

Job Description

Position Title:	3D CAD Designer
Reports To:	Transmission Team Leader
Client(s)/Key Liaison:	Niko engineers and project managers and external clients
Responsible For:	Provision of draughting and design services
Issued:	August 2023

Main Purpose of the Role

The purpose of this position is to provide technical support and design services to Tesla'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 the role will focus on primary plant and 3D drafting using specialist software. However, the workload in the 3D space is variable and there will be a requirement as part of the role to create standard 2D electrical draughting services.

The role is focused on electrical design for our transmission clients; however, the role will include some work in the civil and structural disciplines, and there will be opportunities to support distribution and generation projects.

Key Tasks

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

- Generate 2D and 3D AutoCAD drawings that meet quality and content requirements.
- Develop 3D 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.
- Interface with engineering staff to assist with project scope, schedule, design requirements, etc.
- Assist engineering staff during site inspections (sometimes 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 Tesla's Draughting Community of Learning by identifying and developing best practice methodologies for the most efficient and effective use of Tesla'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 primary electrical plant in an electrical substation setting.
- Technical knowledge of structures and understanding of architectural, engineering and construction design principles.
- An understanding of secondary electrical plant design.
- Basic Inventor or Revit skills and understanding.
- Experience in scripting for Autodesk applications.

Competencies Required

- Attention to detail and a drive for technical excellence. Tesla'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.