



CLASSIFICATION NO. 736  
Established: 4/09  
FLSA: Non-Exempt  
EEO: 3

## **CADD SYSTEM SPECIALIST**

### **CLASS CHARACTERISTICS**

Under direction, to perform complex technical assignments related to the Computer Aided Design and Drafting (CADD) functions within the Transportation Engineering division; to participate in CADD system file management and configuration operations; to provide technical assistance to engineering staff; and to do other work as required.

### **DISTINGUISHING CHARACTERISTICS**

The Transportation Engineering Division within the Department of Transportation and Development (DTD) provides professional and technical engineering support and manages programs to implement improvements to the County's road system. Specific functions include traffic engineering, road engineering and surveying, traffic control engineering and maintenance, construction management and development coordination.

The CADD System Specialist is responsible for planning, implementing, controlling, and supporting the Computer Aided Drafting and Design resources within the engineering division and other departments as required.

The CADD Systems Specialist differs from the Engineering Technician series which is primarily responsible for technical support work for Engineers through computer aided design, surveying, design review and traffic operations. The CADD System Specialist differs from the Technical Services Coordinator which coordinates projects and allocates staff among several support functions. The CADD System Specialist differs from the Survey and CADD Supervisor which has full supervisory responsibilities and is responsible for outlining assignments, goals and objectives, and evaluating performance for effectiveness.

### **TYPICAL TASKS**

Duties may include but are not limited to the following:

1. Coordinates the work activities associated with the CADD system file management and configuration with consultants, engineers, contractors, county departments and divisions, and outside agencies; oversees engineering and survey software files and standard user configurations to include any proposed changes; installs and configures CADD software; investigates, researches and tests hardware and software being considered for purchase by the County; provides technical support services on applied CADD system related software issues.
2. Provides technical support and training to Engineering staff in the proper use of computer aided drafting and design software and to resolve software errors and issues.

3. Researches and makes recommendations on the division's CADD system which includes hardware configuration and software evaluation and testing; serves as liaison with Technology Services staff on the technical requirements for CADD system; provides technical assistance to Technology Services on hardware and software maintenance and purchases.
4. Plans, develops, maintains, prepares and determines CADD standards, computer file naming convention and locations; works with consultants and contractors to facilitate the transfer or translation of complex engineering data to ensure that it is reliable and functional.
5. Plans and prepares complex engineering plans, maps, and exhibits used in the design and construction of roadway related engineering projects and in support of various departments and divisions within the County.
6. Performs field and office survey work to collect data, perform calculations and determine the validity of said data used in the preparation of construction plans, right-of-way maps, topographic surveys, and other graphics as necessary.
7. Reviews and comments on the CADD work of Engineering Technicians, Engineers and Surveyors; participates in project planning and performs miscellaneous duties related to engineering projects.

### **REQUIRED KNOWLEDGE AND SKILLS**

**Knowledge of:** Methods, materials and standard engineering specifications used in the construction of roads and sewer collection facilities; civil engineering principles; surveying methods and techniques as related to construction; principles of computer aided design, geographic information systems, engineering design, engineering mathematics, computer modeling, detailing, drafting and specification writing.

**Skill to:** Understand and interpret CADD technical information and related literature; read, interpret and apply complex plans and specifications; establish and maintain effective working relationships with employees, contractors and the public; communicate effectively, both orally and in writing; prepare complete and comprehensive reports with statistical or cartographic formats; use department-specific mapping software; maintain relationships with organizations performing work on County contracts.

### **WORKING CONDITIONS**

May require occasional moderate physical activities including bending and stooping.

### **MINIMUM QUALIFICATIONS**

Minimum qualifications are used as a guide for establishing the minimum experience, education, licensure, and/or certifications required for employment in the classification. The following minimum qualifications are established for this classification. Additional minimum qualifications and special conditions may apply to a specific position within this classification and will be stated on the job announcement.

**Experience:** A minimum of four (4) years of related experience that would provide the required knowledge and skills to perform the responsibilities of this position.

**Licenses/Certifications:** None Required.

**PRE-EMPLOYMENT REQUIREMENTS**

Driving is required for County business on a regular basis or to accomplish work. Incumbents must possess a valid driver's license, and possess and maintain an acceptable driving record throughout the course of employment.

Edited: 7/12