

#### **Job Details**

Job Title: Professional Engineer

Reports to: Design Services Coordinator

Traffic & Transport Coordinator

Group: City Projects

Position Number: IO0009, IO0018, IO0019, IO0020, IO0180

Grade: 6

Date: June 2015

Objective Doc Ref: A294227

## **Position Purpose/Job Summary**

Professional Engineers take responsibility for engineering projects.

#### This includes:

- the reliable functioning of all materials, components, sub-systems and technologies used;
- their integration to form a complete, sustainable and self-consistent system; and
- all interactions between the technical system and the context within which it functions:
  - understanding the requirements of clients, wide ranging stakeholders and our community;
  - working to optimise social, environmental and economic outcomes over the full lifetime of the engineering project;
  - interacting effectively with other disciplines, professions and people; and
  - ensuring that the engineering contribution is properly integrated into the totality of the undertaking
- that costs, risks and limitations are properly understood as the desirable outcomes
- being responsible for bringing knowledge to bear from multiple sources to develop solutions to complex problems and issues

Professional Engineers contribute to continual improvement in the practice of engineering within the organisation.

Professional Engineers may lead teams appropriate to these activities.



## Selection Criteria - Knowledge, Skills, Qualifications and Experience required

Qualifications

Education:

Minimum Degree in Civil Engineering or equivalent suitable for Membership of

Engineers Australia.

**Desirable** Post Graduate studies relevant to local government engineering.

Licences/Tickets/Affiliations:

Minimum New South Wales Drivers Licence Class 1C (Motor Car)

**Desirable** Membership of Engineers Australia

#### **Experience**

 Demonstrated application of established engineering methods to complex engineering problem solving in the relevant discipline(s)

- Fluent application of engineering techniques, tools and resources
- Demonstrated application of systematic engineering synthesis and design processes
- Demonstrated application of systematic approaches to the conduct and management of engineering projects

#### **Professional and Personal Attributes**

- Ethical conduct and professional accountability
- Effective oral and written communication in professional and lay domains
- Creative, innovative and pro-active demeanour
- Professional use and management of information
- Orderly management of self and professional conduct
- Effective team membership and developing team leadership

#### **Knowledge and Skill Base**

- Comprehensive theory based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline
- Conceptual understanding of the mathematics, numerical analysis, statistics and computer and information sciences which underpin the engineering discipline
- In-depth understanding of the specialist bodies of knowledge within the engineering discipline
- Knowledge of engineering design practice and contextual factors impacting engineering discipline
- Working knowledge of Local Government and relevant engineering policies, procedures, standards, guidelines and practices.

#### **Civil Liability**

Directly involved in applying engineering principles to the asset management of Council
assets, including the planning for, designing, maintaining, replacing, rehabilitating or
disposing of, and such assets that may give rise to liability under the Civil Liabilities Act
2002.



## **Key Accountabilities – Position Specific**

General	Traffic & Transport	Design	
Branch Awareness	Development Application	Road design	
	Review		
Flexibility	Traffic Modelling	Traffic design	
Innovation	Road Safety Audits	Drainage Design	
Interpersonal Skills	Funding Applications	Quantity Survey	
Planning and Organising	Traffic Reports	Minor survey	
Technology		Minor Structural Design	
Problem Solving		Utility Adjustment	
Technical Skill		Construction Specifications	
		Procurement	

Job Family Specific

Operations Civil Engineering
Project Management

**Key Accountabilities - Core** 

- Comply with the requirements of Council's Work Health Safety Management System (WHSMS) and fulfil relevant WHS responsibilities as per WHS-01.1.1 Responsibilities, Authority and Accountability Guideline whilst employed by or acting on behalf of the Council
- 2. Comply with the reasonable requests and directions of management whilst employed by or acting on behalf of the Council. This includes undertaking other task or duties that may be allocated from time to time
- 3. Comply with Council's Code of Conduct, policy and procedures whilst employed by or acting on behalf of Council, including formal delegations
- 4. Meeting professional standards in the conduct and execution of the role, including:
  - Maintenance and development of professional knowledge and skill base;
  - Growth and maturity in applying engineering abilities, including integration of client requirements
  - Adoption and effective use of technology and associated tools
  - Maintenance and development of professional and personal attributes, including pro-active approach to decision-making and problem resolution
  - Effective communication skills with a variety of stakeholders and circumstances
- 5. Delivery of professional services to business expectations, including
  - Delivery of projects and tasks within budget, time and quality standards
  - Delivery of investigations and customer interactions

### Reporting Relationships

Direct: Nil

No. of Indirect: Nil



Key Relationships				
1 Internal				
Communicating with	Nature of Communication			
Staff within the Business Unit and/or Branch	<ul> <li>Providing advice.</li> <li>Sending service and work requests to other Divisions as result of enquiries.</li> <li>Reporting on outcomes of investigations.</li> <li>Reporting on outcomes of planning studies.</li> </ul>			
Staff within the organisation, including councillors	<ul> <li>As part of regular project communications and reporting project status and outcomes.</li> </ul>			
Key Relationships				
2 External				
Communicating with	Nature of Communication			
Customers, residents, Government bodies, external stakeholders and suppliers and consultants	<ul> <li>Management of contractors and consultants</li> <li>Providing advice to external stakeholders</li> <li>Reporting on outcomes of investigations</li> <li>Reporting on outcomes of planning studies</li> <li>As part of regular project communications and reporting project status and outcomes</li> <li>Preparing and delivering papers and presentations</li> <li>Provide opportunities for feedback and input into Council activities and projects through community engagement</li> </ul>			

## **Position Dimensions**

As per Delegation of Authority.

There are no resources or budgets to manage in this position.

# **Decision making Authority & Accountability**

The City Manager authorises you to take the actions required to make your workplace safe and to fulfil your WHS responsibilities in WHS-01.1.1.

### Accountability:

- Independence in achieving goals and work targets
- Responsible for completion of work with some complexity



- Required to provide sound advice and recommendation, which influence the decisions of others
- At this level the position is required to undertake research, analysis, interpretation and make recommendations on practical solutions
- Manage a number of projects at any one time
- This position shares accountability with supervisors for the integrity, validity and reliability of advice provided to clients

The following policies, standards and guidelines assist Professional Engineers in decision making:

- Fairfield City Council Floodplain Management Policy
- Fairfield City Council Stormwater Management Policy
- NSW Floodplain Development Manual
- General DNR, NSW Fisheries and NSW EPA guidelines
- Australian Standards

Defining which decisions to make independently and which decisions to consult relies on the Professional Engineer's foundation knowledge, judgment and experience in relation to:

- Implementation and management of projects
- Ensuring budgets are appropriately managed
- Maintaining and improving the systems and processes
- Ensuring risk management and hazard assessment processes are adhered to by work colleagues and contractors

# **Problem Solving**

Application of education and training at a Degree level to address the following challenges:

- Constantly shifting priorities and multiple client demands
- Competing priorities within set resources
- Communicating with a diverse and multicultural community
- Raising community awareness across a range of issues from environmental, natural resource, civil, traffic, transport and road safety
- 3 The challenges are addressed using:
  - Analytical thinking and use of engineering judgment, experience and expertise
  - A flexible approach to work plans, enabling regular re-prioritisation of tasks
  - Prioritising efforts to ensure best and most immediately needed outcomes
  - Cultural sensitivity and relationship building.

Most solutions involve the analysis of complex problems which requires an analytical consideration of a large array of interdependent variables

### Competencies

Performance in this role is also assessed on 'how' staff achieve their goals, based on the same behavioural expectations for all staff. An individual Work Plan, based on your position description will be established in partnership with your supervisor. Your supervisor will meet with you on a



regular basis to ensure that you are performing as expected or assign some training to improve performance if needed.

Signature				
Employee:	Signature	Date		
Authorised by: (Manager)	Signature	Date		