

Engineering Manual

General

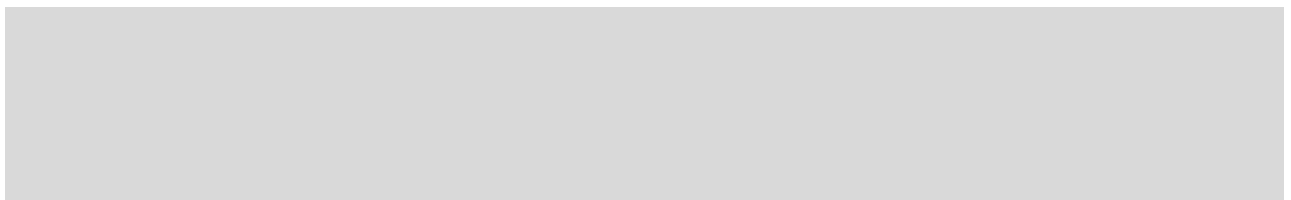
OTGM 005

ENGINEERING STANDARDS LISTING

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1.0	August 2018	First Issue

Summary of changes from previous version

Section	Summary of change

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1 Purpose

The purpose of this manual is to provide a listing of the engineering standards documents approved for use of the Oberon Tarana Heritage Railway. For OTHR documents, the current approved version is available on the OTHR website. The Oberon Tarana Heritage Railway uses recommendations and information contained in a number of Procedure Manuals and Specifications from other NSW rail entities for guidance and these are also listed below. The latest version of these manuals, procedures or specifications can be sourced from the following websites.

For CRN documents –

<http://www.jhrcrn.com.au/Documents.asp?ID=52&Title=Engineering+Standards>

For RailCorp documents

<http://www.asa.transport.nsw.gov.au/ts/railcorp-engineering-standards>

For Assets Standards Authority documents

<http://www.asa.transport.nsw.gov.au/ts>

The manual is to be utilised in accordance with the requirements for the application of engineering standards outlined in OTGM 001 Engineering Standards System Manual.

2 General

2.1 Manuals

Title	Reference No	Notes
Engineering Standards System Manual	OTGM 001	
Engineering Standards Listing	OTGM 005	

3 Train Operating Conditions (TOC) Manual

Title	Reference No	Notes
Train Operating Conditions Manual	TOC	

4 Civil

4.1 Standards

Title	Reference No	Notes
General		
Civil Technical Maintenance Plan	OTCS 100	
Track		
Track System	OTCS 200	
Track Geometry & Stability	OTCS 210	
Transit Space	OTCS 215	
Rail and Rail Joints	OTCS 220	
Sleepers and Track Support	OTCS 230	
Ballast	OTCS 240	
Turnouts and Special Trackwork	OTCS 250	
Structures		
Structures System	OTCS 300	
Load Rating of Underbridges	OTCS 301	
Structures Defect Limits	OTCS 302	

Title	Reference No	Notes
Underbridges	OTCS 310	
Overbridges & Footbridges	OTCS 320	
Miscellaneous Structures	OTCS 330	
Geotechnical		
Formation and Earthworks	OTCS 410	
Track Drainage	OTCS 420	
Right of Way		
Boundary Fences	OTCS 510	
Level Crossings	OTCS 520	
Service Installations in the Rail Corridor	OTCS 540	

4.2 Manuals

Title	Reference No	Notes
General		
Civil Technical Competencies and Engineering Authority	CRN CM 001	
Track		
Track Fundamentals	CRN CM 202	
Track Inspection	CRN CM 203	
Track Geometry and Stability	CRN CM 211	
Survey	CRN CM 212	
Derailment Investigation	CRN CM 213	
Transit Space	CRN CM 215	
Rail Installation & Repair	CRN CM 221	
Rail Welding	CRN CM 222	
Rail Adjustment	CRN CM 223	
Rail Defects & Testing	CRN CM 224	
Rail Defects Handbook	CRN CM 226	
Rail Surface Defects	CRN CM 227	
Sleepers & Fastenings	CRN CM 231	
Ballast	CRN CM 241	
Turnouts	CRN CM 251	
Structures		
Structures General	CRN CM 301	
Structures Examination	CRN CM 302	
Structures Repairs	CRN CM 303	
Underwater Examination	CRN CM 304	
Structures Assessment	CRN CM 305	
Transoms	CRN CM 311	
Buffer Stops	CRN CM 331	

Title	Reference No	Notes
Geotechnical		
Track Reconditioning Guidelines	CRN CM 403	
Earthworks	CRN CM 411	
Track Drainage	CRN CM 421	
Right of Way		
Bushfire and Vegetation Management	CRN CM 501	
Boundary Fences	CRN CM 511	
Level Crossings	CRN CM 521	

4.3 Inspection Forms

Catchpoint Examination	CRN CM 203	
Culvert Examination	CRN CM 302	
Clearance Examination	CRN CM 203	
Examination of Drainage	CRN CM 203	
Examination of Length – Form 1	CRN CM 203	
Inspection of Insulated Joints	CRN CM 203	
Inspection of Rail Wear	CRN CM 203	
Level Crossing Examination	CRN CM 203	
Misalignment Report	CRN CM 211	
Misalignment Investigation Report	CRN CM 211	
Miscellaneous Structures Examination	CRN CM 302	
Monthly Turnout & Weld Testing Report	CRN CM 224	
Rail Adjustment Return	CRN CM 223	
Rail Fail Form	CRN CM 224	
Steel Bridge Examination	CRN CM 302	
Turnout Examination	CRN CM 203	
Weekly Defect Summary Report – Form 2	CRN CM 203	
Weekly Structures Defect Report	CRN CM 302	
Weld Return	CRN CM 222	
Welding Return	CRN CM 222	
W TSA Manual Analysis	CRN CM 203	
W TSA Manual Analysis Input	CRN CM 203	

5 Signals

5.1 Signal design principles

Title	Reference No	Notes
Signal Design Principles - Noticeboards	OTSD 006	
Level Crossings	OTSD 018	

5.2 Maintenance manuals

Title	Reference No	Notes
Mechanical Points and Ground Frames	CRN SM 004	

5.3 Signal safeworking manual (Manual J)

Title	Reference No	Notes
Maintenance of Signal Sighting and Signals	CRN SP 031	

6 Rolling Stock

6.1 Minimum operating standards

Title	Reference No	Notes
Minimum Operating Standards for Rolling Stock	OTRS 010	
Minimum Operating Standards for Rolling Stock – General Interface Standards	OTRS 100	
Minimum Operating Standards for Rolling Stock – Common Interface Standards	OTRS 200	
Minimum Operating Standards for Rolling Stock -Multiple Unit Trains	OTRS 600	
Minimum Operating Standards for Rolling Stock - Infrastructure Maintenance Vehicles	OTRS 700	
Minimum Operating Standards for Rolling Stock – Appendix I – Reflective Delineators	OTRS 900	
Minimum Operating Standards for Rolling Stock – Appendix D – Driver Safety Systems	OTRS 901	
Minimum Operating Standards for Rolling Stock – Appendix B - Glossary	OTRS 902	
Minimum Operating Standards for Rolling Stock – Appendix G - Drawings	ESR 0001-G	
Rolling Stock Wheel Defect Limits	CRN RS 011	
Rail Vehicle Weighing Requirements	CRN RS 012	

6.2 Maintenance Manuals

620-660 class Diesel Railcar Maintenance Manual – Mechanical	OTRS 660
620-660 class Diesel Railcar Maintenance Manual – Electrical	OTRS 661
660 class Diesel Railcar Maintenance Manual – Hydraulic Torque Converter	OTRS 662
Electrodyne Alternator Maintenance Manual	OTRS 663
Diesel Railcars SEM Electro Pneumatic Equipment Manual	OTRS 664
Diesel Railcars SEM Electro Pneumatic Maintenance Manual	OTRS 665
General Information and Working Instructions for Diesel Railcars	OTRS 666

6.3 Inspection Forms

Railcar Trip Inspection	LSMR 036
Railcar Monthly Inspection	LSMR 037
Railcar Annual Inspection	LSMR 038
Railcar 5 yearly Inspection	LSMR 039