JOB DESCRIPTION

Position: GIS Analyst

Department: Information Technology

Reports To: Information Technology Manager
Revised 10/18/2018

General Summary

Information Technology, a division of the Finance Department, is responsible for the City's technology systems, including Geographic Information System (GIS) Technologies. With minimal supervision, the GIS Analyst oversees the day-to-day operation, continued development, and maintenance of GIS data for the City of Sidney. The GIS Analyst coordinates and maintains technical standards associated with spatial data and GIS technology. The Analyst uses GIS technology, supports its use by other departments, and provides support and training to users in GIS. The Analyst will combine data from many sources, be the resource for mapping and spatial analysis, and move data from original sources to end users. The Analyst will assist the IT Manager with GIS policies, needs, and data structures for spatial data and GIS technology projects of City departments. The position will need knowledge of City department's data sources and processes. The Analyst will establish a GIS Core User Group and maintain the GIS Strategic Plan as well as the short term and annual goals.

Nature and Scope

The GIS Analyst position reports directly to the IT Manager. This position manages the GIS spatial data for the City of Sidney. The GIS Analyst uses ESRI software for the creation, manipulation, maintenance, quality control and documentation of geo-spatial data. The position is responsible for data editing, data collection, data documentation, data accuracy and map production for City Departments and will also create, maintain, update, query, view and retrieve processed GIS data on multiple databases. The Analyst assists staff in developing and managing databases related to spatial data. The Analyst requires extensive technical skills with up-to-date, hands on capability to use current GIS technology and use Python programing language and ARGIS online functions to deploy GIS based products and services, and functions as webmaster for online GIS services. The GIS Analyst assists with technical aspects of projects based on GIS by other departments (especially Underground Utilities, Engineering, Public Works, Water and WasteWater Treatment Plants, Streets and Public Safety departments). Knowledge of Engineering software such as Autocad, Microstation and Bentley's Sewer and Water Gems and provide GIS support for GrantiteXP and CityWorks. The Analyst will review and manage the flow of data between departments and to contractors, residents and public.

Job Responsibilities

The major responsibilities include, but are not limited to:

- Creates maps using planimetric and thematic mapping techniques and aerial and satellite data using ESRI GIS software.
- Create new GIS layers.
- Coordinates the acquisition and distribution of spatial data.
- Update maps as new data is received relative to new subdivisions, developments, capital improvement projects, zoning requirements, and other projects.
- Maintain and update zoning maps.
- Manages GIS projects.
- Manages online tools using spatial data.
- Develops operating and database standards.
- Maintains and updates databases using GIS.
- Develops and maintains links between various databases.
- Assist with strategies for maintaining database security, implementing new software purchases and any agreements regarding the City's GIS.
- Performs analysis of spatial data.
- Prepares graphics, reports, maps, presentations, charts and other documents based on analysis of spatial data and assists and provides users with such information.
- Conducts mapping research in the field and in the office.
- Convert hardcopy engineering drawing into electronic formats.
- Interprets and prepares data such as field notes, GraniteXP, and CityWorks information.
- Coordinates GIS implementation and data updates with other departments.
- Manage easements, leases, street and alley vacations, and traffic information.
- Responsible for assigning addresses for the City and surrounding areas.
- Assist with updating the City's property and owner database.
- Participate in departmental GIS meetings.
- Coordinate, train, and instruct staff in the operation of GIS as necessary.
- Responsible for assisting patrons with property data including easements, protective covenants, zoning, and create maps with property and utility data.
- Enter department changes to the City's website and social media sites as requested.
- Conduct legal research information of land deeds and easements. Perform research for other staff on utilities, traffic, zoning, property information, etc. Have the ability to accurately locate and review records, maps, construction plans and documentation to input into GIS.
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Requirements

- Working knowledge of, experience with, and demonstrated skill using ESRI's ArcGIS software suite.
- Ability to edit geo-spatial data and maps with accuracy and precision and to document data, edit procedures, data quality, and metadata.
- Keep accurate records, maps and database information of City Infrastructure. Review plans to determine new and replacement infrastructure to place into GIS.
- Knowledge of symbols and terminology using in civil, architectural or electronic engineering drawings.
- Digitizing and data manipulation procedures for GIS.
- Understand GIS mapping principles, aerial photography, database design.
- Knowledge of geo-spatial editing tools methods and procedures.
- Become familiar with industry specific (such as water and wastewater or planning and zoning) terminology.

- Read and use zoning maps, quarter-section maps, plat maps, land use maps, single line maps, and aerial maps.
- Perceive color as defined by the Inter Society Color Council-National Bureau of Standards system.
- Read and interpret legal descriptions.
- Experience in application development and programming, database design, digitizing and data manipulation procedures in GIS.
- Understand LiDAR data and working knowledge of GPS technology.
- Have excellent communication skills and be able to develop effective working relationships with the general public, other City departments, government agencies, and local jurisdiction in writing, in person, or over the telephone.
- Work with the County on data sharing, maintaining data and be involved with scheduling of aerial flyover data.
- Keep end user satisfaction top priority.
- Be familiar with the City's Code of Ordinances, Zoning Code, Engineering Standards, Various Policies, Deeds, Leases, Easements, and Emergency Operations Center (EOC) activation.
- Knowledge in City's modeling software including water modeling and hazardous material cloud modeling.

Major Challenges

- Ability to deal with interruptions and prioritize urgent tasks.
- Ability to deal courteously, effectively and promptly with City staff, Council, and the public.
- Explain technical information in layman's terms.

Job Qualifications

- Associate's degree or equivalent course work at a technical or vocational school, in geographic information systems, geography, planning, landscape architecture, civil engineering, computer science, or a related field, or two years of experience working with geographic information systems. Other combinations of experience and education that meet the minimum requirements may be substituted.
- GIS certification can be used for equivalency.
- Experience should include ESRI ArcGIS suite, GIS data conversion and editing, GIS mapping, database management, spatial analysis and reporting.

This description in no manner states or implies that these are the only duties and responsibilities to be performed by the employee filling this position; he/she will be required to follow other instructions and perform any duties required by the employee's supervisor or his/her designee or any other job deemed necessary.