



## Town of Southwest Ranches Job Description

Title: **GIS Technician**  
Department: Town Clerk  
FLSA Status: Part Time, Non-Exempt  
Reports to: Town Clerk and Town Engineer

### General Description:

This is specialized technical work in the development of Town maps and Geographic Information Systems (GIS) layers using the ESRI suite of software. Work includes assisting in the creation, maintenance, and update of the GIS database for the Town. Work is reviewed through conferences and written reports for results obtained.

### Essential Functions:

The following duties and functions, as outlined herein, are intended to be representative of the type of tasks performed within this position. They are not listed in any order of importance. The omission of specific statements of the duties or functions does not exclude them from the position if the work is similar, related, or a logical assignment for this description. Other duties may be required and assigned.

1. Creates, maintains, and updates GIS database for the Town. Designs database to include needs of all Town departments.
2. Compiles geographic data from a variety of sources including censuses, field observations, satellite imagery, aerial photographs, and existing maps.
3. Uses Global Positioning System (GPS) equipment and conventional measuring methods for locating and documenting of Town infrastructure and other assets, as deemed necessary.
4. Uses computer assisted design (CAD) equipment and software, designs and/or drafts sketches of proposed public works project.
5. Prepares metadata and other documentation.
6. Develops scripts and applications (AML, Avenue, Visual Basics, etc.) to automate common tasks.
7. Provides technical advice to supervisors.
8. Analyzes geographic relationships among varying types of data.
9. Creates maps and graphs using GIS software and related equipment.



## Town of Southwest Ranches Job Description

10. Prepares a variety of studies, reports, and related information for decision-making purposes.
11. May assist in the preparation of CAD engineering plans and specifications, and in the preparation of sanitary sewer, water, storm drainage, and street system maps, zoning and planning maps, databases and comprehensive plans.
12. Draws charts for representation of statistical data; draws finished designs from sketches.
13. Plots legal description for dedications, annexations, local improvement districts, easements or condemnations.
14. Plots records, maps and other data obtained for such typical municipal systems as streets, sewer mains and stubs, water mains, hydrants and zoning district designations, etc.
15. Assists in the maintenance of engineering, planning, and infrastructure records. Assists in preparing as-built plans for street, sewer, water, or street light and landscaping systems.
16. Coordinates with jurisdictional agencies to acquire GIS information and incorporate it into the Town's GIS database.
17. May perform a variety of office related functions, including preparing permits, correspondence, presentation materials, brochures, reducing field notes, printing materials, answering phones and responding to inquiries from contractors, developers, property owners, staff and the general public.
18. Performs related duties as assigned.
19. Perform emergency response duties as directed.

### Minimum Qualifications:

- A. Education and Experience:  
Associates degree from an accredited college or university with major course work in Geographical Information Systems, Geography, Surveying/Mapping, Engineering, Planning, Computer Science, or closely related field; supplemented by minimum two (2) years of work experience in GIS software applications; or an equivalent combination of education, training and experience.



## Town of Southwest Ranches Job Description

### B. Knowledge, Abilities, and Skills:

- Knowledge of personal computing and GIS products including, but not limited to, ESRI products such as ArcGIS Desktop 10 or later and ArcPad; some knowledge of civil engineering principles, practices and methods as applicable to a municipal setting.
- Skill in data creation and editing with Esri and ArcGIS products.
- Knowledge of mathematical engineering applications, land surveying methods and general municipal operations.
- Knowledge of applicable Town policies, laws, ordinances and regulations affecting department activities.
- Ability to prepare, organize, and maintain CAD files and related office data, reports, systems.
- Considerable knowledge and experience collecting field data to be loaded into a GIS.
- Ability to effectively communicate complex technical information, orally and in writing. Must communicate in professional engineering terminology as needed.
- Ability to handle a multitude of diverse tasks simultaneously while maintaining an attention to detail for the purpose of ensuring accuracy in task performance.
- Ability to establish effective working relationships with employees, contractors, developers, officials and the general public.

#### **Additional Standards:**

Data Conception: Requires the ability to compare and/or judge the readily observable, functional, or composite characteristics (whether similar to or divergent from obvious standards) of data, people or things.

Language Ability: Requires the ability to understand various disciplines languages, i.e. engineering, mechanical, electrical.

Intelligence: Requires the ability to apply principals and methods of computing spatial information systems.



## Town of Southwest Ranches Job Description

Numerical Aptitude: Requires the ability to add, subtract, multiply, and divide; interpret graphs; calculate decimals and percentages; utilize geometric and trigonometric principles.

Form/Spatial Aptitude: Requires the ability to inspect items for proper length, width and shape and visually read various information.

Motor Coordination: Requires the ability to coordinate hands and eyes accurately for drafting tasks and in handling materials and instruments. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

Manual Dexterity: Requires the ability to utilize a variety of modern office equipment. Must have minimal levels of eye/hand/foot coordination.

Interpersonal Temperament: Requires the ability to deal with people from a variety of departments and backgrounds in both giving and receiving instructions. Must be able to perform under stress of frequent deadlines.

### **Essential Physical Skills:**

Acceptable eyesight, hearing (with/without correction), ability to communicate (orally and in writing), reaching, pulling, pushing, walking, standing, sitting, kneeling, and bending. Must be able to carry up to 25 pounds.

### **Environmental Conditions:**

Works primarily in an office environment with some field work in adverse environmental conditions as needed.

### **Key Competencies:**

Integrity, Initiative, Judgment, Attention to Detail, Interpersonal skills, Communication (oral and written). Work is performed under general supervision of the Town Administrator or Designee and is reviewed through reports, periodic internal and external audits, conferences, and an annual performance appraisal review.

(Reasonable accommodations will be made for otherwise qualified individuals with a disability)