

## **GUILFORD COUNTY SCHOOLS JOB DESCRIPTION**

### **JOB TITLE: CAD TECHNICIAN – INTERN POSITION FACILITIES DEPARTMENT**

#### **GENERAL STATEMENT OF JOB**

Under general supervision, uses CAD, database and associated tools to capture, create, update and maintain as-built record drawings and property accounting data in the GCS database; interprets and clarifies notes, digital redline and field mark-up drawings; ensures the completeness and accuracy of all data fields; and performs related duties as assigned by Design Services Manager.

#### **SPECIFIC DUTIES AND RESPONSIBILITIES**

##### **ESSENTIAL JOB FUNCTIONS**

Verifies the accuracy and completeness of as-built record drawings and property accounting data.

Populates and updates facilities databases using latest version of AutoCAD and other technology tools to create and maintain as-built record and property accounting drawings.

Performs work with a high degree of accuracy to create spatially correct, detailed data and maps of the District's facilities infrastructure for use throughout the organization.

Converts digital redlines and reviews survey data, field mark-ups, and notes to digital drawings using CAD and other technology tools.

Performs calculations, refers to existing facility data and Uniform Design and Construction Standards (UDACS) and utilizes knowledge of building and site plans to verify the accuracy and completeness of project data.

Resolves discrepancies through research or returns to author for corrections.

Enters new as-built data in facilities database, reviews and corrects existing facilities data associated with the project and initiates merge processes to update facilities data and maps.

Uses query tools to identify and research data discrepancies.

Conducts field visits to obtain information to ensure the accuracy of facilities data for legacy facilities.

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### **ADDITIONAL JOB FUNCTIONS**

Performs other related work as required.

### **MINIMUM TRAINING AND EXPERIENCE**

An Associate's degree in architectural or engineering technologies from a recognized community college or vocational school; and at least two years of CAD experience, preferably in an engineering or architectural firm; or an equivalent level of training and experience. Additional experience may be substituted for the required education.

### **SPECIAL REQUIREMENTS**

A valid North Carolina driver's license and the ability to maintain insurability under the District's Vehicle Insurance Policy.

### **MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS**

**Physical Requirements:** Must be able to regularly walk, stand or sit, talk or hear both in person and by telephone; use hands to repetitively finger, handle, feel or operate standard computers and other field and office equipment; and reach with hands and arms. The employee is occasionally required to lift objects weighing up to 10 pounds. Specific vision abilities required by this job include close vision, color vision and the ability to adjust focus. While performing the duties of this class, employees are regularly required to use and solve problems; use math and mathematical reasoning; observe and interpret situations; learn and apply new information or new skills; perform highly detailed work on multiple, concurrent tasks; and interact with District staff and other organizations and supervisors, co-workers, inspectors and employees in other departments and others encountered in the course of work.

**Data Conception:** Requires the ability to compare and/or judge the readily observable, functional, structural or composite characteristics (whether similar or divergent from obvious standards) of data, people or things.

**Interpersonal Communication:** Requires the ability to speak and/or signal people to convey or exchange information. Includes receiving instructions, assignments or directions from superiors.

**Language Ability:** Requires the ability to read correspondence, work orders, logs, diagrams, blueprints, schematics, etc. Requires the ability to prepare simple reports, activity logs, forms, etc. according to prescribed formats.

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**Intelligence:** Requires the ability to apply principles of rational systems to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists; to interpret a variety of instructions furnished in written, oral, diagrammatic, or schedule form.

**Verbal Aptitude:** Requires the ability to record and deliver information, to explain procedures, to follow oral and written instructions. Must be able to communicate effectively and efficiently in standard English, and electrical and mechanical terminology.

**Numerical Aptitude:** Requires the ability to utilize simple mathematical formulas; to add and subtract; multiply and divide; utilize decimals and percentages.

**Form/Spatial Aptitude:** Requires the ability to inspect items for proper length, width and shape.

**Motor Coordination:** Requires the ability to coordinate hands and eyes rapidly and accurately in using hand tools.

**Manual Dexterity:** Requires the ability to handle a variety of items such as hand tools. Must have minimal levels of eye/hand/foot coordination.

**Color Discrimination:** Requires the ability to differentiate between colors and shades of color.

**Interpersonal Temperament:** Requires the ability to deal with people beyond giving and receiving instructions. Must be adaptable to performing under stress and when confronted with persons acting under stress.

**Physical Communication:** Requires the ability to talk and hear: (Talking: expressing or exchanging ideas by means of spoken words. Hearing: perceiving nature of sounds by ear.) Must be able to communicate via telephone.

### **KNOWLEDGE, SKILLS AND ABILITIES**

Considerable knowledge of terminology, methods, practices, techniques and nomenclature of architectural, structural, civil, mechanical, plumbing, electrical and/or technology drafting

Considerable knowledge of uses and operations of AutoCAD software

Considerable knowledge of basic database and system administration techniques as required moving data and files between applications and repositories and performing database queries

Considerable knowledge of engineering mathematics, including algebra, geometry and trigonometry

Ability to utilize AutoCAD applications and tools, to complete assigned projects efficiently and accurately

## **CAD TECHNICIAN – INTERN POSITION**

Ability to perform highly-detailed data capture thoroughly, efficiently and with a high degree of accuracy to create and maintain facilities infrastructure data

Ability to research and interpret field notes, engineering and construction drawings, digital redlines, GPS data and other legacy data to identify and resolve discrepancies and missing data on assigned projects

Ability to perform engineering computations applicable to the work

Ability to work effectively individually and as a team member; establish and maintain effective working relationships with supervisors, co-workers, inspectors and employees in other departments and others encountered in the course of work.

### **DISCLAIMER**

The preceding job description has been designed to indicate the general nature and level of work performed by employees within this classification. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities, and qualifications required of employees to this job.