

POSITION DESCRIPTION

SPECIAL PROJECTS ENGINEER – MAJOR FLOOD AND DRAINAGE STUDY

POSITION DETAILS

Date of Position Description	August 2026
Position Title	Special Projects Engineer - Major Flood and Drainage Study (Temp)
Position Grade	13
Directorate Business Unit	City Services & Projects Integrated Grants & Projects
Reports to	Manager Design Projects
Physical Requirements Category	Category 1 – Desk role with Ergonomic Requirements
Job Location	316 Victoria Road, Rydalmere (Council retains the right to alter locations should the operational need arise)

POSITION OVERVIEW

This position is responsible for managing Council's major flood and drainage studies, and to assist on various tasks associated with Council Special Projects as required. In particular, the position will be predominantly working on a planned \$50 million flooding and drainage upgrade of Hill Road, Wentworth Point.

The position provides guidance on major mainstream and local flood and drainage engineering matters to internal customers. This may include, but is not limited to, preparing documentation and project briefs, analysing and assessing flood models, liaising with external Consultants undertaking work for Council and assisting with other Floodplain Risk Management work as required.

KEY RESPONSIBILITIES

Role Specific

- Provide professional and specialist technical advice and guidance on engineering matters to the organization and external customers (public, developers, consultants etc.) to achieve positive outcomes.
- Provide professional and technical advice and guidance on various planning instruments, guidelines, Flood DCP, Water Management DCP, Strategies / Studies / Policies relating to floodplain, drainage, estuarine, storm water and water quality matters.
- Administer current and historical information to ensure that consistent and prompt advice is provided in order to protect Council's interest.
- Progressive consolidation of flood & infrastructure information
- Process and supply flood information requested by external agencies.
- Assist the Supervisor of Catchment Management to manage Council's flood catchments in accordance with the NSW Flood Risk Management Manual.
- Manage the investigation, flood modelling and design work and reporting for a diverse range of Council floodplain risk management Special Projects within a multi-disciplinary project team environment.
- Ensure that quality, safety, environment and risk issues are appropriately addressed in the design process.
- Ensure design output and technical advice complies with legal statutes and relevant standards.

- Contribute to the development of work programs, budgets and other management information and monitor performance against them.
- Work to and monitor budget, programs and other management information.
- Assist the Project Manager of Strategic Projects to manage Council's Consultants / Contractors in the office and field.
- Use & manage water management software applications e.g. DRAINS (drainage), RAFTS / MIKE11 / TUFLOW (flood), MUSIC (water quality) and WaterRide.
- Manage and undertake the preparation of:
 - Conceptual civil design
 - Cost estimate
 - Flood studies/mapping/drainage upgrades
 - Sub-catchment management plans
 - Civil design briefs
 - Contract documentation
- Consult and liaise with Council officers, consultants, the community, public utilities and government authorities in relation to civil and water related matters.

Baseline

- Ensure that all practices are up to date with current and pertinent legislation, statutory regulations and better practice to ensure a subject-matter-expert mindset is adopted and promoted to all stakeholders.
- Promote continuous improvement and innovation in practices, optimisation of technology, procedures and recommendations with the aim of providing better service to the client base in line with the organisation's values.
- Build in performance metrics and mechanisms to identify early visibility of risks to enable mitigation approaches.
- Promote and maintain effective relationships with all external business partners including community organisations, contractors, State and Federal authorities.
- Ensure to take reasonable care of the health and safety of yourself, employees, visitors, contractors and volunteers whilst at work, and cooperate with the organisation to comply with WHS legislative obligations.
- Promote the value of diversity and inclusion in all practices, engaging with and integrating the views of others.
- Contribute to customer service and organisational effectiveness, by acting ethically, honestly and with fairness.
- Comply with Council policies as amended from time to time

KNOWLEDGE

Qualifications

- Recognised Degree in Civil Engineering and eligible to be a member of The Institution of Engineers Australia.
- Class 'C' Driver's Licence.

Experience

- Approximately 10 years civil and water engineering experience, including experience in Flood Modelling, Drainage design and Project Management.
- Knowledge of Floodplain Risk Management.
- Previous experience using Council online systems such as Content Manager and Pathways (desirable)
- Post-graduate qualifications in water (hydraulic/hydrologic) engineering (desirable)
- Local catchment experience and knowledge (desirable)
- Operate MUSIC software at a basic level (desirable)

Skills

Demonstrated skills in the areas of:

- Contract administration
- Project management
- Floodplain Risk Management
- Drainage design
- Flood modelling
- Engineering Practice
- Planning and Design
- Engineering project management.
- Self-Management in the Engineering Workplace
- Time management
- Investigation and Reporting
- Demonstrated highly developed written and oral communication skills including complex documents.
- Negotiate and resolve complex engineering issues to achieve positive outcomes.
- Source and Estimate Materials
- Operating spreadsheet software at an intermediate level.
- Operating word processing software at a basic level.
- Excellent customer and stakeholder management skills.
- 3D terrain modelling, LIDAR data, survey data and preparation of flood surface terrain models.
- Hydrological and hydraulic flood modelling.

Demonstrated skills in the areas of Civil Engineering Software including:

- Operate DRAINS software at an advanced level.
- Operate HECRas software at an advanced level.
- Operate TUFLOW software at an advanced level.
- Operate 12D Civil CAD ARD, MX and other terrain modelling programs at an advanced level.
- Operate RatHGIL software at an intermediate level.
- Operate ArcMap GIS software at an intermediate level.
- Operate AutoCAD drafting software at an intermediate level.
- Operate MIKE II software at an intermediate level.
- WaterRide software at an intermediate level.