



JOB DESCRIPTION

GIS Technician

Date Prepared: July, 2021

SUMMARY: Under basic supervision from the GIS Manager, performs work in the development and maintenance of geographic and related information. Provides basic training and technical support to end users regarding Geographic Information Systems (GIS) and related hardware and software operations; performs related duties, as required.

ESSENTIAL FUNCTIONS: -- *Essential functions, as defined under the Americans with Disabilities Act, may include any of the following representative duties, knowledge, and skills. This is not a comprehensive listing of all functions and duties performed by incumbents of this class; employees may be assigned duties which are not listed below; reasonable accommodations will be made as required. The job description does not constitute an employment agreement and is subject to change at any time by the employer. Essential duties and responsibilities may include, but are not limited to the following:*

- Prepare, collect, organize, and input data to maintain and enhance the City's GIS using Esri ArcGIS desktop software.
- Conduct field research and collect data using appropriate field equipment and software, including any necessary data post-processing or manipulation; work with other field staff from Public Works and Water to make necessary corrections or updates to GIS layers.
- Assist with interpreting as-built drawings, construction plans, engineering plans, recorded maps, deeds, legal descriptions, imagery and related source documents and incorporates them into GIS using various methods including coordinate geometry (COGO), digitizing, and GPS.
- Assist in the creation and maintenance of multiple GIS layers including parcels, streets, right-of-way, zoning, other development layers, and water and sewer system layers.
- Input, update, and maintain metadata for the City's various GIS layers.
- Assist in the curation of web GIS content, including story maps, web maps, and mapping applications placed on the City's GIS Portal or ArcGIS Online.
- Follow quality assurance (QA) and quality control (QC) processes, and perform routine data management tasks, such as data validation and correction, queries and editing in GIS to ensure GIS data accuracy, integrity, and completeness.
- Assist with GIS and data analysis, prepare and execute queries, produce maps, spreadsheets, graphs, and other analytical products.
- Provide first response and follow-up troubleshooting services over the phone and by remote desktop support for the City's GIS; may require responding in person in the field.
- Monitor all open GIS related incidents to ensure Service Level Agreements are met; may include providing on-call support or responding in person in the field.
- Troubleshoot and support the City's GIS and related hardware and software, including peripheral equipment, printers/plotters, GPS and other mobile devices in conjunction with other Information Technology Department staff.
- Generate and manipulate images to be used in web mapping content inventory, such as web icons, logos, or thumbnails.
- Maintain confidentiality of work-related issues and City information.

MINIMUM QUALIFICATIONS:

Education, Training and Experience Guidelines:

High School diploma or GED equivalent; 30 college semester units majoring in Geographic Information Systems, Information Technology, Geography, Civil Engineering or related field AND two (2) years of experience utilizing geographic information systems including ESRI suite of products; OR an equivalent combination of education, training, and experience. A bachelor's degree in the aforementioned disciplines may substitute for the required experience. One year of experience with databases and digitizing as-built drawings plans is preferred.

Knowledge of:

- Current principles, practices, terminology, and trends in Geographic Information Systems usage and modern land based mapping application theory.
- Procedures, principles, and practices for the installation, configuration, upgrading, operation, and troubleshooting of GIS related hardware and peripherals including printers/plotters, GPS devices, mobile devices, and other related devices.
- Esri, Inc.'s ArcGIS software platform, including ArcGIS Pro, ArcGIS Enterprise, ArcGIS Desktop Version 10+, and mobile applications such as Survey123, Field Maps, and Workforce.
- Principles and practices of developing analytical maps, spreadsheets, graphs, charts, and written reports.
- Standard business applications including software required to accomplish the essential functions listed; Microsoft desktop and server operating systems, and mobile operating systems.
- Relational databases and structured query language (SQL). Familiarity with Microsoft SQL Server preferred.
- Web-based programming languages such as HTML, CSS, JavaScript, and Esri's Arcade.
- General municipal infrastructure including street networks (right-of-way and traffic control), water system networks (mains, hydrants, valves, meters), sewer system networks (gravity mains, manholes, cleanouts, laterals), and storm drain system networks (culverts, inlets, catch basins, dry wells).
- General municipal land management principles and concepts, such as land use and zoning, survey and cadastre, right-of-way, easements, dedications, land subdivision, etc.

Skill in:

- Providing efficient customer service and communicating clearly and objectively both verbally and in writing.
- Organizing with the ability to prioritize work and exercise independent judgment, wisdom, common sense, and initiative.
- Thoroughly carrying out oral and written instructions.
- Using initiative, discretion, and judgment within established procedures, guidelines, and rules.
- Defining problems, establishing facts, and drawing valid conclusions.
- Reading and understanding technical manuals and construction plans.
- Establishing and maintaining cooperative working relationships with department heads, managers, supervisors, employees, external public and private agencies, consultants, vendors, suppliers, contractors and the general public.
- Applying safe work practices.

LICENSE AND CERTIFICATION REQUIREMENTS:

- Must possess a minimum of a valid California Class "C" driver's license upon hire and maintain throughout the length of employment with the City of Victorville.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT:

Work is performed in an indoor and outdoor environment and in close proximity to other workers. Will work in the field collecting GPS points and information. May be exposed to excessive noise levels and hazardous chemicals. May be required to work within confined spaces. Incumbent shall be exposed to those conditions normally encountered in a business office environment. Physical demands are light, consisting primarily of sitting, standing and walking. May be required to lift and carry items weighing up to 75 pounds. Incumbent must be able to see and hear in the normal range with or without correction and communicate verbally and in written form with great facility and must be able to be understood. Incumbent must have the stamina to work long hours and attend night meetings after regular working hours.

Department Head Approval

Date

Personnel Officer Approval

Date