

**POSITION DESCRIPTION**

Civil Design Engineer  
(POS2639)

<b>Directorate:</b>	Operations	<b>Department:</b>	Infrastructure Planning
<b>Position Grade:</b>	14	<b>Reports to:</b>	Coordinator Civil Engineering Design and Survey
<b>Last review:</b>	April 2024	<b>Next review:</b>	April 2026
		<b>Version No.:</b>	4.0

**Position purpose:**

To carry out design, drafting and estimate the cost and quantities for tender and construction purposes of urban and rural stormwater drainage, road works, flood mitigation works, sporting facilities, traffic facilities and other civil infrastructure projects as required.

**Key accountabilities/responsibilities:**

- 1) Estimating the time required for undertaking design works
- 2) Preparing concept and detailed design plans for roads, retaining walls, car parks, driveways minor and major drainage systems, open channels, structural details, parks and playgrounds etc
- 3) Undertaking the concept and detailed design using 12D, AutoTURN, AutoCAD programs and in accordance with Liverpool City Council's Investigations and Design process
- 4) Checking and preparing schedule of quantities and cost estimates
- 5) Undertaking underground services investigations such as DBYD or potholing.
- 6) Checking and assessing design and survey information received to ensure that it is technically accurate and sufficient for the specific project
- 7) Checking plans and completing QA forms in accordance with Liverpool City Council Investigation and design process
- 8) Liaising with Coordinator Civil Engineering Design and Survey, Senior Engineers and Project Manager with regard to design progress, design variations, etc. in accordance with Investigations and design process
- 9) Using and sharing your computer aided drafting and design systems knowledge and experience with other team members in the most efficient and effective manner
- 10) Prepare Safety in Design report in accordance with Council's standard policy.
- 11) Follow Council's policies and procedures when carrying out work to ensure risks are managed. Report all incidents, risks and issues to Management on a timely manner.

**Decisions made in the position:**

- 1) Analysis of various design concepts and selection of best design concept based on safety, budget and construction method
- 2) Selection of suitable design parameters
- 3) Contribute to selection of consultants and contractors

**Decisions referred:**

- 1) In accordance with position delegations.

**Key issues/challenges:**

- 1) Completion of designs to a professional standard within an agreed timescale and estimate.
- 2) Prepare and document designs in accordance with technical detail, specification and QA procedures
- 3) Prepare detailed estimates for civil design projects.

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- 4) Minimise rework of designs as much as possible
- 5) Design presentation to be in accordance with the Liverpool Council's design, drafting and 12d standard.
- 6) Keep abreast of engineering practices, Liverpool City Council engineering standard and guidelines, Australian Standards, Austroads Guides, ARRB, RMS guidelines and relevant technical manuals

### Key working relationships

- |   |                                 |
|---|---------------------------------|
| • Manager Technical Support                       | • Traffic Engineers             |
| • Manager Infrastructure Planning                 | • Consultants                   |
| • Coordinator Civil Engineering Design and Survey | • Service Authorities           |
| • Other staff of Investigations and Design        | • Planning and operations staff |
| • Project Engineers                               | • Software developer/reseller   |

**POSITION SPECIFICATION**

**Whilst the criteria described below is indicative of the nature of this role, for the purpose of this hiring process please only address the selection criteria listed in the job application.**

ESSENTIAL CRITERIA
<p><b>Qualifications/Licences</b></p> <ul style="list-style-type: none"> <li>• Degree in Civil Engineering or equivalent tertiary qualifications or extensive demonstrated experience in similar field</li> <li>• Class C Drivers Licence</li> </ul> <p><b>Experience</b></p> <ul style="list-style-type: none"> <li>• Demonstrated experience in the preparation of civil design, drafting and documentation for roads, kerb and gutter, retaining walls, carparks, Shared path, drainage, traffic facilities, roundabout and other civil engineering projects</li> <li>• Demonstrated experience in the use of 12D and AutoCAD software for the preparation of civil design drawings</li> <li>• Demonstrated experience in complying with a quality management system for civil engineering designs</li> <li>• Demonstrated experience in the preparation of cost estimates</li> <li>• Experience in preparing Safety in Design report.</li> </ul> <p><b>Knowledge and Skills</b></p> <ul style="list-style-type: none"> <li>• Knowledge of Work Health and Safety practices, the principles of Equal Employment Opportunities, ethical practice and multi-cultural diversity</li> <li>• Detailed knowledge of 12D, AutoCAD, and AutoTURN and any other associated software necessary for the production of civil designs</li> <li>• Detailed knowledge of Local Government, Roads and Maritime Services (RMS) and Austroads Design standards and practices</li> <li>• Knowledge of ISO9001:2000 quality system and quality assurance principles as they relate to civil design and civil engineering design practice</li> <li>• Sound knowledge of continuous improvement processes and techniques</li> <li>• Knowledge of Microsoft Excel, Word, and Project</li> </ul>
DESIRABLE CRITERIA
<p><b>Qualifications/Licences/Experience/Knowledge and Skills</b></p> <ul style="list-style-type: none"> <li>• Eligibility for Corporate Membership of the Engineers Australia</li> <li>• Experience in using DRAINS, HEC RAS</li> <li>• Well-developed communication and leadership skills</li> <li>• Ability to deal with both internal and external customers</li> <li>• Understanding of Local Government operation, processes and administrative procedures</li> </ul>

**LIVERPOOL  
CITY  
COUNCIL**



## **Our vision:**

**Aspiring to do great things – for ourselves,  
our community and our growing city.**

## **Our values:**

**Ambitious**

**Authentic**

**Collaborative**

**Courageous**

**Decisive**

**Generous**