



Senior Project Engineer

Position Description

Team:	Wellington Metro Network – Network Intervention	Location:	Wellington
Reports to:	Network Delivery Manager		
Role Type:	Permanent		

About Us

KiwiRail's Role in Aotearoa, New Zealand

KiwiRail, a proud State-Owned Enterprise, delivers sustainable and inclusive growth for our customers, communities, and people.

For more than 150 years, rail in New Zealand has connected communities, delivered freight and passengers around the country, and showcased our spectacular scenery to the world. Our purpose—Hononga Whaikaha, Oranga mo Aotearoa (Stronger Connections, Better New Zealand)—speaks to connection with our customers and the future needs of their businesses, connection with the communities we serve and operate in, and connection with each other. KiwiRail is carrying this legacy into the future, delivering connected rail and shipping transport services that create economic, social, and environmental value for New Zealand and New Zealanders.

Our Workplace

At KiwiRail, our values define the behaviour we expect from everyone. We have a team of over 4500 people, and every connection we make with each other, our union partners, our customers and all our stakeholders must be of the highest standard.



Safety, health, and well-being are our number one priority, ensuring our people return home safe and healthy every day.

About the Role

Purpose of the role

KiwiRail is in a period of significant transformation to modernise and grow New Zealand's rail network.

The Senior Project Engineer provides technical leadership and engineering assurance across complex, high-risk, and multi-disciplinary network intervention works. The role ensures that engineering solutions are technically robust, constructible, safe, and compliant, and that quality outcomes are achieved on site.

Responsibilities include planning, scoping and procuring design and delivery work packages, contract formation and management, quality management, performance management, solving design and delivery/site issues, monitoring and reporting progress against programme outcomes and measures, engineering quality verification, construction compliance and executing works safely and taking personal responsibility for their assigned work.

The role plays a key part in mentoring Project Engineers and Junior Project Engineers, supporting capability uplift and consistent engineering standards across the work bank.

Key Accountabilities

Within the Wellington Metro, this role is required to:

- Lead technical planning, scoping and cost development for assigned complex projects and work packages, ensuring alignment with KiwiRail's rail and investment strategies.
- Build understanding of conceptual designs and support the conversion of business cases and early plans into fully scoped, approved, and resourced projects ready for successful delivery.
- Provide senior engineering leadership across detailed design, construction, completion, commissioning and handover stages, delivering project outcomes and contributing to overall programme success.
- Develop accurate and achievable project plans, schedules and detailed budgets in line with programme standards and scheduling requirements.
- Support procurement, contract negotiations and initiation of contracted works to achieve project objectives.
- Actively manage quality across all engineering disciplines and the delivery lifecycle, ensuring work by KiwiRail and external parties meets or exceeds safety and quality standards.
- Support Project Managers and Senior Project Managers with technical risk assessment, mitigation and issue resolution, escalating as required.
- Mentor and coach Project Engineers and Junior Project Engineers to build technical and project delivery capability.

Key challenges

- Ensuring quality outcomes from civil and structural contractors.
- Translating engineering designs into executable works within constrained access windows.
- Managing technical interfaces between civil/structural works and rail systems.
- Resolving site-based technical and quality issues quickly to avoid delivery delays.
- Maintaining engineering rigour under programme and schedule pressure.

Key Relationships Here are the key relationships relevant to this role		Manage /Lead	Deliver to	Collaborate with	Advise or inform
Internal	Network Delivery Manager		✓		
	Project Managers	✓		✓	✓
	Junior Project Engineers	✓		✓	✓
	Superintendents			✓	✓
	Engineering team			✓	✓
	Network Planning & Integrity team			✓	✓
	Network Workforce team			✓	✓
	Network Maintenance team			✓	✓
External	Contractors and consultants	✓		✓	
	Independent inspectors and certifiers	✓		✓	✓
	Equipment suppliers and OEMs	✓		✓	
	Local authorities and third-party stakeholders			✓	✓

What you will do to contribute

Health Safety and Wellbeing	<ul style="list-style-type: none"> • Champion KiwiRail's Care & Protect value through disciplined engineering leadership. • Ensure engineering solutions support safe ways of work and operational integrity. • Intervene where engineering or quality risks could compromise safety • Ensure technical risks, hazards and quality controls are addressed through design, planning and delivery stages.
Customer Focus	<ul style="list-style-type: none"> • Lead development of delivery solutions that minimise disruption to customers and operations. • Clearly communicate technical constraints, risks, options and trade-offs to senior stakeholders. • Balance customer outcomes with engineering, safety, programme and regulatory requirements. • Contribute to programme-level decisions that optimise customer and network outcomes.
High Performing Teams Skills	<ul style="list-style-type: none"> • Provide technical mentoring and coaching to Project Engineers and Junior Project Engineers. • Lead collaboration across engineering, planning and delivery teams to achieve project and programme outcomes. • Set and uphold expectations for engineering quality, professionalism and technical assurance. • Contribute to building engineering capability across the programme.
Commercial Acumen	<ul style="list-style-type: none"> • Lead technical inputs to estimates, budgets, variations and claims for complex works. • Assess and manage technical and commercial risks in collaboration with Project and Senior Project Managers. • Contribute to procurement, contract negotiations and value-for-money outcomes through sound engineering judgement. • Support accurate forecasting and cost control across assigned projects. • Support delivery management in forecasting, planning and monitoring delivery performance to achieve or exceed project objectives. • Contribute to financial planning and control, including cost plans, forecasting, purchase orders, accruals, spend analysis and resolution of budget variances.
Other Role-Related Competencies	<ul style="list-style-type: none"> • Contribute to project and programme governance, reporting and assurance activities. • Maintain accurate, auditable engineering, quality and project records. • Lead or support incident investigations, defect resolution and post-project reviews. • Drive continuous improvement initiatives across projects and the wider programme.
Planning and Initiation	<ul style="list-style-type: none"> • Lead technical planning, scoping and cost development for assigned complex projects and work packages.

- Build understanding of conceptual design work developed for future work.
- Assist in the conversion of business cases and initial plans into achievable projects that will deliver to KiwiRail's future rail and investment strategies and are fully scoped, approved and resourced with the right technical capabilities, in readiness for successful execution by the Delivery team.
- Contribute to programme prioritisation and programme level scheduling and budgeting as required.
- Contribute to performance reporting and maintain accurate, up-to-date project records in line with document and information management requirements.
- Contribute to programme and project improvement initiatives, identifying opportunities to enhance delivery performance and championing change.

Delivery

- Provide senior engineering leadership across detailed design, construction, completion, commissioning and handover stages of assigned complex projects – delivering on or exceeding the individual project targets and contributing to programme outcomes. Actively work with specialists and experts as required.
- Significantly contribute to the development of accurate and achievable project plans, schedules and detailed budgets for the work assigned - complete in line with programme standards and scheduling requirements.
- Actively contribute to the procurement, contract negotiations and initiation of contracted work required to successfully deliver to project objectives.
- Work with internal stakeholders, engineering services, and consultants to develop fit-for-purpose design solutions that meet operational requirements, technical standards and regulatory requirements.
- Identify and secure all permits, approvals, access, materials, people and inspections required to deliver and complete all project work assigned and in line with legislated frameworks, standards and rules.
- Actively manage the quality of all work undertaken – across the engineering disciplines and the delivery lifecycle, and by Kiwirail and external parties - all deliverables to meet or exceed quality and safety standards.
- Proactively assist delivery management in accurately forecasting, planning and monitoring all aspects of delivery performance – to deliver or exceed project objectives.
- Support delivery managers in all aspects of financial forecasting and management. This includes providing input into cost plans and forecasting and actively assisting with purchase orders, accruals, analysing spend and resolving budget variances as required.
- Significantly contribute to the performance reporting required for all work undertaken.
- Actively identify and address project risks and issues, escalating and reporting in line with programme control disciplines.
- Provide input into a communications strategy for projects assigned and positively assisting with its implementation.
- Keep an accurate, up to date and accessible record of all work assigned in line with document and information management policies and procedures.

Relationship Management

- Identify and build enduring and positive relationships within KiwiRail, external stakeholders, funders and major contracting/supplier organisations
 - Proactively communicates to all parties benefiting or impacted by delivery activities to enhance and support delivery success.
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- Build and maintain effective relationships with internal teams, external stakeholders, funders and key contractors/suppliers.
 - Work collaboratively with planning and delivery functions to optimise programme and project outcomes.

Capability Building

- Work proactively and collaboratively with the planning and delivery functions to plan, optimise and support programme and project delivery
 - Take personal responsibility for own development and delivering high quality deliverables.
 - Develop engineering capability by mentoring and coaching Project Engineers and Junior Project Engineers.
 - Proactively guide Project Engineers and Junior Project Engineers to enable successful delivery and to assist in building their project and technical engineering capabilities and knowledge.
 - Actively contribute to programme/project improvement initiatives through continually looking for opportunities to improve the success of the programme and actively championing change.
 - Support development and implementation of project communications strategies with internal and external stakeholders.
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Decision Making

The position is accountable for **technical and quality-related decisions** within programme scope and approved standards.

Key decision-making requirements include:

- Acceptance of complex engineering solutions and construction methodologies
- Acceptance of civil and structural quality documentation prior to construction
- Resolution of high-risk engineering and constructability issues.
- Provision of engineering and quality advice to the Project Manager and Delivery Manager

Human Resources Delegations	Nil
Direct reports	Nil
Finance Delegations	Level 7: Budgeted Operating Expenditure and Capital Expenditure \$100k.
Budget (operating and capital)	Nil
Travel Delegations	Nil
Statutory powers	Nil

Physical demands and the nature of work

This role is primarily office-based with regular engagement in field environments and involves:

- Prolonged computer-based work
- Attendance at construction sites, inspections, and technical meetings
- Occasional night or weekend work to support delivery and quality assurance
- Travel across the network as required

Your role may include other tasks suited to your level, as your manager directs. This job description shows your current duties. We'll review and update it with you if your responsibilities change.

About you

Knowledge and experience

- 10 + years' experience in engineering delivery of complex infrastructure or rail projects while maintaining operations.
- Strong capability in civil and/or structural engineering quality assurance.
- Proven experience resolving complex engineering and constructability issues.
- Experience mentoring or leading other engineers in a delivery environment.
- Experience in digital engineering methods and tools

Desirable:

- Relevant project experience in rail, port or general construction industry where multiple engineering disciplines are applied, is desirable
- Experience in digital engineering methods and tools
- Practical experience in the field relevant to rail, ports, transportation or logistics.
- Experience in programme, project and contract/ contractor management including planning, funding, implementation, monitoring and evaluation and assessment.
- Knowledge of the rail and/or shipping transport sectors, relevant legislation and rail, port and transport safety issues.

Ways of working / Work-related qualities

- Demonstrates strong technical credibility and professional judgement.
- Ability to bring customers and stakeholders along the 'journey' while ensuring there is clarity around their mandates.
- Calm, decisive, and trusted in high-pressure environments.
- Communicates complex technical issues clearly and pragmatically.
- Willing to challenge where quality or safety standards are at risk.
- Builds trust through sound judgement and technical credibility.
- Excellent interpersonal, communication, leadership and teamwork skills.
- Ability to see the "big picture" and continue working steadily towards this, despite short term distractions, and without losing attention to detail and accuracy.
- Ability to work effectively and without detailed supervision in an ambiguous and changing environment.
- Ability to fit into a programme culture that is based on a constructive team effort towards solutions and achievement of the overall outcomes.

Other Requirements

- You can pass regular drug and alcohol screenings.
- You hold a current and valid NZ driver's licence.
- You are prepared to travel regularly within your area of responsibility.

Qualifications

- Tertiary degree in engineering (civil, structural, electrical, or equivalent).
- Rail or safety-critical engineering experience desirable.
- Chartered Professional Engineer (CPEng) or equivalent is desirable.

**CREATING
STRONGER
CONNECTIONS**