

JOB DESCRIPTION
Senior Mapping Technician
Code Number: 24004

GENERAL PURPOSE

Under direction, performs a variety of complex and difficult computer workstation operations to maintain and produce accurate landbase and/or facilities maps and data for EMWD; provides technical supervision over subordinate technicians; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

This is the advanced journey-level class in the Mapping Technician series. Incumbents perform the most difficult and complex tasks and assignments at this level. This class is distinguished from the lower level classification of Mapping Technician I/II in that incumbents lay out and inspect the work of lower-level technicians and serve as project leaders. Assignments vary, are carried out with considerable independence and require sound judgment and initiative.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the class.

Provides technical oversight and guidance to a staff performing GIS and CAD duties, emphasizing water/wastewater facilities mapping or land base data maintenance.

Inputs new land and facility plans into the GIS, including both graphics and database attributes; updates same information upon receipt of as-built plans.

Provides District departments/end users with accurate and current standard and specialty map products and reports relating to the District's water, sewer and recycled water facilities using Smallworld and ESRI GIS and Microstation CAD applications.

Creates and edits scripts and application code for bulk data manipulation and map customization.

Receives, verifies, plots and inputs new and as-built source documents submitted to Maps & Records.

Works with Information Systems, user departments, and outside consultants to resolve hardware, software, plotting, and data sharing issues.

Assists mapping technicians in resolution of problems associated with GIS and CAD software applications and mapping tools.

Performs related duties as assigned

DESIRED MINIMUM QUALIFICATIONS

Knowledge of:

Terminology, methods, practices, techniques and nomenclature of civil, mechanical and/or electrical engineering drafting by hand and using computers; Smallworld and ArcView GIS and Microstation CAD system and drafting media; COGO software and modern drafting and mapping procedures; algebra, geometry and trigonometry as applied to mapping processes; District operating policies and departmental work procedures and quality standards; District files and locations and the means for retrieving information.

Ability to:

Work on a variety of computer-aided drafting and GIS applications; precisely follow written and oral instructions; perform detailed work thoroughly, neatly, accurately and efficiently; properly use and care for drafting equipment, instruments and personal computers; read and interpret field notes and engineering and construction drawings; perform basic engineering computations; prepare maps, plans and records; establish and maintain effective working relationships with those contacted in the course of work; communicate effectively, orally and in writing; make sound independent judgments within established guidelines.

Training and Experience:

A typical way of obtaining the knowledge, skills, and abilities outlined above is graduation from high school or G.E.D. equivalent, supplemented by courses in mechanical drawing, engineering drafting and computer-assisted drafting or GIS; and four years of experience performing subprofessional, technical civil engineering work, including operating a personal computer using GIS and CAD software; or an equivalent combination of training and experience.

Licenses; Certificates; Special Requirements:

A valid California diver's license and the ability to maintain insurability under the District's Vehicle Insurance Policy.

PHYSICAL AND MENTAL DEMANDS

The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands

While performing the duties of this job, the employee is regularly required to walk, stand and sit; talk and hear, both in person and by telephone; use hands to finger, handle, feel or operate standard office equipment, objects, tools or controls; and reach with hands and arms. The employee is occasionally required to lift objects weighing up to 25 pounds.

Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and the ability to adjust focus.

Mental Demands

While performing the duties of this class, the incumbent is regularly required to use written and oral communication skills; read and interpret data, information and documents; analyze and solve problems; use math and mathematical reasoning; observe and interpret situations; deal with changing, intensive deadlines; interact with officials and the public; and be able to handle many interruptions during the day and get right back on task after each one.

WORK ENVIRONMENT

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

The employee usually works under typical office conditions where the noise level is generally quiet. Employees may infrequently be required to work in outside conditions, exposed to hot or cold conditions, where the noise level may be loud.

FLSA DETERMINATION: Non-exempt.