

# POSITION DESCRIPTION

#### 1. POSITION DETAILS

Position Title	Lead Civil Asset Specialist
Business or Service Unit	Asset Solutions & Delivery
Position Manager	Asset Engineering Manager
Position Location	Negotiable

#### 2. POSITION PURPOSE

To provide the technical lead in the development and maintenance of civil/structural asset knowledge relevant to WaterNSW core asset capabilities, particularly with respect to complex civil/structural systems and applications, and coordinate the provision of advice, development of standards, reviewing performance and supporting the maintenance, upgrade, renewal and provision of new asset capability where technical complexity is warranted whilst putting safety first.

#### 3. KEY ACCOUNTABILITIES

- (1) Ensure all activities are undertaken with the safety of people as the number one priority and at all times role model safe behaviour.
- (2) Provide the technical lead for the development of complex civil engineering standards, provision of advice and integration of complex civil engineering aspects into multidisciplinary systems. Lead multidisciplinary project teams as required.
- (3) Develop and maintain Asset Performance and Configuration standards that describe WNSW's specific performance requirements and selection and implementation criteria to deliver required levels of service at the lowest whole of life cycle cost and review as appropriate the interfaces with standards of other engineering disciplines.
- (4) Develop operational performance testing processes for complex civil/structural systems to validate core asset capability within area of engineering discipline and attend high criticality asset performance tests to witness validation of key asset performance capabilities, contribute advice regarding compliance and recommend further works.
- (5) Develop a detailed and thorough knowledge of core asset classes within area of discipline, particularly with respect to complex civil/structural systems and their interaction with associated electrical, controls and mechanical interfaces, and ensure relevant documentary resources such as manuals and drawings are updated accordingly.
- (6) Manage, specify, and execute small-scale through to large-scale engineering investigations including the completion of all aspects of the Engineering design effort (i.e. design calculations, drawings, computer modelling, specifications, design reports and technical review and inspection of works). Review and approve designs where required that have been prepared by external resources and Civil Asset Specialists within WaterNSW. Lead multidisciplinary design and investigation tasks as required.
- (7) Utilise detailed asset knowledge, performance and configuration standards to advise on provision of new assets, major maintenance activities, failure investigations, reliability reviews and rectification, and upgrade or renewal proposals.



# 4. SIGNIFICANT EXTERNAL RELATIONSHIPS FOR WHICH THIS POSITION IS THE PRIMARY CONTACT

#### 5. AUTHORITY LIMITS

As per Standing Delegations instrument from time to time.

#### 6. MANDATORY KNOWLEDGE AND QUALIFICATION REQUIREMENTS

- Bachelor degree in Civil Engineering or higher form of tertiary institution
- Current NSW driver's licence
- Eligibility for membership of Engineers Australia
- Knowledge of civil assets relevant to WNSW core asset base such as large industrial Civil drive systems, pumps, pipeline assets, valves, industrial hydraulics and cranes
- Knowledge of automation and controls requirements as applied to large civil drive and pipeline and pumping systems
- Applied detailed knowledge of relevant Australian and International codes and standards, good engineering practice and the applicable statutory requirements
- Experience analysing complex civil systems and their interaction with associated electrical, controls and structural interfaces to resolve defects, improve performance or identify improvement opportunities

## 7. MANDATORY EXPERIENCE AND CAPABILITY (PROVEN AND DEMONSTRATED)

- Minimum 10 years' experience in design, construction or maintenance in heavy industrial engineering or utility environments and exposure to asset management of civil equipment relevant to WNSW's asset fleet
- Experience in a senior role or technical lead function within the civil engineering discipline
- Experience leading multidisciplinary project teams
- Demonstrated experience in establishing, building and maintaining relationships with individuals from other work groups working through potentially conflicting needs and objectives to accomplish shared goals and obtain agreement on actions and outcomes
- Strong commercial acumen to identify benefits, opportunities and trade-offs to be made when formulating and executing business cases, project plans and contract negotiations
- Experience in sourcing and using additional information to effectively diagnose problems and determine suitable solutions by recognising patterns and drawing linkages between data and/or situations and addressing the root cause of problems to prevent recurrences
- Excellent general computer literacy skills as well as specialist knowledge of discipline based applications and software

### 8. EXPERIENCE OR QUALIFICATIONS THAT WILL BE VIEWED FAVOURABLY

- Experience with and knowledge pertaining to civil and structural aspects of dams, spillway gates and irrigation regulating mechanisms
- Recent experience in the development and implementation of maintenance standards for bridges and roads and the structural aspects of other key assets



## 9. KEY CHALLENGES

- Leading the consolidation of existing asset knowledge resources and creating new resources where required, filling gaps, updating legacy documentation, maintaining their ongoing currency and developing a standardised approach across a diverse asset base implemented over a broad geographic footprint.
- Managing and delivering a diverse and large workload, often with competing demands and limited resources.
- Leading the establishment of productive and commercially viable relationships with external service providers to extend and complement WNSW's technical expertise within the civil engineering discipline.

#### 10. OTHER RELEVANT INFORMATION