

Design Drafter

Job Purpose:

Civil Engineering Technologist having 3-5 years' experience with a consulting engineering firm and a strong mapping and civil structures background, to be an integral part of the Design Drafting team, creating comprehensive drawing packages to effectively communicate Canadian Projects Limited's designs to its Clients and its Clients' contractors with the ability to work on several major projects simultaneously in a multidiscipline environment.

Key Responsibilities/Duties:

1. AutoCAD Drafting

- Create drawings and mapping for hydroelectric plants and wind power sites in the renewable energy sector using AutoCAD Civil 3D.
- Use AutoCAD with minimal guidance on the use and features of the drafting software and the computer processes of the current version.
- Understand model-space / paper-space interactions and key features of the CIVIL 3D design module including surface creation/manipulation, alignments, corridors and grading.
- Understand civil, structural, mechanical and electrical drawings and creation of complete drawing packages.
- Import and convert mapping and survey data into usable base plans utilizing data quality management techniques.
- Efficiently produce final product drawings from concept sketches with moderate technical guidance.

2. Design Capabilities

- Produce accurate 2D and 3D drawings using 3D visualization of terrain, cut and fill slopes, concrete structures and pipelines.
- Design basic geometric relationships such as segmental pipe bends, compound bends, UTM coordinate conversions, trench sections and civil engineering surveying layout.
- Acquire data from government web sites for resource mapping and cadastral base mapping.
- Calculate quantity take-offs of earthwork, concrete volumes and miscellaneous steel for complex structures using accurate simplification techniques.

3. Technical Experience

- Experience with software such as Revit and 3DS Max is an asset.
- Design of roads, pipelines and powerlines.
- Design of buildings, dams, weirs and intakes.
- Design of concrete, miscellaneous steel and equipment supports.