

POSITION DETAILS

POSITION TITLE	Mechanised Inspection Senior Engineer (Track Geometry & OHW)
DIRECTORATE	Engineering & Maintenance
DIVISION	Network Maintenance
REPORTS TO	Mechanised Inspection Review & Reporting Manager
CLASSIFICATION	RC06
KIND OF EMPLOYMENT	Permanent full time
POSITION NUMBER	50058290, 50058291
LOCACTION	Granville
HEALTH ASSESSMENT CATEGORY	Cat 3 Colour vision - Nil Hearing Standard - Category 3
AGENCY WEBSITE	www.sydneytrains.nsw.gov.au

PRIMARY PURPOSE

The Mechanised Inspection Senior Engineer is responsible for:

- Providing subject matter expert advice and support to the Mechanised Inspection Review & Reporting team to transform large volumes of asset inspection data captured by the Mechanised Inspection Systems into actionable asset condition information for maintenance and asset management purposes
- Providing technical leadership and mentoring to the mechanised inspection data analysis and information reporting to deliver condition monitoring and support the drive to a predictive condition based maintenance.

ORGANISATIONAL ENVIRONMENT

Sydney Trains provides train services throughout the Sydney metropolitan area and was established in July 2013. Its vision is to keep Sydney moving by putting the customer at the centre of everything it does and delivering safe, reliable and clean rail services to the people of Sydney. The organisation is focused on providing sustainable, efficient and cost effective services.

KEY ACCOUNTABILITIES

- 1. Ensure the provision of specialist technical services and support in the fields of fixed rail assets inspection and defect management including but not limited to Mechanised Track Patrol (MTP), Engine Patrol, track geometry, rail profile, overhead wire geometry & imagery, rail corrugation, internal rail flaw, rail surface condition, corridor clearance, LiDAR and asset mapping.
- 2. Set up and complete thorough data analysis and testing, and manage reporting to engineering management on matters affecting asset conditon monitoring and recording.
- Exercise Engineering Authorities to a level of delegation and liaise with maintenance and engineering
 personnel and coordinate the escalation, management and rectification of priority and emergency asset
 degradation and defects.
- 4. Support a high level of customer satisfaction by consistently meeting the availability, distribution and reporting requirements including asset condition information quality, accuracy and timeliness.
- 5. Initiate and support the development and implementation of an effective and efficient analytical and reporting capability including complex data processing and analytics, vigilance tasks, assisted visual detection, human factors and reporting tools.
- Contribute to the reliability, availability, and maintainability of Mechanised Inspection Systems by systematically investigating incidents, identifying root causes and proactively driving continuous improvement and systems enhancements, including software and hardware upgrades.
- 7. Monitor system performance in order to identify, propose and implement changes and improvements to the Mechanised Inspection 'on-board' recording and evaluation functions, equipment and procedures
- 8. Execute safety responsibilities, authorities and accountabilities consistent with Sydney Trains safety management system requirements which are defined in SMS document number SMS-02-RG-3058.



KEY RELATIONSHIPS

INTERNAL – across/within Sydney Trains

MAIN CONTACT and PURPOSE

- Mechanised Inspection Operations for run planning, service delivery and data quality
- Operational Technology, ICT for technology systems support and systems troubleshooting.
- Maintenance Engineering, Engineering and System Integrity for engineering support and advice
- Territory infrastructure maintainers (Network Bases) for collaborative defect management, field visits and service delivery
- Asset Management for condition based monitoring and asset performance
- ICON Infrastructure Control & Coordination for emergency defects escalation
- Data owners and/or custodians (eg. GIS) to arrange and manage reference data support
- Procurement and Contract Managers for contractual and commercial matters.

EXTERNAL – outside of Sydney Trains

MAIN CONTACT and PURPOSE

- Software, technology and service vendors for support, services and maintenance
- Other rail maintainers for network cross-boundary issues

DECISION MAKING

The position is fully accountable for the formulation of advice and coordination across all operational objectives. Independent decision making requirements of the position include:

- Assess data validity and appropriate actions to be taken
- Exercise Engineering Authorities to a level of delegation

Collaborative decision making requirements of the position include:

- Development and improvements of the mechanised inspection capability
- Engineering standards update/development
- Management and rectification of priority and emergency asset degradation and defects

CHALLENGES

- Highly specialist nature of work
- Managing and collaborating with a large number of stakeholders remotely located across a number of disciplines.
- Work with complex data processing and analytics and vigilance tasks
- Constantly meeting strict compliance timeframes as well as user expectations for availability, reliability and quality of service
- Maintaining hands on standards and defect knowledge across a number of disciplines.

POSITION IMPACT

DIRECT REPORTS:	Nil
BUDGET (CapEx/Salary):	Nil

SELECTION CRITERIA

- 1. Tertiary qualifications (Degree) in Engineering or equivalent substantial experience
- 2. Demonstrated knowledge of rail infrastructure standards, asset management, routine maintenance and defect management especially track, rail and/or electrical overhead assets
- 3. Exceptional analytical skills to transform large volumes of data into targeted information
- 4. Demonstrated attention to details and proven experience producing and checking technical deliverables, including engineering data and reports
- 5. Ability to engage with multiple stakeholders and customers, especially field teams and engineers to advise on and manage the priorites of defects and maintenance activities
- 6. Advanced communication and interpersonal skills and demonstrated ability to train and mentor staff



PERFORMANCE STANDARDS

Dimension	Performance Level
SAFETY	 Safety goals achieved through personal commitment, no harm to self or others and participation in safety initiatives. Opportunities for continuous improvement identified and reported Competency for role is achieved through proactive self-development and training Hazard and incident elimination approached proactively Safety and management systems utilised for self and peers Safety procedures and practices implemented and applied
CUSTOMER	 Agreed methods and measures followed and ensure reliable results for customers Customer expectations and service standards in the areas of timeliness, information, passenger safety and cleanliness understood and delivered within agreed timeframes Immediate customer satisfaction achieved through use of imitative Customer feedback used to influence process improvements
FINANCIAL	 Reliable results achieved by utilisation of agreed methods and measures Improvements suggested and processes constructively questioned Cost savings achieved through effective use of resources Suggested improvements and constructively questioned processes to improve Targets, due dates and quality standards met
LEADERSHIP	 Actively listened to and built positively on others' ideas Displayed fairness, exhibited trust and created real teamwork and sharing Business direction, team purpose and change agenda understood, agreed to and work activities aligned. Sought formal and informal development opportunities for growth Proactively sought and maintained collaborative working relationships with peers and manager to deliver results. Demonstrated awareness of relevant community issues.

BEHAVIOURS

DETIAVIOURS		
Critical behaviours	Behaviour Statement	
SAFETY	 Look out for your mates and customers and immediately raise awareness to any safety risks or hazards. Accept personal responsibility for your own safety, your team, and your customers Follow safety rules 	
PRIDE	 Take care of your kit and your workers Wear your uniform or lanyard with pride Be ready to lend a hand to customers and team mates Share with others about what makes you proud to work here 	
ACCOUNTABILITY	 Be on time Follow through on the promises you make Meet deadlines through careful planning Find the information you need to make timely and informed decisions 	
COLLABORATION	 Talk in a respectful and open way to customers and your team mates Provide and accept hones and constructive feedback from others Act with self-awareness of your impact on others 	
EXCELLENCE	 Arrive prepared, informed and enthusiastic to deliver excellent customer service and results. Warmly greet and reach out to your colleagues and customers by anticipating their needs. Work hard to always do more than what others expect. 	