



## FACILITIES COMPUTER AIDED DESIGN (CAD) TECHNICIAN

**Department:** Facilities Management

**Job Class #:** 566100

**Pay Range:** Engineering/Technical 03

**FLSA:** Non-Exempt

**Represented:** No

Classification descriptions are intended to present a descriptive list of the range of duties performed by employees in this class and are not intended to reflect all duties performed within the job.

**GENERAL FUNCTION:** This is basic technical work in support of field and office engineering, architectural, and facilities management. An employee occupying the Facilities Computer Aided Design (CAD) classification is responsible for performing a broad scope of journey-level drafting, entry level design and technical work involving various phases of one or more of the following areas: design and drafting, planning, inspecting as-built drawings for compliance with actual conditions, creating and updating existing CAD drawings, organizing and archiving electronic and paper construction plan sets and specifications or related technical engineering, architectural and facilities management work.

### **ESSENTIAL FUNCTIONS:**

- Perform manual drafting or automated drafting work to assist in the preparation of plans, blueprints and engineering, architectural and facilities management drawings for structural, architectural, mechanical, or electrical construction and engineering projects. Prepare sketches and reports from information gathered in field notes.
- Make mathematical calculations, compile data, and compute quantity and cost estimates.
- Create and maintain a paper and computerized file management and organization system for existing and new CAD drawings including records, databases, and retrieve reports, drawings, and plans.
- Create new and update existing CAD drawings to reflect actual as-built conditions throughout County facilities.
- Establish and maintain CAD drawings and take-offs for space measurement and allocation based on BOMA standards.
- Read and interpret existing building record drawings with a general understanding of construction documents and building systems.
- Utilize computer terminal, plotter, and other digital devices to input and retrieve information; compile data to produce useful reports.
- Provide routine technical information and explain routine policies and procedures to internal departmental staff and other departmental staff throughout County government in person, on the telephone and in writing.
- Locate property on appropriate maps or construction plans; interpret notations on maps and atlases; update and maintain various county atlases and maps, road logs and annexation records.
- Produce detailed AutoCAD and Revit site plans, floor plans, reflecting ceiling plans, elevations, sections, details, schedules, diagrams, notations, symbols, inserted graphics and blocks, titles blocks and borders and coordinated sheets for purposes of permitting, bidding and construction.
- Review incoming submittals for overall compliance with established policies and guidelines.
- Work with project managers and maintenance staff to obtain and maintain as-built drawings for new construction projects.
- Assist staff and vendors in obtaining and distributing record drawings for specific project needs.
- Maintain regular, predictable, and punctual attendance during regularly scheduled work hours at assigned worksite.
- Perform the physical requirements of the position; work within the established working conditions of the position.
- Meet the traveling requirements of the position.

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- Work a flexible schedule, which may include evenings, weekends, holidays and overtime.

#### **OTHER JOB FUNCTIONS:**

- Obtain permits and interact with permitting staff to meet the requirements necessary to obtain permits.
- Complete written reports on specification compliance for a variety of construction projects.
- Ensure drafting and project management software contracts and licenses are kept up to date and that users have current software installed. Maintain plotter contract on an annual basis and provide maintenance to the device and support to user group.
- Input, edit, and review work order and asset management software data and other county programs as required for standardization and alignment with building drawing floorplans and information.

**SUPERVISION RECEIVED AND EXERCISED:** Work is reviewed for fulfillment of division and departmental objectives, conformance with governing laws and regulations, adherence to budget, and support and furtherance of Department goals. Incumbents receive direct supervision but are expected to exercise initiative and judgment in carrying out assignments according to established standards, policies, and procedures. Work assignments are reviewed while in progress and upon completion by a class of a higher level. The position does not have supervisory responsibility.

**WORK ENVIRONMENT:** The Facilities CAD Technician works in an office environment on a daily basis and performs field-related assignments routinely. Travel to various field sites and meeting locations is required. Work is performed on a regularly scheduled basis and may include evenings, weekends, holidays and overtime.

**PHYSICAL REQUIREMENTS:** The physical demands described herein are representative of those that must be met by an employee to successfully perform the essential functions. The physical activities include the use of finger dexterity to use and operate a personal computer and related engineering tools and equipment; reading and analyzing complex engineering reports, documents, specifications, and plans; communicating both orally and in writing with professional and technically skilled staff, developers, contractors, public and private officials; use of eye sight to inspect engineering documents and field work; prolonged sitting at a desk or while attending meetings; driving to various work sites locations; and working along-side hazardous road conditions. Lifting items weighing less than 40 pounds is done on a less frequent basis. Incumbent may experience prolonged periods of sitting or standing and be subjected to normal office noise and interruptions.

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

##### **Knowledge of:**

- Mathematics, including algebra and trigonometry, and some knowledge of physics.
- Principles, practices, and equipment used in surveying, drafting and architecture and engineering.
- Engineering principles and practices including basic hydraulics.
- Computer data and file management; including electronic data transfers via the internet and/or the County's network.
- Computerized spreadsheet and word processing applications, computer aided drafting and other related computer programs,
- The latest editions of the Adobe Suite, AutoCAD, Revit, and Microsoft Office, SketchUp.
- The current BOMA standards.
- Applicable County, State, and Federal design standards, laws, ordinances, and rules.

##### **Ability to:**

- Communicate effectively with engineers, contractors, developers, and the public.

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- Research and gather facts to present options.
- Adapt to changing priorities and technology.
- File plans and other materials alphabetically, numerically or by other predetermined classifications.
  
- Read and understand construction and engineering and architectural plans and specifications and to become familiar with existing standards and department policies.
- Understand and execute moderately complex oral and written instructions.
- Use independent judgment in completing assignments.
- Develop new applications of existing computer programs.
- Establish and maintain effective working relationships with fellow employees
- Maintain a courteous attitude even in stressful and unpleasant situations.
- Prepare clear and concise written reports, and drawings from completed survey information and notes.
- Make field measurements and complete calculations using computers or calculators.
- Bend, stoop, climb, and walk on uneven terrain.
- Physically perform the essential job functions.
- Meet the travel requirements of the position.

**MINIMUM REQUIREMENTS TO APPLY:**

AA Degree in architectural engineering design, civil/structural engineering or a combination of two years engineering experience plus some coursework in architectural, CAD Drafting, civil/structural engineering technology OR an equivalent combination of experience and education which would clearly indicate the ability to perform the duties of the position is required. Two or more years CAD, drafting, and file management experience preferred.

**SPECIAL REQUIREMENTS AND/OR QUALIFICATIONS:** A valid Washington State driver's license may be required when travel is required of the position. Ability to successfully complete all required background investigations including submission of fingerprints.