

# **Job Description**

Position Title: Senior CAD Designer

**Reports To:** Transmission, Distribution or Generation Team Leaders

Client(s)/Key Liaison: Niko engineers and project managers and external clients

**Responsible For:** Provision of draughting and design services

**Issued:** September 2023

## Main Purpose of the Role

The purpose of this position is to provide technical support and design services to Niko's clients.

The role involves preparing detailed working drawings and models using specialist computer-aided design applications to clearly show substation and power station infrastructure; including electrical equipment layouts and associated civil, structural and buildings elements.

The intention is that this role will focus on 2D electrical design and design draughting of electrical system drawings, however, there will be opportunities for 3D draughting.

The role is focused on electrical design for either our transmission, generation or distribution clients; the role will include some work in the civil and structural disciplines.

## **Key Tasks**

Complete project work, with major areas of responsibility as follows:

- Generate 2D and 3D AutoCAD drawings that meet quality and content requirements.
- Undertake electrical design (design draughting), dependent on the applicant's capability.
- Develop AutoCAD models and drawings using specialist electrical industry and standard CAD software.
- Develop and maintain a working knowledge of (and apply) client and industry draughting codes and standards, as well as applicable quality policies and procedures.
- Delivering quality first time, every time. Supporting other less experienced staff to deliver this quality.
- Interface with engineering staff to assist with project scope, schedule, design requirements, etc.
- Assist engineering staff during site inspections (potentially for several days at a time).
- Own and ensure the quality including neatness, legibility, readability, and accuracy of completed drawings and models through self-checking.
- Supporting other team members to deliver quality drawings on time.
- Contribute to Niko's Draughting Community of Learning by identifying and developing best practice methodologies for the most efficient and effective use of Niko's computer-aided design applications.
- Provide coaching of junior draughting staff.
- Assist with the preparation of proposals for design tenders,
- Communicating and coordinating project activities with others as needed.
- Develop relationships with our clients.

- Manage allocated time for tasks.
- Understand and keep abreast of relevant client and industry standards for both electrical engineering and draughting.
- Carrying out quality assurance reviews of work by other Draughtspersons.
- Comply with any further instructions or requirements of a reasonable nature that may be given by your line manager, the Company Manager, or individual Project Lead Engineers from time to time.

## **Other Requirements**

- Promote and contribute to the health, safety, and environment objectives of Niko Engineering.
- Embrace the equal employment opportunity objectives of Niko Engineering.
- Enhance the profile of Niko Engineering within the community and to prospective clients.
- Contribute to the promotion of a quality culture within Niko Engineering.

## **Person Specification**

#### **Education/Qualifications**

- A formal AutoCAD qualification from a recognised tertiary institution (preferred).
- An electrical engineering qualification such as a diploma in electrical engineering, a BEng Tech or an electrical trade qualification (preferred).

## Knowledge/Skills

#### Required

- 3 or more years Design draughting experience in New Zealand, with industrial work experience.
- Competent with Autodesk suite, primarily AutoCAD.
- Competent user of the Microsoft suite.

#### Desirable:

- A solid understanding of BIM principles and workflows.
- Experience in Navisworks.
- An understanding of electrical plant in an electrical substation setting.
- Technical knowledge of structures and understanding of architectural, engineering and construction design principles.
- An understanding of electrical plant design.
- Basic Inventor or Revit skills and understanding.
- Experienced in scripting for Autodesk applications.

### **Competencies Required**

- Attention to detail and a drive for technical excellence. Niko's reputation relies on high quality design outputs,
- A desire to learn new skills in draughting automation, scripting and 3D modelling.

- Strong written and oral communication skills.
- An aptitude for solving problems based upon a mixture of analysis, wisdom, experience, and judgment,
- Ability to establish and maintain strong working relationships with clients and colleagues and gain their trust and respect,
- Flexible with the types of work to be completed.
- Strong self-motivation and desire to work with minimal supervision,
- Ability to confer with engineering staff and other personnel to resolve problems.

#### **Values**

Personal values and behaviours that align to our company values:

- Be friendly and approachable, whilst being professional in your dealing with internal and external clients.
- Have consideration for the safety of themselves and others at the place of work.
- Respect for colleagues.
- Act in good faith and be fair.
- Willing to work and share knowledge within a close-knit team.
- Commitment to outstanding customer service.