

Position Description



Position Title	Principal Signal Reliability Engineer
Position No	00038985
Delegation Level	007
Job Designation	Engineer
Organisational Unit	Signalling Testing & Commissioning SEQ Assets
Work Centre	Brisbane
Position Type	Permanent
Rail Safety Worker	Yes
Medical Fitness Standard	NHS Cat 3 ATTP
Performance Plan Type	Lead Others
Shiftworker	No
Classification (Range)	PT5 ELA .1 - PT5 ELA .4
Pay Scale Type	ASPT
Reports to Position	Mgr Signal Commission & Reliability

QUEENSLAND RAIL VALUES:

1 Queensland Rail - We do better together
Treat others with respect - We appreciate everyone's contributions and differences
Empower our people - We have confidence in our people
Act Safely - We work safe, to go home safe
Make a positive difference - We learn from today, to improve tomorrow

Position Purpose

Provide expert signalling engineering services to deliver quality, asset performance focused outcomes across Queensland Rail, and in particular apply, interpret and support the continuous improvement of standards and specifications related to signalling reliability and maintenance processes.

Position Responsibilities

1. Provide professional engineering expertise in the development, maintenance, and auditing of compliance to signalling asset maintenance plans, standards, checklists, to maximise network reliability and efficiency of maintenance activities.
2. Develop and provide professional engineering oversight of effective, consistent, outcome-focused processes for engineering reliability activities including investigation, root cause analysis, KPI's, and performance reporting to monitor availability and reliability of signalling assets.
3. Maintain the process for tracking and oversee the impact and rectification option analysis for systemic issues which affect safety and reliability of signalling assets.
4. Provide professional engineering supervision and guidance on reliability & maintenance initiatives to address systemic issues, such as trialling predictive maintenance technologies, upgrading assets, or selecting new equipment.
5. Provide specialist technical advice & direction to internal and external stakeholders to ensure the optimal reliability and maintainability of SEQ signalling assets.
6. Certify, as a professional engineer, signal engineering works and ensure that the requirements of professional practice are met to provide consistent output of professional engineering services. This

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shall also ensure compliance with safety, operational and environmental legislation, regulations and practices.

7. Liaise with other divisions of SEQ Assets on strategic maintenance planning and provide recommendations for capital investment in the signalling area that will reduce maintenance costs and/or improve asset performance.

Additional Factors

The appointee will be required to :-

- Comply with Queensland Rail's Code of Conduct;
- Observe all legal and safety obligations of the organisation;

The appointee will be required to:-

- Be available to travel intra and interstate as required;
- Be available for call-out duties as rostered, and overtime outside normal working hours;
- Undertake further training considered necessary for the effective performance of duties associated with this position;
- Operate in a semi-autonomous manner under direction given by the Signalling Reliability Engineering Manager;
- The appointee may be required to relieve in the position of Signalling Reliability Engineering Manager;
- Observe all legal and safety obligations of the organisation.

What is the key selection criteria

1. Extensive knowledge and demonstrated application of professional signal engineering solutions in at least one area of signalling reliability, such as asset management, infrastructure maintenance, construction supervision, inspection and auditing, or research and development.
2. Extensive knowledge of signalling systems and equipment, including applicable maintenance standards, specifications, and procedures that support consistent and efficient asset performance across a rail network.
3. Extensive knowledge of signalling safe-working principles and procedures, including testing, commissioning, and assurance processes for safety-critical signalling systems.
4. High level of skill in strategic planning and decision-making related to long-term signalling asset maintenance, renewal, and capital investment to improve reliability and reduce lifecycle costs.
5. High level of skill in engineering analysis and problem-solving, including root cause failure analysis, systemic issue identification, and whole-of-life cost-benefit evaluation.
6. High level of skill in stakeholder engagement and communication, with the ability to provide specialist technical advice, negotiate outcomes, and collaborate across multidisciplinary teams.
7. Knowledge of and willingness to commit to and work within Queensland Rail's Values and Behaviours.

Pre-employment Checks:

Not Applicable

Pre-employment Qualifications:

What qualifications do I need to hold prior to applying for the position?:

40010530 G_Bach Eng (Electrical/Electronic)

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Competent to carryout testing of Electrical Equipment as used within QR's Signalling Systems.

Health, Safety and Environment Responsibilities

Comply with the overarching document called Health, Safety and Environment Responsibilities MD-11-6843 located in the Safety and Environment Management System.

Personal Protective Equipment needs:

Head and Face protection
Eye Protection
Hearing Protection
Hand Protection
High Visibility Clothing
Safety Footwear
Sunscreen SPF 15+

Safety Publications

QR Electrification Safety Booklet
QR Weekly Notice
Your Health (Newsletter)
C.E.O.'s Safety Statement
C.E.O.'s General Safety Rules

Please Note:

Queensland Rail has a random alcohol and other drug testing program.
Testing can occur anywhere, at any time, on any day.