Department Overview

At GTA, civil design professionals and engineers have their hands on a vast range of exciting projects in both, public and private industry. Projects range in size from a standard house grading plan, to mixed-use subdivisions on 50 or more acres of land.

The firm prides itself on our energetic and innovative group of problem solvers, with diverse backgrounds and perspectives, which has been engaged in civil engineering on the Central Coast since the 1960’s. We relentlessly pursue the most efficient and effective methods of blending tried and true engineering practices and the latest technological advances to meet project objectives.

GTA is a leader in engineering, surveying and planning on the Central Coast. We serve commercial and residential development clients, public agencies, schools, hospitals and agriculture. GTA is an equal opportunity employer and is currently accepting new applications from qualified professionals for the following full-time position:

Civil CAD Designer

General Summary

It should be noted that GTA is specifically seeking CAD Designers that are not only proficient in AutoDesk AutoCAD, Civil3D and Infraworks programs, but that these individuals be well-prepared to teach other members of our staff that are in various stages of learning the software programs themselves. The successful candidate(s) will have significant experience programming automated annotation styles and maintain an open mind as it pertains to our philosophies regarding appropriate use of new technologies in various project workflows. As a valued and respected member of the design team, the Civil CAD Designer will help shape the our firm’s policies regarding appropriate injection of new technologies into various project workflows.

In general, this position is responsible for preparing drawings and improvement plans used in civil engineering projects based on the design provided by a civil designer or civil engineer, with minimal assistance. Plans will be produced in planographic and profile views. In some cases, an advanced Civil CAD Designer may be asked to provide a design with little direction from engineering staff. Such plans include grading and drainage plans, street, sewer, storm drain and water plans, pipelines, erosion control plans. The Civil CAD Designer must know how to perform the fundamentals of the work without the use of advanced technologies, in order to see that the technologies are functioning correctly.

Essential Job Function

• Be THE go-to resource for Civil3D and Infraworks questions, problems and style programming.

• Produce improvement plans, exhibits and drawings using AutoCAD and Civil 3D, working under the direction of a Licensed Civil Engineer.

• Generate 3D Renderings and planning-level design documents utilizing Infraworks.

• Produce maps, diagrams, and profiles, using cross-sections and surveys, to represent elevations, topographical contours, subsurface formations and structures.

• Create maps, diagrams and profiles using Civil 3D design surfaces.
• Draft plan and profile views of improvement plans, such as street, storm drain, sewer, water and other underground improvements, using smart labels, and other methods.

• Draft plan view of detailed, and rough grading plans for various clientele, such as commercial and industrial developers.

• Create and manipulate construction details and cross sections.

• Understand the order of work and method of presentation, based on different drafting requirements for each agency.

• Finish and duplicate drawings and documentation packages, according to required mediums and specifications for reproduction using blueprinting, photography, or other duplicating methods.

• Ability to address redlined comments from public agency or internal review.

• Review rough sketches, drawings, specifications, and other engineering data received from civil engineers to ensure that they conform to design concepts.

• Generate earthwork models and utilize Civil 3D tools to perform quantity calculations and prepare “heat maps” depicting areas of deep cut and/or fill.

• Other duties as applicable.

Knowledge, Skills and Abilities

• Mastery of Civil 3D design components and drafting techniques.

• Ability to prepare conceptual designs utilizing a combination or Google Earth, Infraworks, AutoCAD and/or Civil 3D as appropriate.

• Knowledge of design techniques, tools, and principles involved in production of precision technical plans, drawings, and exhibits.

• Ability to use advanced mathematics to solve problems.

• Effective verbal and written communication.

Education and Experience

• Minimum of 3 years of experience using ACAD Civil 3D

• Exposure to and working knowledge of Infraworks software

• Background knowledge in the land development industry

• Competent in Microsoft Office suite of programs.

The requirements for this position include:

• Grading, Drainage and Utility design

• AutoCAD Civil 3D expert level

• Civil/survey experience

• Diversified experience within various stages/design elements of a project is a plus
• Bachelor’s Degree in Engineering preferred, but not required.
• E.I.T. Certification preferred, but not required.
• Applicable work experience is desirable.
• Experience in hydrology is a plus.
• Strong communication and interpersonal skills
• Desire, willingness and ability to teach.
• Enjoy working in teams.
• Ability to work independently.

GTA prides itself on providing the opportunities our employees most desire, and career paths which are crafted to the individual. We offer a competitive compensation and benefits package, including medical dental insurance, a retirement plan and a quarterly bonus program that will be installed in the first quarter of 2020.