

Position Title:	Asset Engineer
Reports To:	Manager Engineering & Asset Intelligence
Location:	Launceston (with statewide operational travel)
Instrument:	Water Award 2020
Award Classification:	Level 7 –9 (subject to experience)
Salary Band:	Subject to experience
Employment Basis:	Permanent, Full Time
Hours of Work:	38 hours per week / Monday to Friday, 8.30am to 5.00pm

Organisation

Tasmanian Irrigation Pty Ltd (TI) is the State-owned Company responsible for developing and operating irrigation schemes, typically funded through public / private partnerships.

Since Tasmanian Irrigation was established in 2008, the Company has taken over management of a range of inherited assets, including dams, irrigation schemes and river works, constructed 16 new irrigation schemes, and advanced planning on a further six schemes.

By 2030, Tasmanian Irrigation expects to manage a portfolio of irrigation infrastructure valued at more than \$900 million, capable of delivering 236,000 megalitres of water via 1,786km of pipeline, 49 pump stations, 15 dams and three power stations.

All schemes developed and operated by Tasmanian Irrigation are economically viable, environmentally sustainable, have strong community endorsement, are designed to last at least 100 years and deliver water at an average reliability of more than 95 per cent per annum.

Role Purpose

The Asset Engineer provides engineering expertise to support the effective lifecycle management of Tasmanian Irrigation's water delivery infrastructure. Embedded within the Engineering & Asset Intelligence function, this position is focused on asset performance, condition and reliability, and on maintenance, renewal and investment planning that balances customer service levels with asset lifecycle cost and residual operational risk.

Working across dams, pipelines, pump stations and SCADA-controlled systems, the role applies engineering judgement, reliability and performance analysis, and data interrogation to inform asset management decision-making. The position also contributes to condition assessment programs, renewal planning, root cause analysis and continuous improvement initiatives, while acting as a key engineering interface between Asset Intelligence, Operations and Water Security functions.

Key Responsibilities

Asset Management & Lifecycle Planning

- Develop, review and improve asset management strategies, plans and processes, aligned with contemporary asset management practice (ISO 55000 series), to mitigate and control lifecycle and operational risks.
- Develop and maintain asset class lifecycle strategies and plans, balancing customer service levels with lifecycle cost and risk.
- Contribute to the development of renewal and capital investment plans, including scoping, prioritising and developing renewal and augmentation works with supporting technical documentation and preliminary design input.
- Develop and implement planned asset inspection and condition assessment programs to inform future maintenance and renewal requirements.
- Optimise preventive maintenance programs to ensure reliability, efficiency and compliance with regulatory requirements.
- Apply asset criticality and risk frameworks to determine asset risk profiles and inform investment prioritisation.

Asset Performance & Reliability

- Investigate asset performance, reliability issues and system constraints, and support resolution of operational challenges.
- Conduct asset performance and reliability analysis, including detailed condition assessments and root cause analysis of asset failures, to inform remedial actions.
- Improve asset reliability and performance of infrastructure, reducing overall mean time between failures through the integration of innovative, data-driven solutions.

SCADA & Data Analysis

- Interrogate SCADA systems, asset management systems and operational data to diagnose faults, alarms and abnormal operating conditions.
- Interpret control logic and system behaviour to support troubleshooting and optimisation of system performance.
- Contribute to root cause analysis of incidents and near misses, using data-driven insights to inform outcomes.
- Leverage operational and asset data to support condition monitoring, performance trending and asset reporting.

Engineering & Operational Support

- Provide engineering support to the operation of dams, pipelines, pump stations and associated water delivery infrastructure.
- Apply hydraulic analysis and engineering judgement to support operational and asset management decision-making across water delivery systems.
- Support the development and refinement of technical standards, operational procedures and asset management documentation, and third-party interactions with infrastructure to ensure compliance with engineering requirements.

Incident Management & Emergency Response

- Provide engineering input into incident investigations, impact assessments and corrective actions.
- Participate in emergency response activities, including out-of-hours support where required.

Project Management & Delivery Support

- Manage small to medium asset renewal and operational engineering projects, including scope, scheduling, contractor coordination and budget oversight.

- Work collaboratively with internal stakeholders to deliver engineering outcomes aligned with operational priorities.

Level of Accountability

Performance of the role must be undertaken with the highest of integrity, in accordance with TI's Delegations of Authority. This is a generally supervised role that may operate with some independence, where some discretion in task execution is enabled, however guidance is available for non-routine issues. Guidance and advice are available from the Manager Engineering & Asset Intelligence as required.

All tasks must be completed within required timeframes, to a high standard, and in accordance with TI policies and procedures. Actively engaging in reflective practices and receiving feedback is required to promote continuous improvement and to lead individual professional development objectives.

Organisational Relationships

Reports to:	Manager, Engineering & Asset Intelligence
Direct Reports:	Nil
Key Internal Relationships:	GM Customers and Operations, Manager Water Delivery & Performance, Manager Water Security and Safety (Dam Safety Engineer) Hydrologist, Operations and Water Delivery Teams and Asset Intelligence and Engineering Services staff.
External Relationships:	Contractors and service providers, Emergency management agencies (as required), Consultants and specialist advisors.
Leadership Teams:	SLT, CEO and Board of Directors

Knowledge, Experience & Qualifications

Essential:

- Degree in Engineering consistent with eligibility for membership of Engineers Australia.
- Demonstrated experience in water infrastructure engineering, mini hydro power stations, pipelines, pump stations or similar systems.
- Demonstrated experience monitoring, analysing and improving the performance of infrastructure assets, including condition assessment and reliability analysis.
- Experience working with or interrogating SCADA-controlled systems, including fault finding and operational problem solving.
- Demonstrated ability to project manage engineering tasks in an operational environment.
- Current driver's licence (C class).
- Well-developed analytical, communication and stakeholder engagement skills.

Desired:

- Experience supporting dam safety activities or working within regulated dam environments.
- Demonstrated experience developing asset management frameworks, strategies and plans that balance performance, cost and risk (ISO 55000 series or similar).

- Experience in operational incident management or emergency response environments.
- Familiarity with water industry operational standards and regulatory frameworks.
- Sound understanding of hydraulic principles and the behaviour of water delivery systems, including exposure to hydraulic modelling.

Respectful and Safe Workplace

Employees are expected to contribute to a workplace culture that is safe, respectful, and inclusive. This involves modelling behaviours that reflect TI's values, complying with and promoting safety procedures, and taking shared responsibility for identifying and managing risks to health, safety, and wellbeing, including psychosocial hazards. Employees are to encourage open communication, treat mistakes and near misses as opportunities for improvement, and support mental health and wellbeing initiatives.

Equally, employees must foster a respectful environment by demonstrating professional conduct, valuing diversity of thought, and ensuring interactions are free from bullying, harassment, discrimination, sexual harassment, sex-based harassment, victimisation, or occupational violence. All employees are required to take appropriate action to uphold TI's zero-tolerance approach to behaviours that compromise a safe and respectful workplace.

In accordance with its Recruitment Policy, Tasmanian Irrigation is committed to selection procedures based on merit, qualifications, experience and which are aligned to the key selection criteria of the role. As such, applications for this role should address the Key Selection Criteria below in order to demonstrate their ability to fulfil the key duties and responsibilities outlined.

Key Selection Criteria:

1. **Engineering Expertise** - Demonstrated experience in civil, mechanical or hydraulic engineering within water infrastructure, utilities or a similar operational environment.
2. **Asset Management Capability** - Demonstrated experience in contemporary asset management, including developing strategies, plans and programs that balance asset performance, lifecycle cost and risk.
3. **SCADA & Data Interpretation** - Experience in interrogating SCADA or similar control systems, with the ability to interpret operational data, trends and control logic to inform decision-making.
4. **Asset Performance & Reliability Analysis** - Proven ability to monitor, analyse and improve the performance of infrastructure assets, including condition assessment, reliability analysis and root cause investigation of asset failures.
5. **Project Management Capability** - Demonstrated ability to manage engineering projects from scoping through to delivery, including contractor coordination and budget oversight.
6. **Stakeholder Collaboration & Communication** - Strong interpersonal skills with the ability to work effectively across multidisciplinary teams and communicate technical information clearly to operational and non-technical stakeholders.