

## GIS TECHNICIAN

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

### **SUMMARY DESCRIPTION**

Under general supervision, performs a variety of responsible, technical, sub-professional office and field tasks in support of the City's Geographical Information System (GIS) and the Computerized Maintenance and Management Software (CMMS) programs; responsible for maintenance, troubleshooting and support of hardware and software used; collects GIS data, updates physical GIS maps and maintains the GIS database for the mapping of City and public works infrastructure.

### **REPRESENTATIVE DUTIES**

*The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.*

1. Perform the design, development, implementation, and maintenance of the City's GIS/CMMS systems; compile, store, inventory, and analyze data.
2. Create and maintain GIS data to support enterprise GIS efforts for the City.
3. Design and develop various GIS analysis maps for different City departments to accommodate their GIS needs.
4. Interpret engineering plans, future developments, annexations, Capital Improvement projects, and model interpretations for GIS layer and database development.
5. Conduct GPS data collection and data post-processing for GIS layer development efforts.
6. Assist in the progress of enhancing the City's GIS services to aid in the development of various City departments.
7. Ensure the integrity, quality, and accuracy of a variety of GIS information and data; field check data by driving to locations, verifying features and recording changes.
8. Operate a variety of GIS input and output devices including GPS receivers, scanners, printers, and plotters.
9. Capture data using GPS equipment; export data into shapefile format and import data into the existing GIS database.
10. Research geographic and tabular data from various sources for integration into the City's GIS database; provide updated information to external agencies as necessary.
11. Stay abreast of new and emerging trends and changing technologies in the field of GIS; read pertinent industry publications; attend meetings and training as required.
12. Gather all base data sources including improvement plans and other resources in field.
13. Prepare and print a variety of routine and special request maps.

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14. Maintain all project data updates by adding subdivision improvement plans, capital improvement plans, public works project plans, maintenance field work and pipe inspection feature changes to GIS database.
15. Manipulate developed GIS data into Public Works Computerized Maintenance and Management Systems (CMMS).
16. Provide services for Public Works CMMS, including GIS implementation and maintenance of CMMS database.
17. Ensure the maintenance of CMMS data and data input for users to withdraw and extract information for citizen requests.
18. May provide oversight and limited direction to intern or part time staff.
19. Perform related duties as required.

**QUALIFICATIONS**

*The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.*

**Knowledge of:**

- Operations, services and activities of a GIS/CMMS program.
- Principles and techniques of GIS/CMMS.
- Methods and techniques of developing maps.
- Methods and techniques of assembling and compiling geographic data.
- Personal computer hardware and software.
- Uses, capabilities, and operational characteristics of GIS equipment and specialized hardware and software.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.
- Pertinent federal, state, and local codes, laws, and regulations.

**Ability to:**

- Provide technical support to GIS/CMMS programs.
- Compile and analyze GIS/CMMS data.
- Read and interpret maps and data.
- Prepare accurate maps; scan maps and photographs.
- Create, edit and plot GIS data and graphics in specialized software programs.
- Adapt to changing technologies and learn functionality of new equipment and systems.
- Identify necessary changes and update and/or post data.
- Implement, maintain and operate GIS database systems, including related hardware and software.
- Make complete, logical and accurate mathematical calculations.
- Operate office equipment including computers, plotter, and supporting word processing, spreadsheet, and database applications.
- Communicate clearly and concisely, both orally and in writing.
- Take coaching, instruction, and feedback with a cooperative and positive attitude.
- Establish and maintain effective working relationships with those contacted in the course of work.

### **Education and Experience Guidelines**

#### **Education/Training:**

Equivalent to the completion of the twelfth grade supplemented by specialized training in GIS, engineering, design, land surveying, computer science, or a related field. An Associates Degree is highly desirable.

#### **Experience:**

Two years experience in GIS, CMMS, mapping, or related field.

#### **License or Certificate:**

Possession of an appropriate valid driver's license.

### **PHYSICAL DEMANDS AND WORKING ENVIRONMENT**

*The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.*

**Environment:** Work is performed primarily in a standard office setting with occasional travel from site to site and exposure to all types of weather and temperature conditions.

**Physical:** Primary functions require sufficient physical ability and mobility to work in an office setting; to stand or sit for prolonged periods of time; to occasionally stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

FLSA: Non-Exempt

Created: March 1987

Revised: February 1997, December 2003; March 2010; June 2014, June 2017

This class specification identifies the essential functions typically assigned to positions in this class. Other duties not described may be assigned to employees in order to meet changing business needs or staffing levels but will be reasonably related to an employee's position and qualifications. Other duties outside of an individual's skill level may also be assigned on a short term basis in order to provide job enrichment opportunities or to address emergency situations.