

GIS Technician I

DEPT: Water Systems
DIV:
DATE: December 2018

FLSA: Non Exempt
EEOC: Technician



GENERAL PURPOSE

Performs a variety of duties related to the development or creation of digitized maps through a geographic information system (GIS) using ArcGIS, AUTOCAD or related computer program application(s).

SUPERVISION RECEIVED

Works under the guidance and direction of the GIS Coordinator.

ESSENTIAL FUNCTIONS

Creates digital basemaps; digitizes existing and new additions to public works and engineering systems, etc. Primarily assigned to perform services for Water Department.

Utilizes ArcGIS, AutoCad and related software to create or incorporate mapped regions into digital basemap; establishes database tables and maintains databases as additions and removals are required; prepares written documentation for GIS functions; conducts spatial analysis to determine densities and occurrences of various elements within the GIS database.

Researches records of plats and property descriptions to determine property location, boundaries and size; draws appropriate changes or additions to existing maps; works with legal descriptions as required; researches and conducts miscellaneous project assignments.

Performs GPS field work and enters into the city GIS system city culinary water, pressure irrigation water, sewer, and storm drains, etc.; maps and plots locations of utility lines, valves, manholes, lift stations, wells, roadway improvements, etc. as installed; maps the elevation of sewer/storm drain manhole flow lines, rim elevations, etc.

Reproduces maps, surveys, engineering drawings, graphics and data base reports from GIS system and related software; operates computer and GPS equipment.

Creates and maintains web maps and mobile apps using ArcGIS server, ArcGIS Online, ArcGIS App and collector for ArcGIS.

Performs other related duties as required.

MINIMUM QUALIFICATIONS

1. Education and Experience:

- A. Equivalent to an Bachelor's Degree related to GIS, Mapping, Surveying, Computer Science, or a closely related field

OR

- B. An equivalent combination of job related education, training and/or experience.

2. Required Knowledge, Skills, and Abilities:

Considerable knowledge of complex math and computer aided engineering; technical tools and equipment associated with drafting and cartography; mapping scales and their most appropriate use; survey practices and procedures; legal documents and terminology; computerized mapping software and methods (AUTOCAD, ArcGIS, GPS Pathfinder, Windows, etc.); various geographic databases, including State of Utah, USGS digital line graphics, TIGER data file and related commercially developed data; surveying practices including GPS point retrieval, State Plane Coordinate Systems (NAD 27 and NAD 83), quality assurance and control methods.

Skill in the operation of technical GIS field equipment and software.

Ability to perform complex computer mapping and mapping evaluations; read and understand legal documents; perform complex mathematical computations; operate calculators, spreadsheets and standard office equipment; work independently; communicate effectively, verbally and in writing; develop effective working relationships with supervisors, fellow employees, and the public.

3. Special Qualifications:

A valid, lawful driver's license is required

4. Work Environment:

Essential functions of the position performed in both a typical office setting with appropriate climate controls, and an outdoor weather setting with exposure to extreme cold and heat. Tasks require occasional physical activities, not generally involving muscular strain, such as walking, standing, stooping, sitting, reaching, talking, hearing and seeing. Rapid work speed required to perform keyboard operations. Common eye, hand, finger, leg and foot dexterity are required. Mental application utilizes memory for details, verbal instructions, emotional stability and discriminating thinking. Regular exposure to outside weather extremes and in dangerous settings related to the public right of way operations and construction sites.

Disclaimer: The above statements describe the general nature, level, and type of work performed by the incumbent(s) assigned to this classification. They are not intended to be an exhaustive list of all responsibilities, demands, and skills required of personnel so classified. Job descriptions are not intended to and do not imply or create any employment, compensation, or contract rights to any person or persons. Management reserves the right to add, delete, or modify any and/or all provisions of this description at any time as needed without notice. This job description supersedes earlier versions.

I _____ have reviewed the above job description. Date: _____
(Employee)