

VALLEY CENTER MUNICIPAL WATER DISTRICT
GIS/MAPPING TECHNICIAN

DEFINITION

Under general lead of the Senior GIS Analyst, incumbents perform technical Geographic Information System (GIS) work in support of the District's operational and asset management functions. The position is responsible for maintaining the integrity of the District's GIS data and providing mapping and GIS application support services to District staff.

CLASS CHARACTERISTICS

This classification is a technical level GIS position responsible for entry to journey level GIS duties performed primarily in an office environment. Incumbents create, edit, and maintain spatial and tabular data; interpret engineering and utility records; prepare cartographic products. Field work may be performed occasionally to support data verification or special projects.

ESSENTIAL DUTIES

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 this position.

Uses ArcGIS Pro to create, edit, maintain, and update the District's GIS datasets, spatial databases, and mapping products; disseminates reliable and well-documented GIS data.

Gathers, verifies, inputs, edits, and maintains tabular and spatial data from engineering plans, as-built drawings, utility records, and other source documents; performs data quality checks.

Prepares, revises, and maintains GIS maps, exhibits, reports, and graphic presentations for District operations and Board meetings.

Archives, scans, and converts records, maps, drawings, and related source documentation such as information from existing District records and field information into digital format; maintains associated digital records.

Reads, interprets, revises, and updates topographic maps, "as-builts" and valve detail drawings, and other related engineering drawings as well as various facility databases.

Maintains and updates GIS documentation, metadata, and standard operating procedures.

Generates GIS data queries, basic analyses, and map products in response to requests from District departments.

Coordinates with District departments to ensure accurate capture, maintenance, and documentation of facility and attribute data in GIS.

Provides training and assistance to District staff on GIS functions, applications, and map products.

Assists with testing GIS applications, software packages, tools, and workflows.

Manages assigned projects, mapping and GIS timelines; provides status reports on the progress of mapping updates, GIS applications, and mapping workflows.

Retrieves and distributes stored maps and GIS information; provides accurate mapping-related information to District staff and, as appropriate, to external agencies and the public.

Assists in addressing complex integration issues toward long-term GIS and mapping goals.

May perform limited field data collection or verification using a Global Navigation Satellite System (GNSS) on an occasional basis.

Performs other duties as assigned.

QUALIFICATIONS GUIDELINES

Knowledge of:

Principles and practices of Geographic Information Systems, including coordinate systems and techniques for capturing, editing, manipulating, and converting tabular and spatial data; algebra, geometry and trigonometry as applied to mapping processes; data collection and analysis methods; standard office practices and procedures; operation of standard office and engineering equipment including computers, calculators, reproduction equipment, and related equipment; software programs including, but not limited to, ESRI GIS platforms with demonstrated working knowledge of ArcGIS Pro as the primary desktop GIS application, familiarity with ArcGIS Enterprise and ArcGIS Online, and Microsoft Windows operating systems and desktop productivity software such as Excel, Outlook, Word, and Access; working knowledge of AutoCAD preferred but not required.

Ability to:

Read, interpret, and understand maps, drawings, schematics, and source documents related to District facilities and land base, and accurately transpose information into GIS datasets using established tools and data standards with strong attention to detail. Utilize GIS and related software applications to carry out assigned responsibilities. Prepare accurate, purposeful, and visually effective cartographic products. Conduct basic spatial analysis and research geographic data to support District decision making. Provide technical guidance and assistance to staff regarding GIS applications and data. Prepare clear, concise, accurate, and comprehensive documentation, technical materials, and logs. Troubleshoot program problems. Work independently as well as part of a team. Understand, read, interpret, follow, explain and apply detailed technical instructions, documentation, and GIS workflows. Communicate clearly and concisely both orally and in writing, including while using the District's radio communication system. Establish and maintain effective working relationships with other employees and those contacted in the course of the work. Exercise appropriate judgment in responding to requests and releasing information, and maintain confidentiality and security of sensitive information.

EDUCATION, EXPERIENCE, LICENSES AND CERTIFICATIONS

Education: Equivalent to a High School Diploma. An Associate's Degree, completion of college-level coursework or a certificate in GIS, geography, earth sciences, civil engineering, urban planning, information technology, computer science, or a related field, is preferred.

Experience: One year of progressively responsible experience performing GIS-related work involving the development, maintenance, or operation of GIS applications, digital maps, or spatial data; or an equivalent combination of education, training, and experience sufficient to successfully perform the essential duties of the job such as those listed above.

PHYSICAL DEMANDS AND WORK ENVIRONMENT

The physical demands and work environment described here are representative of those that must be met by an incumbent to successfully perform the essential functions of this job. Reasonable accommodations may be

made to enable individuals with disabilities to perform the essential functions.

Physical Demands: While performing the duties of this job, incumbents are regularly required to use hands to finger, grasp, feel, and use repetitive motions in order to operate office equipment. Incumbents are frequently required to sit, talk and hear. Incumbents are occasionally required to stand, walk, stoop, kneel, crouch or reach and may occasionally be required to lift up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

Work Environment: While performing the duties of this job, incumbents are not substantially exposed to adverse environmental conditions. Work is performed mostly in office settings. The noise level is usually quiet to moderate.

POSITION DESCRIPTION APPROVED:



General Manager

2/29/2026
Date