CITY OF SAN JUAN CAPISTRANO

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.

DEFINITION

To coordinate and perform a variety of technical GIS functions; to develop and maintain the City's GIS system and databases; to create, collect and analyze GIS data; to respond to GIS related inquiries from City staff, consultants and the general public; to provide GIS support in relation to capital improvement projects; and to perform other related duties and responsibilities as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives direct supervision from the Water Engineering Manager.

ESSENTIAL FUNCTION STATEMENTS. Essential responsibilities and duties may include, but are not limited to, the following:

Essential Functions:

1. Develops and maintains the City's GIS system and related databases pertaining to City assets, utilities, water lines, storm drains, and the sewer system.

2. Utilizes computer aided drafting technology and specialized software to draft utilities and capture related data.

3. Creates, collects, compiles, and inputs GIS data; converts digitally submitted data into compatible geographic data; analyzes data for accuracy; conducts queries in relation to captured data.

4. Prepares and provides City staff with GIS maps, atlases and exhibits used for reports and presentations.

5. Updates and maintains the City's GIS maps and related records; incorporates changes to zoning maps upon City Council approval.

6. Drafts and maintains official City drawings including performing bar-coding, scanning and filing; reviews and verifies field data.

7. Meets with and provides assistance to City Engineers, IT staff and management personnel regarding capital improvement projects.

8. Performs a variety of technical GIS and engineering functions in support of project activities including locating potential sites and calculating cut and fill volumes.

9. Researches and interprets plan data; identifies conflicts in relation to field and plan data.

10. Responds to technical GIS related inquiries from City staff, consultants and the general public.
11. Coordinates and provides training to staff regarding the use of GIS products and the work order system.

12. Researches, evaluates and provides recommendations regarding GIS technology and software.

13. Performs related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:
- GIS systems, software and databases.
- Principles and practices of GIS system maintenance and development.
- Techniques for creating, collecting and analyzing GIS data.
- Methods for converting data and conducting queries.
- GIS maps, atlases, records and drawings.
- Engineering principles and practices.
- Customer service standards and protocol.
- Pertinent Federal, State and local codes, laws and regulations.

Skill in:
- Coordinating and performing a variety of technical GIS functions.
- Developing the City’s GIS system and maintaining the integrity of database information.
- Creating, compiling and analyzing geographic data.
- Preparing and maintaining City maps, drawings and records.
- Providing technical and engineering support in relation to capital improvement projects.
- Responding to GIS related inquiries and providing systems training to staff.
- Communicating clearly and concisely, both orally and in writing.
- Establishing and maintaining effective working relationships with those contacted in the course of work.

EXPERIENCE AND TRAINING GUIDELINES

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:
Two years of experience maintaining GIS systems and databases.

Training:
Equivalent to a Bachelor’s Degree from an accredited college or university with major course work in geography, engineering, or a related field.

Licenses or Certifications:
Possession of, or ability to obtain, an appropriate, valid driver’s license.

WORKING CONDITIONS

Environmental Conditions:
Office environment.

Physical Conditions:
Essential functions may require maintaining physical condition necessary for sitting for prolonged periods of time; requires visual acuity for reading maps and engineering drawings.