

Position Description

Project Engineer



Business Unit: Operations

Reporting to Position Manager: Project Engineering Manager

Position Purpose

Provide engineering expertise to ensure optimal whole of life solutions are effectively identified, developed and implemented in response to identified project needs. The Project Engineer is responsible for checking design and technical delivery applying WaterNSW project delivery frameworks and tools, and to put safety first.

Key Accountabilities

1. **Safety:** ensure all activities are undertaken with the safety of everyone as the number one priority and always role model safe behaviour.
2. **Values:** behave and make decisions in accordance with the WaterNSW Values at all times.
3. Lead development and implementation of technical/engineering solutions on behalf of the project manager. Includes provision of timely accurate and complete technical support, advice reporting and recommendations to the project manager to minimise risk, environmental impact and ensure overall project objectives are met.
4. Manage identification of solution options and selection of preferred or recommended options to meet project needs, including assessment of associated capital and operational costs and ensuring that key stakeholders are involved in decision-making.
5. Ensure project specification documentation is clear and comprehensive to enable consultants and contractors to effectively respond to requests for tender and to minimise number and nature of requests for information (RFIs).
6. Interface with design consultants during development of options, concept and detailed designs and REFs or EIAs where relevant.
7. Oversee the project design process ensuring all relevant engineering specifications and standards are met, and appropriate inspection and test planning is in place. Lead design review meetings including HAZOP (Hazards and Operability Analysis) and CHAIR (Construction Hazard

Assessment Implication Review). Ensure design optimisation and value engineering processes are undertaken and that recommendations are made and adopted where appropriate.

8. Regularly monitor work undertaken to ensure it complies with agreed scope and meets agreed requirements, including factory validation during production of technical components. Manage all requests for design or other engineering changes to ensure that they are reasonable, meet original project aims and are within defined scope.
9. Develop and then implement commissioning, testing and handover plans for all relevant projects, modify these in accordance with any approved change to ensure agreed solution is effectively implemented and that operators have been trained in use where there is a change in operating practices.
10. Ensure drawings, operating and maintenance manuals and other relevant artefacts are produced in timely manner and meet specifications or other requirements of the business.
11. Ensure that delivered solutions are operating satisfactorily and that defects identified during the defect period are addressed in a timely manner.
12. Provide technical support and recommend actions across all project phases to ensure that engineering designs meet operational requirements and engineering standards. Respond to technical RFIs from external parties and ensure appropriate mechanisms are in place for factory testing, where relevant.

Key Challenges

- Getting alignment and commitment of number of different, predominantly internal stakeholders to meet project objectives without direct line management authority to do so.
- Managing engineering aspects to deliver cost and risk appropriate solutions to meet customer needs.
- Acceptance of approved solutions by operators and internal stakeholders that may be resistant to change.
- Managing competing priorities of time and cost pressures against the pressure to develop effective and reliable whole of life solutions.

Significant Internal Relationships

Stakeholder	Purpose of Relationship
Project Manager, Construction Manager, Project Controller, Project Officer	Project Engineer works within a Project Team to describe the interplay of technical issues, to represent the key technical requirements and

	contribute to effective planning throughout the project lifecycle
Project Sponsor, internal teams(including Regional Operations, Asset Engineering, Dam Safety, Environment, Heritage & Catchment Protection, Property & Spatial, Digital & Scada, Indigenous Engagement, Water Monitoring)	Provide engineering support for the Project Manager who takes overall delivery accountability. Coordinate, consult and inform all relevant technical advisors and stakeholders
Project Engineering Manager	Project Engineer deliver services to allocated projects in line with corporate expectations providing timely reporting of deliverables, and any matters of safety or project technical risk.

Significant External Relationships

Stakeholder	Purpose of Relationship
Design Consultants and contractors engaged in projects	Engaged in delivery of products and services as part of overall project delivery.
External third parties or stakeholders	Interface to progress project delivery (e.g. landowners, businesses, utilities, planning authorities, council etc.)

Delegations, Financial Accountabilities & Freedom to Act

As defined in the WaterNSW Financial Delegations as varied from time to time.

WaterNSW Leadership & Performance Competencies

People	Level	
Coaching & Developing others	B	<ul style="list-style-type: none"> Supports individual development in line with career aspirations and business requirements Challenges others to achieve their full potential Actively listens to others Supports others to establish meaningful goals Asks questions to create awareness and encourage self-directed problem solving

Communicating with Influence	B	<ul style="list-style-type: none"> • Tailors communication to suit the audience and uses a range of influencing techniques to build support • Supports messages with relevant examples, demonstrations and stories • Communicates issues clearly with different audiences • Handles challenging questions confidently and constructively
------------------------------	---	--

Customer	Level	
Collaboration & Engagement with Stakeholders & Customers	B	<ul style="list-style-type: none"> • Builds and maintains relationships with individuals from other work groups to accomplish shared goals • Adapts approach to meet the needs of a broad range of customers and stakeholders

Business	Level	
Safety & Risk Management	B	<ul style="list-style-type: none"> • Takes immediate and appropriate action to minimise risk and maximise opportunities • Implements and monitors policies, procedures and programs. • Role models safety behaviour • Considers safety and risk in all business decisions
Analysis & Problem Solving	B	<ul style="list-style-type: none"> • Defines the extent and cause of the problem through observation and investigation • Knows when and how to source and use additional information to effectively diagnose the problem and determine suitable solutions. • Considers all possible solutions and seeks input from subject matter experts where appropriate • Takes necessary action to implement the identified solution

Continuous Improvement	B	<ul style="list-style-type: none"> Analyses current processes and practices to identify opportunities for improvement Identifies patterns in data and information and implements improvements based on this analysis Has knowledge of and able to apply appropriate continuous improvement tools to achieve the best outcome Undertakes improvement projects within own team or business area to improve outcomes by utilising innovative thinking
------------------------	---	--

Technical Competencies

Competency	Level	
Nil		

Mandatory Candidate Requirements

Qualifications:

- Bachelor degree or higher tertiary institution in civil, mechanical or electrical engineering, or demonstrated equivalent relevant experience.
- Current NSW Drivers Licence

Knowledge:

- Knowledge of assets relevant to WaterNSW core asset base such as dams, water regulating structures, bridges roads, canals, embankments, buildings and cranes etc.
- Knowledge of regulatory requirements and standards including WHS as they relate to the design and delivery of engineering aspects of range of capital projects
- Ability to interpret, assess and review engineering designs, drawings and construction or other work methodologies to ensure compliance with standards and to meet required objectives.

Experience:

- Demonstrated experience in managing the engineering and design aspects of multiple multidisciplinary infrastructure projects
- Experience working collaboratively and making decisions with stakeholders to review, analyse, negotiate and implement technical solutions
- Demonstrated experience in determining appropriate solutions to technical challenges through evaluation of options
- Experience in development of technical specifications including interpretation of regulatory and other standards in developing those specifications.
- Demonstrated experience in coordinating and facilitating meetings/workshops to determine appropriate solutions to technical challenges through evaluation of options

Favourable Candidate Requirements

- Post Graduate qualifications in project management or equivalent with experience in managing various forms of commercial arrangements to drive 'value for money' engineering outcomes.
- 5+ years' experience with engineering design responsibility, and site validation responsibilities.
- Demonstrated experience in successfully delivering Engineering projects with design coordination and stakeholder engagement.

Pre-Employment Checks Required

- Identification
- Qualifications
- Drivers Licence
- Pre-employment Medical (Field)
- Police Check