



Jason Emerine, PE  
Robert Emerine, PE  
Jason Rickard, PE

**JOB TITLE: DESIGNER/CAD TECH**  
**SUPERVISOR: PROJECT ENGINEER**

**JOB SUMMARY**

The Designer/CAD Tech is responsible, under general supervision, to prepare working CAD construction drawings, topographical profiles, and related maps and specifications used in planning and construction of civil engineering projects using AutoCAD Civil 3D software. The self-motivated and detail oriented staff member must have a willingness to work on commercial, residential and light industrial projects in a team environment. Under the direction of Design Engineers the candidate will draft detailed drawings, conduct research and prepare final documents for various projects.

**QUALIFICATION REQUIREMENTS**

To perform this job successfully, an individual must be able to perform each essential duty proficiently. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**EDUCATION and/or EXPERIENCE**

- Minimum High School Graduate or GED
- Associates Degree or Technical School completion preferred
- 0-5 years of experience in land development or public infrastructure design
- Experience with AutoCAD Civil 3D
- Experience with Microsoft Office

**ESSENTIAL JOB DUTIES and RESPONSIBILITIES**

- Working with CAD system to draft, edit and finalize technical drawings, design sketches and details from rough sketches, notes and design parameters provided by other members of the design team.
- Correlate and interpret survey data from the field to produce base maps, digital terrain models, and construction drawings.
- Draft profiles and cross-sections, indicating relation of topographical contours and elevations to existing and proposed conditions.
- Locate and identify symbols located on topographical surveys to denote geological and geophysical formations.
- Prepare detailed drawings of plans related to the design of roads, culverts, water supply, sanitary sewer systems, traffic engineering, and various other engineering design items.
- Create copies and assemble plans for distribution to regulatory agencies, clients and contractors.
- Measure and calculate quantities of bid items for use in estimating project costs.
- Update drawing based on revision requests from agencies and Project Engineers.
- Ensure that drawings conform to current SKE quality and CAD standards.
- Self-check your own work for completeness, accuracy, and compliance to standards.
- Complete all other duties as directed by Project Engineer.
- Perform intermediate design tasks using AutoCAD Civil 3D software.
- Assist project engineers with basic engineering tasks as requested.
- Possess an understanding of algebra and geometry.
- Apply principles of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions. Interpret an extensive variety of technical instructions in mathematical and diagrammatic form. Deal with several abstract and concrete variables.



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**PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential duties and responsibilities of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties and responsibilities. While performing the essential duties and responsibilities of this job, the employee is regularly required to:

- Stand; walk; use hands to fingers, handle and/or feel objects, tools, and/or controls; reach with hands and arms; talk and/or hear; sit; and stoop, kneel, and/or crouch.
- Exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force frequently, and/or a negligible amount of force constantly.

Specific vision abilities required by this job description include but are not limited to close vision, distance vision, depth perception, and the ability to adjust focus.

**WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- While performing the essential duties and responsibilities of this job, the worker is:
- Subject to both inside and outside environmental conditions.
- Subject to sufficient noise to cause the worker to shout to be heard about ambient noise levels.
- Subject to hazards including proximity to moving mechanical parts, moving vehicles.
- Subject to atmospheric conditions that affect the respiratory system including: fumes, odors and dust.
- When inside, operates in a professional office environment not substantially exposed to adverse environmental conditions.

Employee uses standard office equipment such as computers, printers, plotters, scanners, telephones, photocopiers, filing cabinets and fax machines.

**Employee is required to have, maintain, and wear all Personal Protective Equipment (PPE) as assigned by the company.**

**Employee is required to maintain a professional appearance by wearing the appropriate clothing for the work environment.**

**JOB DESCRIPTION ACKNOWLEDGEMENT & ACCEPTANCE**

- I agree this job description is intended to describe the general nature and level of work being performed by the person assigned to this position. Principal duties and responsibilities are intended to describe those functions that are essential to the performance of this job.
- I agree this job description does not state or imply that the above are the only duties and responsibilities assigned to this position. I understand I will be required to perform any other job-related duties as requested by management. I understand all requirements are subject to possible modification to reasonably accommodate individuals with a disability.
- I have read and understand all the above. I have reviewed the duties and responsibilities for which I am responsible, as well as the minimum requirements of this position, with my supervisor.
- I agree the company maintains the right to change this job description at any time and will provide me with written revisions and addendum prior to the installation of the new policies or requirements.
- I understand that this document does not create an employment contract and that I am employed by Civil Engineering Consultants, on an "at will" basis.
- I have been or will be given a copy of the company organizational chart and acknowledge my position within the organization.
- I acknowledge that my performance will be evaluated, and I will be completing a self-evaluation.

\_\_\_\_\_  
Employee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Onboarding Administrator

\_\_\_\_\_  
Date