
GIS COORDINATOR

Department: Engineering
Range:

FLSA Status:
Effective Date:

General Purpose

Under general direction of the Engineering Services Manager, to perform a wide variety of routine to complex technical duties in developing, implementing, maintaining and supporting the District's Geographic Information System (GIS); and to perform other related duties as required.

Distinguishing Characteristics

This is a single-incumbent class. Under general supervision, the incumbent performs the full range of assigned duties. Assignments vary, may encompass a variety of tasks, seldom require detailed instructions, and necessitates making sound judgments.

Essential Duties and Responsibilities

The duties and responsibilities listed below are intended to provide a representative list of the various types of work that may be performed. Specifications are not intended to reflect all duties performed within the job class, and incumbents may expect to perform other related similar duties.

- Performs GIS data capturing, data conversion, and data entry work using ESRI ArcGIS Desktop software; maintains integrity of data base using quality control procedures.
- Designs and produces GIS map applications for the District's website using ArcGIS Server/ArcGIS Online.
- Uploads data into District's GIS database from various sources; visually audits uploaded information for errors or inconsistency.
- Inputs information into the GIS database from as-built plans using COGO and information provided by field personnel.
- Updates land use, parcel and street centerline information as required based on city and county general plans.
- Designs, creates, and updates GIS database and layers using hard copy maps, digital data conversion, survey and GPS.

- Uploads Global Positioning System (GPS) data collected in the field into the GIS database.
- Receives and formats data records and/or facilitates transfer of electronic files into GIS from AutoCAD.
- Generates a variety of specific, presentation-quality maps for meetings and reports; produces system atlas maps.
- Coordinates and collaborates with other departments to ensure the District's GIS goals and objectives are met.
- Assists with the creation of technical reports that supports daily and ongoing project activities.
- Makes recommendations and implements GIS solutions.
- Coordinates the planning, implementation, and maintenance of all GIS components: develop, coordinate, implement, and maintain databases for GIS; install and maintain software; administer and monitor maintenance contracts and license agreements for GIS system software. Administers the implementation, operation and maintenance of GIS-related hardware including plotter, scanner, and GPS equipment.
- Coordinates integration of GIS with other District functions/databases such as customer billing, meter reading, and asset management.
- Develops and maintains GIS applications for staff.
- Provide training and assistance to other staff members on GIS.
- Writes programs/scripts to automate GIS processes and workflows.
- Participates in District safety meetings.
- Performs other related duties, as assigned.

Qualifications

Knowledge of:

- Geographic Information System principles and practices
- Standard engineering terminology, symbols, mathematics, and record keeping
- Cartography, including coordinate systems, projections, coordinate geometry and elements of effective map design.

- ArcGIS v 10 software including ArcGIS Desktop (including Network Analyst and Spatial Analyst extensions), ArcGIS Server and ArcGIS Online.
- Microsoft Office (Excel, Word, Access, Outlook) and SQL Server
- Programming languages such as Python, Visual Basic
- Personal computers/workstations/servers and the use of scanning, plotting and GPS equipment.
- Geodatabases, geometric network datasets and relational databases
- Database Management
- Methods and techniques used for the design and construction of public water facilities
- Safe work practices.

Ability to:

- Read and understand blueprints, maps and civil engineering plans and specifications.
- Format and enter data into the GIS system database from multiple sources.
- Write simple scripts/programs
- Perform complex geographic analysis
- Author maps and program GIS applications to meet user needs.
- Interpret and analyze technical information and make independent judgments.
- Utilize GIS information to project consequences of proposed actions, identify alternate solutions and provide recommendations.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain cooperative working relationships with co-workers, supervisors, administrators, officials and representatives of other jurisdictions, and members of the general public.
- Perform difficult technical computer and mapping work through personal initiative.
- Prepare and maintain accurate and complete records and reports.
- Effectively plan, coordinate and organize work flow.
- Work efficiently and accurately.
- Operate a vehicle observing legal and defensive driving practices.
- Operate standard office equipment, personal computers, Internet, Microsoft Office software products, and engineering related software including ArcGIS
- Observe proper safety precautions.

Minimum Qualifications

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Education:

A bachelor's degree in engineering, geography or information technology;
and

Experience:

A minimum of four (4) years of progressively responsible GIS support experience in an Engineering Department or organization, preferably including record keeping and developing and maintaining GIS maps, layers and databases.

Certificate:

Possession of a Certificate of Completion of a formal course of instruction in the use of ARCGIS software at a recognized college, university, or an accredited trade school or vocational school.

Certification:

Certified Geographic Information System Professional (GISP) is preferred.

Necessary Special Requirements

Must possess an appropriate valid, Class "C" Driver's License issued by the California State Department of Motor Vehicles, and a good driving record.

Physical Tasks and Environmental Conditions

The physical demands described below are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions on a case-by-case basis.

While performing the duties of this classification, an incumbent is regularly required to use hands and fingers to handle, or feel. The employee is frequently required to talk, hear, taste or smell, and to sit and reach with hands and arms. The employee is occasionally required to stand, walk, climb or balance and stoop, kneel, crouch or crawl. The employee must regularly lift and/or move up to ten (10) pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

Article 3.306

Advancement in salary is not automatic. It should be considered a reward for meritorious service. The General Manager may authorize the advancement of an employee who has performed twelve (12) months continuous satisfactory service.

An employee who furthers his/her knowledge in the field or employment may become eligible for consideration of a salary review by the General Manager. The General Manager may authorize reimbursement to the employee for cost of tuition, registration fees, required text books, certification costs and other related charges upon proof of receiving a passing grade, and /or certificate, whichever may be appropriate or both.

THIS POSITION MAY BE ELIMINATED, OR THE DUTIES, QUALIFICATIONS AND TRAINING REQUIRED CHANGED BY THE BOARD OF DIRECTORS AND/OR THE GENERAL MANAGER, WHEN IN THEIR JUDGEMENT, IT IS CONSIDERED NECESSARY AND PROPER FOR THE EFFICIENT OPERATION OF THE DISTRICT.