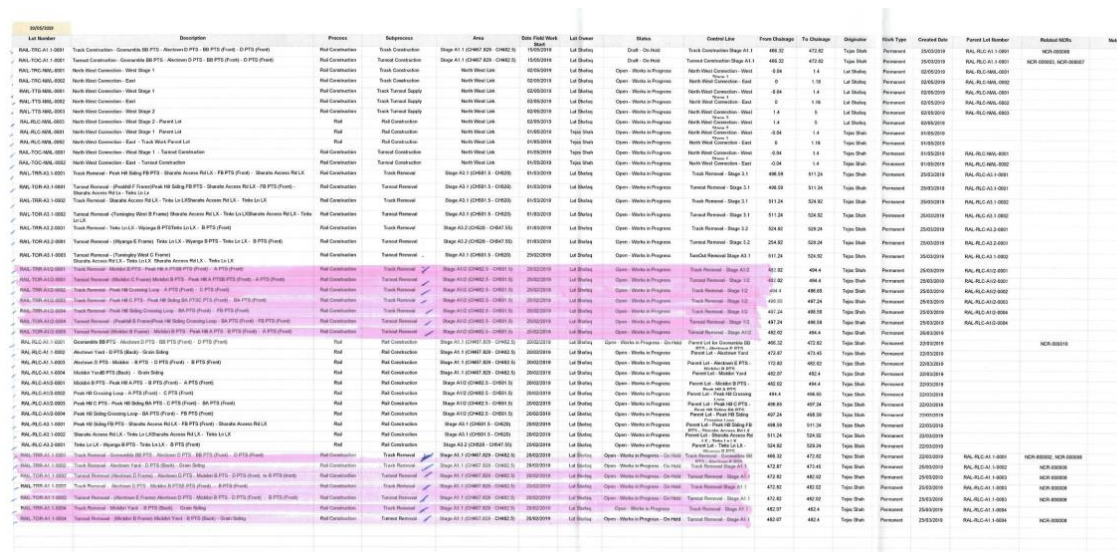
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INSPECTION & TEST PLAN – Turnout Construction (5-0012-240-PVP-00-TE-0062)				Fastrack Doc No.: T-QUAL-ITP-05	
Project Number and Name:	808 – J013 – INLink – Parkies to Narramallee (P2N)	Referred Specifications:	4-0012-240-PCM-00-RT-0004 3 Works Documents ETC-0240 Vw 1, ETC-0430 Vw 1.1, ETC-0430 Vw 1.2, ETC-0430 Vw 1.3, ETC-0430 Vw 1.4, ETC-0430 Vw 1.5, ETC-0430 Vw 1.6, ETC-0430 Vw 1.7, ETC-0430 Vw 1.8, ETC-0430 Vw 1.9, ETC-0430 Vw 1.10, ETC-0430 Vw 1.11, ETC-0430 Vw 1.12, ETC-0430 Vw 1.13, ETC-0430 Vw 1.14, ETC-0430 Vw 1.15, ETC-0430 Vw 1.16, ETC-0430 Vw 1.17, ETC-0430 Vw 1.18, ETC-0430 Vw 1.19, ETC-0430 Vw 1.20, ETC-0430 Vw 1.21, ETC-0430 Vw 1.22, ETC-0430 Vw 1.23, ETC-0430 Vw 1.24, ETC-0430 Vw 1.25, ETC-0430 Vw 1.26, ETC-0430 Vw 1.27, ETC-0430 Vw 1.28, ETC-0430 Vw 1.29, ETC-0430 Vw 1.30, ETC-0430 Vw 1.31, ETC-0430 Vw 1.32, ETC-0430 Vw 1.33, ETC-0430 Vw 1.34, ETC-0430 Vw 1.35, ETC-0430 Vw 1.36, ETC-0430 Vw 1.37, ETC-0430 Vw 1.38, ETC-0430 Vw 1.39, ETC-0430 Vw 1.40, ETC-0430 Vw 1.41, ETC-0430 Vw 1.42, ETC-0430 Vw 1.43, ETC-0430 Vw 1.44, ETC-0430 Vw 1.45, ETC-0430 Vw 1.46, ETC-0430 Vw 1.47, ETC-0430 Vw 1.48, ETC-0430 Vw 1.49, ETC-0430 Vw 1.50, ETC-0430 Vw 1.51, ETC-0430 Vw 1.52, ETC-0430 Vw 1.53, ETC-0430 Vw 1.54, ETC-0430 Vw 1.55, ETC-0430 Vw 1.56, ETC-0430 Vw 1.57, ETC-0430 Vw 1.58, ETC-0430 Vw 1.59, ETC-0430 Vw 1.60, ETC-0430 Vw 1.61, ETC-0430 Vw 1.62, ETC-0430 Vw 1.63, ETC-0430 Vw 1.64, ETC-0430 Vw 1.65, ETC-0430 Vw 1.66, ETC-0430 Vw 1.67, ETC-0430 Vw 1.68, ETC-0430 Vw 1.69, ETC-0430 Vw 1.70, ETC-0430 Vw 1.71, ETC-0430 Vw 1.72, ETC-0430 Vw 1.73, ETC-0430 Vw 1.74, ETC-0430 Vw 1.75, ETC-0430 Vw 1.76, ETC-0430 Vw 1.77, ETC-0430 Vw 1.78, ETC-0430 Vw 1.79, ETC-0430 Vw 1.80, ETC-0430 Vw 1.81, ETC-0430 Vw 1.82, ETC-0430 Vw 1.83, ETC-0430 Vw 1.84, ETC-0430 Vw 1.85, ETC-0430 Vw 1.86, ETC-0430 Vw 1.87, ETC-0430 Vw 1.88, ETC-0430 Vw 1.89, ETC-0430 Vw 1.90, ETC-0430 Vw 1.91, ETC-0430 Vw 1.92, ETC-0430 Vw 1.93, ETC-0430 Vw 1.94, ETC-0430 Vw 1.95, ETC-0430 Vw 1.96, ETC-0430 Vw 1.97, ETC-0430 Vw 1.98, ETC-0430 Vw 1.99, ETC-0430 Vw 2.00, ETC-0430 Vw 2.01, ETC-0430 Vw 2.02, ETC-0430 Vw 2.03, ETC-0430 Vw 2.04, ETC-0430 Vw 2.05, ETC-0430 Vw 2.06, ETC-0430 Vw 2.07, ETC-0430 Vw 2.08, ETC-0430 Vw 2.09, ETC-0430 Vw 2.10, ETC-0430 Vw 2.11, ETC-0430 Vw 2.12, ETC-0430 Vw 2.13, ETC-0430 Vw 2.14, ETC-0430 Vw 2.15, ETC-0430 Vw 2.16, ETC-0430 Vw 2.17, ETC-0430 Vw 2.18, ETC-0430 Vw 2.19, ETC-0430 Vw 2.20, ETC-0430 Vw 2.21, ETC-0430 Vw 2.22, ETC-0430 Vw 2.23, ETC-0430 Vw 2.24, ETC-0430 Vw 2.25, ETC-0430 Vw 2.26, ETC-0430 Vw 2.27, ETC-0430 Vw 2.28, ETC-0430 Vw 2.29, ETC-0430 Vw 2.30, ETC-0430 Vw 2.31, ETC-0430 Vw 2.32, ETC-0430 Vw 2.33, ETC-0430 Vw 2.34, ETC-0430 Vw 2.35, ETC-0430 Vw 2.36, ETC-0430 Vw 2.37, ETC-0430 Vw 2.38, ETC-0430 Vw 2.39, ETC-0430 Vw 2.40, ETC-0430 Vw 2.41, ETC-0430 Vw 2.42, ETC-0430 Vw 2.43, ETC-0430 Vw 2.44, ETC-0430 Vw 2.45, ETC-0430 Vw 2.46, ETC-0430 Vw 2.47, ETC-0430 Vw 2.48, ETC-0430 Vw 2.49, ETC-0430 Vw 2.50, ETC-0430 Vw 2.51, ETC-0430 Vw 2.52, ETC-0430 Vw 2.53, ETC-0430 Vw 2.54, ETC-0430 Vw 2.55, ETC-0430 Vw 2.56, ETC-0430 Vw 2.57, ETC-0430 Vw 2.58, ETC-0430 Vw 2.59, ETC-0430 Vw 2.60, ETC-0430 Vw 2.61, ETC-0430 Vw 2.62, ETC-0430 Vw 2.63, ETC-0430 Vw 2.64, ETC-0430 Vw 2.65, ETC-0430 Vw 2.66, ETC-0430 Vw 2.67, ETC-0430 Vw 2.68, ETC-0430 Vw 2.69, ETC-0430 Vw 2.70, ETC-0430 Vw 2.71, ETC-0430 Vw 2.72, ETC-0430 Vw 2.73, ETC-0430 Vw 2.74, ETC-0430 Vw 2.75, ETC-0430 Vw 2.76, ETC-0430 Vw 2.77, ETC-0430 Vw 2.78, ETC-0430 Vw 2.79, ETC-0430 Vw 2.80, ETC-0430 Vw 2.81, ETC-0430 Vw 2.82, ETC-0430 Vw 2.83, ETC-0430 Vw 2.84, ETC-0430 Vw 2.85, ETC-0430 Vw 2.86, ETC-0430 Vw 2.87, ETC-0430 Vw 2.88, ETC-0430 Vw 2.89, ETC-0430 Vw 2.90, ETC-0430 Vw 2.91, ETC-0430 Vw 2.92, ETC-0430 Vw 2.93, ETC-0430 Vw 2.94, ETC-0430 Vw 2.95, ETC-0430 Vw 2.96, ETC-0430 Vw 2.97, ETC-0430 Vw 2.98, ETC-0430 Vw 2.99, ETC-0430 Vw 3.00, ETC-0430 Vw 3.01, ETC-0430 Vw 3.02, ETC-0430 Vw 3.03, ETC-0430 Vw 3.04, ETC-0430 Vw 3.05, ETC-0430 Vw 3.06, ETC-0430 Vw 3.07, ETC-0430 Vw 3.08, ETC-0430 Vw 3.09, ETC-0430 Vw 3.10, ETC-0430 Vw 3.11, ETC-0430 Vw 3.12, ETC-0430 Vw 3.13, ETC-0430 Vw 3.14, ETC-0430 Vw 3.15, ETC-0430 Vw 3.16, ETC-0430 Vw 3.17, ETC-0430 Vw 3.18, ETC-0430 Vw 3.19, ETC-0430 Vw 3.20, ETC-0430 Vw 3.21, ETC-0430 Vw 3.22, ETC-0430 Vw 3.23, ETC-0430 Vw 3.24, ETC-0430 Vw 3.25, ETC-0430 Vw 3.26, ETC-0430 Vw 3.27, ETC-0430 Vw 3.28, ETC-0430 Vw 3.29, ETC-0430 Vw 3.30, ETC-0430 Vw 3.31, ETC-0430 Vw 3.32, ETC-0430 Vw 3.33, ETC-0430 Vw 3.34, ETC-0430 Vw 3.35, ETC-0430 Vw 3.36, ETC-0430 Vw 3.37, ETC-0430 Vw 3.38, ETC-0430 Vw 3.39, ETC-0430 Vw 3.40, ETC-0430 Vw 3.41, ETC-0430 Vw 3.42, ETC-0430 Vw 3.43, ETC-0430 Vw 3.44, ETC-0430 Vw 3.45, ETC-0430 Vw 3.46, ETC-0430 Vw 3.47, ETC-0430 Vw 3.48, ETC-0430 Vw 3.49, ETC-0430 Vw 3.50, ETC-0430 Vw 3.51, ETC-0430 Vw 3.52, ETC-0430 Vw 3.53, ETC-0430 Vw 3.54, ETC-0430 Vw 3.55, ETC-0430 Vw 3.56, ETC-0430 Vw 3.57, ETC-0430 Vw 3.58, ETC-0430 Vw 3.59, ETC		

									
Item	Activity	Inspection / Test Method	Who by	Acceptance Criteria	Standard	Comments / Control / Supporting Documentation	Test Point Sign-Off	Drawn	Checked
PM – Project Manager, SE – Site Superintendent, SS – Site Engineer, SM – Workplace Health & Safety Manager, EM – Environmental Manager, E – Engineer, RS – Risk Surveyor							Fastrak	INLink	ARTC
				specifications, all beams to be checked flat and level on gulls, and free of debris. Beamer inventory to be taken to determine if all are present and correct.	Manufacturers Installation Manual				
1.4	Formation Condition and underlying lot	Inspect	SS SE	Visually inspect the area of works to confirm underlying formation is completed. Confirm that underlying lot is conforming. <i>Underlying Lot: DWA 004-1-1-AP-0002</i>	INLink GMP		Lot Plan Formation Lots		
1.5	Ballast Condition	Inspect	SS SE	Ballast is stockpiled on site as indicated in installation location and handled in accordance with ARTC Standards / Specifications to prevent degradation, segregation and contamination. Test certificates required for the ball 300T and then each subsequent 5000t of ballast supplied, test certificate to be provided by third party HATA approved laboratory.	4.0012-040-PMO-00-RT-0004 REV 5 0.04.1 & 5 ETA-042 Section 6 ETA-041 Section 8 AS2784 Section 7 AS2784 Section 8.1 CoP Section 4 – Section 1.1	Ballast Test Reports			
1.6	Material Acceptance	Inspect	PM	A pre-confirmation inspection of all materials supplied must be accompanied by a record of INLink audit pre-confirmation assessment before works commence. Consequent record to be provided upon delivery of materials.	Fastrak / J / INLink / J Major Works Subcontract C23	Inventory Sheet 4.0012-040-PMO-00-RT-0004			
3. CONSTRUCTION									
2.1	Install Bottom Ballast	Measure / Record	SE SS	Ballast placed in a single layer of two layers of approximately the same depth. Each layer of the ballast shall be compacted by a minimum of two passes of a 120mm smooth drum roller to the satisfaction of the ARTC Project Manager and shall take place over the full width of the ballast. The Contractor shall provide a transfer - length between varying ballast depths so that the change in depth does not exceed 20mm per 2 metres.	ETC-02 Section 8.4 CoP Section – Table 4 CoP Section 4 – Section 4.1.2	Ballast Depth Measurements			
2.2	Install Beams	Measure / Inspect	SE	Beams to be laid out square to the through road commencing from the front of the tunnel as per drawings and using a string line. Beams installed at the spacing and in the order indicated on construction design, bearing spacing to be measured cumulatively using a steel tape (to 1mm). CoP can cut reducing steps if required for the specific support. Orientate beams in the correct direction. Handle beams in to as general direction.	CoP Section 4 – Section 3.2 Beamer standard CoP ETC-02 Cl.8.7 Manufacturers Design Drawings Manufacturers Installation Manual	Tunnel inspection form			
File Location: <i>Access</i> Access Doc No: <i>5-0012-040-PMD-02-0682</i> Access Rev: <i>6</i> Date: <i>12/04/2019</i> First Issue Date: <i>21-March-19</i> Rev: <i>0</i> Rev Date: <i>17-April-19</i> Print Date: <i>17-Apr-19</i> Page 2 of 4 Person Responsible: <i>Project Quality Representative</i> Revised By: <i>CL</i> Revised Date: <i>17-Apr-19</i>									

																			
Item	Activity	Inspection / Test Method	Who By	Acceptance Criteria	Standard	Comments / Control / Supporting Documentation	Test Point Sign-Off		Date										
							Fabric	INLink		ARTC									
PM – Project Manager, SS – Site Superintendent, SE – Senior Engineer, EM – Workplace Health & Safety Manager, EN – Environmental Manager, E – Engineer, RS – Rail Surveyor																			
2.3	Install Plates and Pads	Measure / Inspect	SE	Install all sleeper pads and plates in accordance with the design and manufacturers' instructions. Fasten sleeper pads as required and in accordance with manufacturers' instructions.	Manufacturers Design Drawings Manufacturers installation Manual	Turned inspection form													
2.4	Install sleepers and Fastenings	Inspect / Record	SE/SE E	Slenderbush to be clean and free of debris before installation. Monitor for slacken in accordance with manufacturer's instructions, with specific attention to the webchairs. Install rails in the sequence defined by the manufacturer, starting from the nose of the turnout, then the crossing, and the remainder of the rails. Cut slackens to size but, 4 GU are required centric current location with Signaling Engineer. Ensure slack position is within +/-50mm of design location, and switch to crossing mechanism. Check slackens to tolerances. Check switches for square +/- 5mm maximum. Install slackeners correctly using the specified insulators as rails are installed. Install slackener components including check rails, etc. and faster in specified turn. Check all dimensions and gauges in per manufacturers inspection form. If turnout is pre-built, two copies of the turnout inspection form are required, one per pre-built and one for final assembly	CoP Section 3 – Section 3.2 ETP-05-01 Section 2.1 & 4 ETP-06-02 C3.7 To design	Turned inspection form													
2.5	Aluminothermic Welding	Record	SE	Welds completed as per standard All Welds tested and passed as per standard Welding information recorded in return and weld register	ETM-01.1, ETE-01-03 ETC-00-02 C3.8.10 ETC-00-02 C3.12 ETP-05-01 C3.8.2 RSF 5001	Aluminothermic / thermal webchairs Weld test report TQ24-01-13 Weld Register TP no. 5-012-24-PWP-00-TE-001													
2.6	Install Top Ballast	Record	SE	Insufficient ballast; sufficient for surfacing operation. Before ballasting, and prior to joints with parallel barrows to edges of ballast and allow movement. Allow. If not switches with referencer rails are enable surfacing operation.	ETC-00-02 C3.8.4 CoP Section 4 – Section 4.1.2														
2.7	Rebarface track		-	Referencer resurfacing TTP No. 5-012-24-PWP-00-TE-008	Fabric TTP No TQ24-01-07 for Resurfacing	Rebarfacing TTP 5-012-24-PWP-00-TE-008													
2.8	Chisling		-	Rule Chisling TTP No. 5-012-24-PWP-00-TE-0061	Stronging TTP	TP no. 5-012-24-PWP-00-TE-0061													
<table border="0" style="width:100%"> <tr> <td style="width:25%"> File Location: First Issue Date: Person Responsible: </td> <td style="width:25%"> Access: 21-March-19 Project Quality Reconsideration </td> <td style="width:25%"> Rev No. / 0 </td> <td style="width:25%"> Access Date: 5-012-24-PWP-00-TE-0062 Rev Date: 17-April-19 / 19-April-19 </td> <td style="width:25%"> Access Rev 3. Date: 17-April-19 Access Rev 4. Date: 17-April-19 </td> </tr> <tr> <td colspan="5" style="text-align: right;"> Page 3 of 4 </td> </tr> </table>										File Location: First Issue Date: Person Responsible:	Access: 21-March-19 Project Quality Reconsideration	Rev No. / 0	Access Date: 5-012-24-PWP-00-TE-0062 Rev Date: 17-April-19 / 19-April-19	Access Rev 3. Date: 17-April-19 Access Rev 4. Date: 17-April-19	Page 3 of 4				
File Location: First Issue Date: Person Responsible:	Access: 21-March-19 Project Quality Reconsideration	Rev No. / 0	Access Date: 5-012-24-PWP-00-TE-0062 Rev Date: 17-April-19 / 19-April-19	Access Rev 3. Date: 17-April-19 Access Rev 4. Date: 17-April-19															
Page 3 of 4																			

									
Item	Activity	Inspection / Test Method	Who By	Acceptance Criteria	Standard	Comments / Condition / Suspending Documentation	Test Point Sign-Off		
							Fastrak	INLink	ARTC
PM – Project Manager, SS – Site Superintendent, SE – Site Engineer, EM – Workplace Health & Safety Manager, EM – Environmental Manager, E – Engineer, RS – Road Surveyor									
2.8	Install track signage and control marks	Revised	SE SS	At completion of dressing, re-duct surface, correct square, and check and cross check or level books. Track signage and control marks in correct location. Install TCM's in accordance with TCM TP 5-0112-340-PWP-06-1E-0001 Check TCM's after surfacing to ensure correct location, not too position within +/- 5mm of design.	ETP-11-01 G.3	TQJAK-F-19-8 Track Signage Register			
2.10	Complete conditions if required	Inspected	SE SS	Track inspection: completed, completed and certified. Site cleaned and left in acceptable condition, including removal of all rubbish and excess material, access marks, fencing, gates.	ETP-05-01 Section 1.1 & 4.8	Certification Form			
3. POST-CONSTRUCTION									
3.1	Track section handed over to client	Revised	PM	Handover package completed and provided to client, complete with all required quality documentation.	ETC-00-02 Section 10.3	Certification Form All items fully met report TQJAK-F-19-8 Track Signage Register HWSR/TP/TP CMR Plan, Test Register Ballast Register			
Comments / RFIs / NCIRs:									
Sign-Off									
Position		Name		Signature		Date			
Fastrak Representative									
INLink Representative									
ARTC Representative									

Appendix 3: Calibration Register and Certificate

[illegible]

Appendix 4: Un updated Weld Register (Welder ID QW009, CON310, CON 315, and QW 008 not found on the register as noted on weld return forms)

WELD REGISTER

23/05/2019

Doc No.: T-QUAL-F-19.5

														Adjustment Details					Steel In Steel Out		
Weld Register #	Welder Identification	Date	Line	Track	KM	Rail (U/D)	Weld #	Rail Size	Weld Reason	Welder Comments	Weld Type	Batch Number	Weather Conditions	From	To	Adjustment Return #	Rail Temp	PICOS	Before	After	Weld Test Report #
7	CON350	12/05/2019	Broken Hill	Main	452.937	D	188201	60	Switch		PLK HH	8D1712	Night								15/5/19-21
8	CON350	12/05/2019	Broken Hill	Main	452.937	U	188202	60	Switch		PLK HH	8D1712	Night								15/5/19-22
9	CON350	7/05/2019	Broken Hill	Main	452.929	D	188203	60	GLJ		PLK HH	8D1712	Fine								15/5/19-19
10	CON350	7/05/2019	Broken Hill	Main	452.929	U	188204	60	GLJ		PLK HH	8D1712	Fine								15/5/19-20
11	CON350	7/05/2019	Broken Hill	Main	452.923	D	188205	53/60	GLJ		PLK SC	8D1792	Fine								15/5/19-17
12	CON350	7/05/2019	Broken Hill	Main	452.923	U	188206	53/60	GLJ		PLK SC	8D1792	Fine								15/5/19-18
13	CON350	12/05/2019	Broken Hill	A PTS	452.961	D	188207	60	Switch		PLK HH	8D1712	Night								15/5/19-23
14	CON350	14/05/2019	Broken Hill	A PTS	452.961	U	188208	60	Switch		PLK HH	8D1712	Night								15/5/19-25
15	J094	12/05/2019	NWCE	A PTS	452.961	D	188209	60	Switch		PLK HH	8D1572	Night								15/5/19-24
16	CON350	12/05/2019	Broken Hill	A PTS	452.975	D	188210	60	Free Weld	Removed due to defect, not included in test record	PLK HH	8D1572	Night								15/5/19-7
17	CON350	12/05/2019	Broken Hill	A PTS	452.975	U	188211	60	Free Weld		PLK HH	8D1572	Night								15/5/19-9
18	CON350	12/05/2019	Broken Hill	A PTS	452.975	U	188212	60	Free Weld		PLK HH	8D1572	Night								15/5/19-8
19	J094	12/05/2019	NWCE	A PTS	452.975	D	188213	60	Free Weld	Removed due to defect in 188210	PLK HH	8D1572	Night								15/5/19-11
20	CON350	12/05/2019	Broken Hill	A PTS	452.989	D	188215	60	Free Weld		PLK HH	8D1572	Night								15/5/19-26
21	CON350	12/05/2019	Broken Hill	A PTS	452.990	U	188216	60	Crossing		PLK HH	8D1712	Night								15/5/19-28
22	CON350	12/05/2019	Broken Hill	A PTS	452.990	D	188217	60	Crossing		PLK HH	8D1572	Night								15/5/19-27
23	J094	12/05/2019	NWCE	A PTS	452.989	U	188218	60	Free Weld		PLK HH	8D1712	Night								15/5/19-29
24	J093	12/05/2019	NWCE	A PTS	452.989	U	188219	60	Free Weld		PLK HH	8D1572	Night								15/5/19-3
25	CON350	12/05/2019	Broken Hill	A PTS	453.003	D	188220	60	Crossing		PLK HH	8D1712	Night								15/5/19-4
26	CON350	12/05/2019	Broken Hill	A PTS	453.003	U	188221	60	Crossing		PLK HH	8D1712	Night								15/5/19-5
27	CON350	12/05/2019	Broken Hill	A PTS	453.003	D	188222	60	Free Weld		PLK HH	8D1572	Night								15/5/19-6
28	CON350	12/05/2019	Broken Hill	Main	453.019	D	188223	53/60	Junction		PLK SC	8D1792	Night								15/5/19-1
29	CON350	12/05/2019	Broken Hill	Main	453.019	U	188224	53/60	Junction		PLK SC	8D1792	Night								15/5/19-2
30	CON350	14/05/2019	Broken Hill	Main	452.825	D	188225	53	Adjustment		PLK SC	8D1701	Fine	452.717	452.937	ADJ 1.1	33	CON140		15/5/19-15	
31	MH2284	14/05/2019	Broken Hill	Main	452.825	U	188226	53	Adjustment		PLK SC	8D1701	Fine	452.717	452.937	ADJ 1.2	33	CON140		15/5/19-16	
32	MH2284	14/05/2019	Broken Hill	Main	453.108	D	188227	53	Adjustment		PLK SC	8D1701	Fine	453.017	453.237	ADJ 2.1	31	CON140		15/5/19-30	
33	MH2284	14/05/2019	Broken Hill	Main	453.113	U	188228	53	Adjustment		PLK SC	8D1701	Fine	453.017	453.237	ADJ 2.2	31	CON140		15/5/19-31	
34	MH2284	14/05/2019	NWCE	A PTS	452.951	U	188252	60	Switch	RFN	PLK HH	8D1572	Night								16/5/19-59
57	MH2284	14/05/2019	NWCE	A PTS	452.975	U	188253	60	Free Weld		PLK HH	8D1572	Night								16/5/19-60

		RJ & MT AGNEW PTY LTD WELD TEST SHEET Client: Taylor Rail		Test Procedure: ETN-01 04 ARTC Standard Area: Parkes Operator: R J Agnew		Mobile: 0439 166 08 Email: rick@bmd.com.au www.bmd.com.au		
Angle	Probe 1 70°	Probe 2 35°	Probe 3 0°	Probe 4 0°	Probe 5 0°	Probe 6 Twin 70°	UT Machine USM35 S/N-3609a	Couplant Water
Measured Angle	72°	37°	0°			70°	USMGO-12015451	
Recorded Index Point	25°	25°	0°			12°		
Serial No.	57001	56998	57434			820		

TEST DATE	KILOMETRE	TRACK	RAIL UID	WELD NO.	WELD TYPE OS/FB	TEST RESULT Y/N	TYPE DEFECT	RAIL FLAW/ALIGNMENT FORM NUMBER	WELDER RETURN NUMBER	WELDER LICENCE NO.	STICKER NUMBER
15/05/2019	453-019	Main	D	1	One shot	Y				CON350	188223
15/05/2019	453-019	Main	Up	2	One shot	Y				CON350	188224
15/05/2019	453-003	T/O	D	3	One shot	Y				CON350	188219
15/05/2019	453-003	T/O	Up	4	One shot	Y				CON350	188220
15/05/2019	453-003	T/O	D	5	One shot	Y				CON350	188221
15/05/2019	453-003	T/O	Up	6	One shot	Y				CON350	188222
15/05/2019	452-975	T/O	D	7	One shot	Y				CON350	188211
15/05/2019	452-975	T/O	Up	8	One shot	Y				CON350	188212
15/05/2019	452-975	T/O	Up	9	One shot	Y				CON350	188212
15/05/2019	452-975	T/O	Up	10	One shot	Y				CON350	188212
15/05/2019	454-255	Main	D	11	One shot	Y				CON350	188213
15/05/2019	454-263	Main	D	12	One shot	Y				CON350	188213
15/05/2019	454-267	Main	Up	13	One shot	Y				CON350	188213
15/05/2019	454-270	Main	Up	14	One shot	Y				CON350	188213
15/05/2019	452-825	Main	D	15	One shot	Y				CON350	188213
15/05/2019	452-829	Main	Up	16	One shot	Y				CON350	188213
15/05/2019	452-923	Main	D	17	One shot	Y				CON350	188205
15/05/2019	452-923	Main	Up	18	One shot	Y				CON350	188206
15/05/2019	452-929	Main	D	19	One shot	Y				CON350	188203
15/05/2019	452-929	Main	Up	20	One shot	Y				CON350	188204
15/05/2019	452-937	T/O	D	21	One shot	Y				CON350	188201
15/05/2019	452-937	T/O	Up	22	One shot	Y				CON350	188202
15/05/2019	452-960	T/O	D	23	One shot	Y				CON350	188207
15/05/2019	452-960	T/O	Up	24	One shot	Y				CON350	188209

		RJ & MT AGNEW PTY LTD WELD TEST SHEET Client: Taylor Rail		Test Procedure: ETN-01 04 ARTC Standard Area: Parkes Operator: R J Agnew		Mobile: 0439 166 08 Email: rick@bmd.com.au www.bmd.com.au		
Angle	Probe 1 70°	Probe 2 35°	Probe 3 0°	Probe 4 0°	Probe 5 0°	Probe 6 Twin 70°	UT Machine USM35 S/N-3609a	Couplant Water
Measured Angle	72°	37°	0°			70°	USMGO-12015451	
Recorded Index Point	25°	25°	0°			12°		
Serial No.	57001	56998	57434			820		

TEST DATE	KILOMETRE	TRACK	RAIL UID	WELD NO.	WELD TYPE OS/FB	TEST RESULT Y/N	TYPE DEFECT	RAIL FLAW/ALIGNMENT FORM NUMBER	WELDER RETURN NUMBER	WELDER LICENCE NO.	STICKER NUMBER
15/05/2019	452-960	T/O	Up	25	One shot	Y				CON350	188208
15/05/2019	452-989	T/O	D	26	One shot	Y				CON350	188215
15/05/2019	452-990	T/O	D	27	One shot	Y				CON350	188217
15/05/2019	452-990	T/O	Up	28	One shot	Y				CON350	188216
15/05/2019	452-989	T/O	Up	29	One shot	Y				CON350	188218
15/05/2019	453-108	Main	D	30	One shot	Y				CON350	188227
15/05/2019	453-112	Main	Up	31	One shot	Y				CON350	188228
15/05/2019	454-358	Main	D	32	One shot	Y				CON350	188241
15/05/2019	454-358	Main	Up	33	One shot	Y				CON350	188242
15/05/2019	454-374	T/O	D	34	One shot	Y				CON350	188243
15/05/2019	454-374	T/O	Up	35	One shot	Y				CON350	188243
15/05/2019	454-374	T/O	D	36	One shot	Y				CON350	188250
15/05/2019	454-374	T/O	Up	37	One shot	Y				CON350	188251
15/05/2019	454-389	T/O	D	38	One shot	Y				CON350	188248
15/05/2019	454-388	T/O	Up	39	One shot	Y				CON350	188244
15/05/2019	454-388	T/O	Up	40	One shot	Y				CON350	188249
15/05/2019	454-389	T/O	Up	41	One shot	Y				CON350	188243
15/05/2019	454-400	T/O	Up	42	One shot	Y				CON350	188243
15/05/2019	454-410	T/O	D	43	One shot	Y				CON350	188243
15/05/2019	454-403	T/O	Up	44	One shot	Y				CON350	188244
15/05/2019	454-410	T/O	Up	45	One shot	Y				CON350	188245
15/05/2019	454-403	T/O	Up	46	One shot	Y				CON350	188246
15/05/2019	454-417	T/O	D	47	One shot	Y				CON350	188239
15/05/2019	454-417	T/O	D	48	One shot	Y				CON350	188240

		RJ & MT AGNEW PTY LTD WELD TEST SHEET Client: Taylor Rail		Test Procedure: ETN-01 04 ARTC Standard Area: Parkes Operator: R J Agnew		Mobile: 0439 166 08 Email: rick@bmd.com.au www.bmd.com.au		
Angle	Probe 1 70°	Probe 2 35°	Probe 3 0°	Probe 4 0°	Probe 5 0°	Probe 6 Twin 70°	UT Machine USM35 S/N-3609a	Couplant Water
Measured Angle	72°	37°	0°			70°	USMGO-12015451	
Recorded Index Point	25°	25°	0°			12°		
Serial No.	57001	56998	57434			820		

TEST DATE	KILOMETRE	TRACK	RAIL UID	WELD NO.	WELD TYPE OS/FB	TEST RESULT Y/N	TYPE DEFECT	RAIL FLAW/ALIGNMENT FORM NUMBER	WELDER RETURN NUMBER	WELDER LICENCE NO.	STICKER NUMBER
15/05/2019	454-417	T/O	Up	49	One shot	Y				CON350	188241
15/05/2019	454-417	T/O	Up	50	One shot	Y				CON350	188242
15/05/2019	454-441	T/O	D	51	One shot	Y				CON350	188216
15/05/2019	454-441	T/O	Up	52	One shot	Y				CON350	188217
15/05/2019	454-449	Main	D	53	One shot	Y				CON350	188236
15/05/2019	454-449	Main	Up	54	One shot	Y				CON350	188235
15/05/2019	454-450	Main	D	55	One shot	Y				CON350	188229
15/05/2019	454-454	Main	Up	56	One shot	Y				CON350	188230
15/05/2019	454-479	Main	Up	57	One shot	Y				CON350	188235
15/05/2019	454-472	Main	Up	58	One shot	Y				CON350	188234
15/05/2019	452-961	T/O	Up	59	One shot	N	RFT			CON350	188252
15/05/2019	452-975	T/O	Up	60	One shot	Y				CON350	188253

WELD RETURN

Doc No.: T-QUAL-F-18.1

Welder's Name: HAYDON 30085 Welder ID number: CON350 Welder's Signature: <i>[Signature]</i>		Company Name: FASTRAK Date: 14/5/19		Supervisor's Name: S.P. Turner Supervisor's Signature: <i>[Signature]</i> Project or RC/M: 7/2/1		Date: 23/5/19			
WELD LOCATION		WELD DETAILS				PRESERVING EXISTING SPT		FINISHED WELD GEOMETRY	
Date	Track/SPH or equipment number	Kit (each weld)	Rail UID	Weld Type	Machine No (FB) or Batch No (AT)	Weld number (where applicable)	Track Condition	Before	After
12/5/19	452-990	U	GO	HH	S 80172	188216	Good		
"	453-003	U	GO	HH	S 80172	214	Good		
"	453-003	U	GO	HH	S 80172	231	Good		
"	453-003	U	GO	HH	S 80172	222	Good		
"	453-003	U	GO	HH	S 80172	223	Good		
"	453-003	U	GO	HH	S 80172	224	Good		
"	453-003	U	GO	HH	S 80172	225	Good		
"	453-003	U	GO	HH	S 80172	226	Good		
"	453-003	U	GO	HH	S 80172	227	Good		
"	453-003	U	GO	HH	S 80172	228	Good		
"	453-003	U	GO	HH	S 80172	229	Good		
"	453-003	U	GO	HH	S 80172	230	Good		
"	453-003	U	GO	HH	S 80172	231	Good		
"	453-003	U	GO	HH	S 80172	232	Good		
"	453-003	U	GO	HH	S 80172	233	Good		
"	453-003	U	GO	HH	S 80172	234	Good		
"	453-003	U	GO	HH	S 80172	235	Good		
"	453-003	U	GO	HH	S 80172	236	Good		
"	453-003	U	GO	HH	S 80172	237	Good		
"	453-003	U	GO	HH	S 80172	238	Good		
"	453-003	U	GO	HH	S 80172	239	Good		
"	453-003	U	GO	HH	S 80172	240	Good		
"	453-003	U	GO	HH	S 80172	241	Good		
"	453-003	U	GO	HH	S 80172	242	Good		
"	453-003	U	GO	HH	S 80172	243	Good		
"	453-003	U	GO	HH	S 80172	244	Good		
"	453-003	U	GO	HH	S 80172	245	Good		
"	453-003	U	GO	HH	S 80172	246	Good		
"	453-003	U	GO	HH	S 80172	247	Good		
"	453-003	U	GO	HH	S 80172	248	Good		
"	453-003	U	GO	HH	S 80172	249	Good		
"	453-003	U	GO	HH	S 80172	250	Good		
"	453-003	U	GO	HH	S 80172	251	Good		
"	453-003	U	GO	HH	S 80172	252	Good		
"	453-003	U	GO	HH	S 80172	253	Good		
"	453-003	U	GO	HH	S 80172	254	Good		
"	453-003	U	GO	HH	S 80172	255	Good		
"	453-003	U	GO	HH	S 80172	256	Good		
"	453-003	U	GO	HH	S 80172	257	Good		
"	453-003	U	GO	HH	S 80172	258	Good		
"	453-003	U	GO	HH	S 80172	259	Good		
"	453-003	U	GO	HH	S 80172	260	Good		
"	453-003	U	GO	HH	S 80172	261	Good		
"	453-003	U	GO	HH	S 80172	262	Good		
"	453-003	U	GO	HH	S 80172	263	Good		
"	453-003	U	GO	HH	S 80172	264	Good		
"	453-003	U	GO	HH	S 80172	2			

WELD RETURN

Doc No.: T-QUAL-F-19.1

Welder's Name: HAYDON JONES		Company Name: PA50AUC		Supervisor's Name: S. P. Jones		Date: 23/5/19	
Welder ID number: CON150		Company ID: PA50AUC		Supervisor's Signature: [Signature]		Project or RCN: P20	
Welder's Signature: [Signature]		Date: 13/5/19		Project or RCN: P20		Date: 23/5/19	

WELD LOCATION		WELD DETAILS				PRESERVING EXISTING SFT		FINISHED WELD GEOMETRY			
Date	Track/SPT or equipment number	Km (each weld)	Rail Leg UD	Rail Size	Weld Type	Machine No (F/B) Or Batch No (AT)	Weld number (where applicable)	Track Condition	Peak 0.0 to 0.5mm	Lateral 0.5 to 2.5mm	Ramp angle > 7 m
7/5/19	Boden Hill	452.424	U	60	-	801712	189203	Fine			
7/5/19	"	462.424	U	60	-	801712	189204	Fine			
7/5/19	"	462.425	U	60	-	801712	189205	Fine			
7/5/19	"	462.425	U	60	-	801712	189206	Fine			
14/5/19	"	452.437	U	60	-	801712	189201	Fine			
"	"	452.437	U	60	-	801712	189202	Fine			
"	"	452.437	U	60	-	801712	189207	Fine			
"	"	452.437	U	60	-	801712	189208	Fine			
"	"	452.437	U	60	-	801712	189209	Fine			
"	"	452.437	U	60	-	801712	189210	Fine			
"	"	452.437	U	60	-	801712	189211	Fine			
"	"	452.437	U	60	-	801712	189212	Fine			
"	"	452.437	U	60	-	801712	189213	Fine			

Remarks/Comments: **Not mentioned on test sheet instead there's one weld tested @ CH454 too done by QWOCB**

Tick check box to confirm the following has been undertaken:
☒ Each weld has been visually inspected.
☒ Excess mould sand has been cleaned.
☒ Each weld properly packed and adequately supported.

File Location: **F:\BMD\QualityControl\Final\T-QUAL-F-19.1\Weld Return.docx**
 Issue Date: **10-May-19** | Rev No: **1.0** | New Date: **10-May-19** | Print Date: **10-May-19** | Page: **1 of 2**
 Person Responsible: **Quality Coordinator** | Document Status: **1. Draft 2. Released / Approved**

WELD RETURN

Doc No.: T-QUAL-F-19.1

Welder's Name: STEVE JONES		Company Name: QUICKWAY		Supervisor's Name: S. P. Jones		Date: 23/5/19	
Welder ID number: QUICKWAY		Company ID: QUICKWAY		Supervisor's Signature: [Signature]		Project or RCN: P20	
Welder's Signature: [Signature]		Date: 13/5/19		Project or RCN: P20		Date: 23/5/19	

WELD LOCATION		WELD DETAILS				PRESERVING EXISTING SFT		FINISHED WELD GEOMETRY			
Date	Track/SPT or equipment number	Km (each weld)	Rail Leg UD	Rail Size	Weld Type	Machine No (F/B) Or Batch No (AT)	Weld number (where applicable)	Track Condition	Peak 0.0 to 0.5mm	Lateral 0.5 to 2.5mm	Ramp angle > 7 m
14/5/19	Boden Hill	454.358	U	60	-	801712	189340	Fine			
"	"	358	U	60	-	801712	189341	Fine			
"	"	358	U	60	-	801712	189342	Fine			
"	"	358	U	60	-	801712	189343	Fine			
"	"	358	U	60	-	801712	189344	Fine			
"	"	358	U	60	-	801712	189345	Fine			
"	"	358	U	60	-	801712	189346	Fine			
"	"	358	U	60	-	801712	189347	Fine			

Remarks/Comments: **Not mentioned on test sheet instead there's one weld tested @ CH454 too done by QWOCB**

Tick check box to confirm the following has been undertaken:
☒ Each weld has been visually inspected.
☒ Excess mould sand has been cleaned.
☒ Each weld properly packed and adequately supported.

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 Person Responsible: **Quality Coordinator** | Document Status: **1. Draft 2. Released / Approved**

WELD RETURN

Doc No.: T-QUAL-F-19.1

Welder's Name: SHILANI KISHAN		Company Name: QUICKWAY		Supervisor's Name: S. P. Jones		Date: 13/5/19	
Welder ID number: QUICKWAY		Company ID: QUICKWAY		Supervisor's Signature: [Signature]		Project or RCN: P20	
Welder's Signature: [Signature]		Date: 13/5/19		Project or RCN: P20		Date: 13/5/19	

WELD LOCATION		WELD DETAILS				PRESERVING EXISTING SFT		FINISHED WELD GEOMETRY			
Date	Track/SPT or equipment number	Km (each weld)	Rail Leg UD	Rail Size	Weld Type	Machine No (F/B) Or Batch No (AT)	Weld number (where applicable)	Track Condition	Peak 0.0 to 0.5mm	Lateral 0.5 to 2.5mm	Ramp angle > 7 m
12/5/19	Boden Hill	454.041	U	60	-	801712	189232	OK			
"	"	454	U	60	-	801712	189233	OK			
"	"	454	U	60	-	801712	189234	OK			
"	"	454	U	60	-	801712	189235	OK			
13/5/19	ARC	454	U	60	-	801712	189236	OK			
"	"	454	U	60	-	801712	189237	OK			
"	"	454	U	60	-	801712	189238	OK			
"	"	454	U	60	-	801712	189239	OK			
"	"	454	U	60	-	801712	189240	OK			

Remarks/Comments: **Not on Weld test sheet. It shows done by CH454. Are these welds the same as the one done by Joag on 13/05/19?**

Tick check box to confirm the following has been undertaken:
☒ Each weld has been visually inspected.
☒ Excess mould sand has been cleaned.
☒ Each weld properly packed and adequately supported.

File Location: **F:\BMD\QualityControl\Final\T-QUAL-F-19.1\Weld Return.docx**
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WELD RETURN

Doc No.: T-QUAL-F-19.1

Welder's Name: JOHN TONNEY		Company Name: CAMP		Supervisor's Name: S. P. Jones		Date: 23/5/19	
Welder ID number: QUICKWAY		Company ID: QUICKWAY		Supervisor's Signature: [Signature]		Project or RCN: P20	
Welder's Signature: [Signature]		Date: 13/5/19		Project or RCN: P20		Date: 23/5/19	

WELD LOCATION		WELD DETAILS				PRESERVING EXISTING SFT		FINISHED WELD GEOMETRY			
Date	Track/SPT or equipment number	Km (each weld)	Rail Leg UD	Rail Size	Weld Type	Machine No (F/B) Or Batch No (AT)	Weld number (where applicable)	Track Condition	Peak 0.0 to 0.5mm	Lateral 0.5 to 2.5mm	Ramp angle > 7 m
13/5/19	ARC	452.461	U	60	-	801712	189210	Fine			
"	"	452.475	U	60	-	801712	189211	Fine			
"	"	452.489	U	60	-	801712	189212	Fine			
"	"	452.497	U	60	-	801712	189213	Fine			
"	"	452.497	U	60	-	801712	189214	Fine			
"	"	452.497	U	60	-	801712	189215	Fine			
"	"	452.497	U	60	-	801712	189216	Fine			
"	"	452.497	U	60	-	801712	189217	Fine			
"	"	452.497	U	60	-	801712	189218	Fine			

Remarks/Comments: **189210 & 189214 remark due to defect -> Need to make reference of the remark weld return. done CON 350 dated 14/5/19**

Tick check box to confirm the following has been undertaken:
☒ Each weld has been visually inspected.
☒ Excess mould sand has been cleaned.
☒ Each weld properly packed and adequately supported.

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 Issue Date: **10-May-19** | Rev No: **1.0** | New Date: **10-May-19** | Print Date: **10-May-19** | Page: **1 of 2**
 Person Responsible: **Quality Coordinator** | Document Status: **1. Draft 2. Released / Approved**



FASTRAK

Doc No.: T-QUAL-F-19.1

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WELD RETURN

FASTRAK

Doc No.: T-QUAL-F-19.1

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WELD RETURN

FASTRAK

Doc No.: T-QUAL-F-19.1

Owner's Name Welder ID number Welder's Signature	<u>Matt Heav</u> <u>113229</u> <u>Matt Heav</u>	Company Name Date	<u>CARIS</u> <u>11/15/19</u>	Supervisor's Name Supervisor's Signature Project or RCRI#	<u>S. Patten</u> <u>[Signature]</u> 						
WELD LOCATION		WELD DETAILS		PRESERVING EXISTING FIT							
Date	Track/FPS or equipment number	Kin (inch weld)	Rail Leg UC	Rail thickness	Weld type	Material of Metal (N/FB or Base for ST)	Weld number (where applicable)	Track Condition	Rail cut x Rail in 2 mm		Finished Weld General Peak 0.0 to 0.3 mm 0.3 mm to 0.7 mm 0.7 mm to 1.3 mm
									Punch Marks	Alar	
11/15/19	Bridon Hill	454 550	10	53	SC	5	BD1201	184 224	<u>fine</u>		
"	"	454 554	10	53	SC	5	BD1201	230	<u>fine</u>		
"	"	454 514	10	60	1H1	5	SD1572	250	<u>fine</u>		
"	"	454 324	11	60	1H1	5	BD1201	261	<u>fine</u>		
11/15/19	Bridon Hill	454 270	10	53	SC	5	SD1201	234	<u>fine</u>		
"	"	453 825	10	53	SC	5	BD1201	215	<u>fine</u>		
"	"	452 824	10	53	SC	5	BD1201	224	<u>fine</u>		
"	"	453 1087	10	53	SC	5	BD1201	227	<u>fine</u>		
"	"	453 878	10	53	SC	5	BD1201	228	<u>fine</u>		
"	"	452 741	10	60	1H1	5	BD1572	232	<u>fine</u>		

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WELD RETURN

FASTRAK

Doc No.: T-QUAL-F-19.1

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Appendix 5:

Transport NSW-Sydney Trains

Doc Ref: AccredKK024
Date: 28 June 2016

From: Rail Inspection Services
Granville

To: Rick Agnew
RJA Ultrasonics

Internal Public
Phone 68161 (02)95368162

12 monthly Competency Assessment of KK Operators for the testing of rail.

All Rail Testing Staff must complete the basic training course conducted by Rail Inspection Services (RIS), Rail Training Course No. WR91 and ASS242 for compliance with Civil Standard MN T 20224 to be qualified as a manual ultrasonic testing operator [KK Operator].

Re-certification of KK Operators [manual ultrasonic testing operators] must also be carried out once every 12 months by relevant training officer to ensure that Rail Testing Standards are maintained.

Repair or replacement of the equipment as needed is necessary for effective testing.

Operators who's Certification has lapsed due to the minimum testing requirements not being met, must complete a one day Assessment/Re-certification prior to recommencing testing duties.

Operator Assessment.

Competency Assessment, Course/Session No. WX62 /
'Perform Ultrasonic Testing' Reaccreditation, conducted today for:

Name of Operators assessed	Employee No.	Location
Rick Agnew	0	Dubbo

FileName: KK Certification Rick Agnew 28-06-16.doc Page 1 of 2

Transport NSW-Sydney Trains

Doc Ref: AccredKK024
Date: 28 June 2016

Prerequisite	Satisfactory
Course No. WR91, Perform Ultrasonic Testing	✓
Number of Welds Verified As Tested	✓
Number of Turnouts Verified As Tested	✓
As per procedure sheets	
Check of setting up procedures including calibration of screen for testing	✓
Check of testing procedures	✓
Check of Sizing procedures	✓
Check of Dye Penetrant Testing Procedures	✓
Check of Weld Alignment Assessment	✓
Training/assessment conducted using ultrasonic flaw detector USM25	✓
Training/assessment conducted using ultrasonic flaw detector USM35	✓

Name Operator Certified as Satisfactory

1. Rick Agnew ✓

For field weld and turnouts ✓
Including flashbutt weld testing ✓

Additional Notes:

The accreditation criteria for the above operator have been met. The Operator is certified for rail testing throughout the Sydney / NSW Trains Network as indicated above.

Rail Training has been notified that the Operators have been deemed competent to test as per Sydney Trains Rail Testing Manual MN T 20224 for issue of an updated competency card.


R. Carlyon
Technical Officer, Rail Testing

FileName: KK Certification Rick Agnew 28-06-16.doc Page 2 of 2



PTM-FRM-00183
Rev. 7 (6/03/2018)