GIS SPECIALIST

JOB DESCRIPTION

Department:	Public Works	**Division/Section:**	Engineering
Work Location:	Public Works	**Percent Time:**	100% (1.0 FTE)
Job Type:	Civil Service	**FLSA Status:**	Non-exempt
Reports To:	City Engineer	**Union:**	Non-Union

JOB SUMMARY

The GIS Specialist is responsible for a wide range of multi-faceted, professional duties in the operation and support of the City's Geographic Information System (GIS). Duties include organizing and executing the analysis, design, implementation, maintenance, and modification of the City's Geographic Information System (GIS). Work is performed independently under the general supervision of the City Engineer.

Class Characteristics

This position is responsible for supporting Geographical Information System functions for the City within general policy and procedural guidelines and for adapting specific program procedures and activities to meet the needs of the City, other agencies, and technological advances. Successful performance of the work requires skill in proactively planning, administering and evaluating program goals, objectives and budgets to define and integrate the requirements of various internal and external clients. This class is distinguished from other information services classes by the level of technical knowledge of and emphasis on GIS software applications/extensions and other GIS related software.

ESSENTIAL FUNCTIONS

- General understanding of geospatial data acquisition to locate city infrastructure systems such as sanitary sewers, storm sewers, lights, traffic signals, signs, parking meters, and other information.

- Assists in development and implementation of city and regional GIS data standards, processes, and best management practices.

- Performs quality control on GIS data including researching, interpreting, and validating sources of information in order to identify and correct errors or omissions in data and to keep data in compliance with city and regional GIS data standards.

- Imports, exports, and converts data from various formats and sources for use in GIS and related systems such as enterprise asset management systems.

- Creates, modifies and maintains various maps, applications, and other graphic information.

- Assists in coordinating data sharing, report and map generation of GIS services among City departments and public requests.

- Assists in creating workflows for city departments to complete tasks more efficiently and make data-informed decisions.

- Partners with other governmental agencies, regional GIS participants, and citizen groups to deliver beneficial mapping and data services to the public.

- Researches and investigates GIS industry techniques and products; evaluates and recommends GIS software tools.

- Writes documentation for databases, applications, workflows, and other GIS outputs

- Performs other duties or assumes other responsibilities as apparent or assigned.

JOB REQUIREMENTS

Education & Experience:

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

- Associate's degree in GIS, Computer Science, or a closely related field from an accredited college. A Bachelor's degree in GIS, Computer Science, or a closely related field from an accredited college is preferred.

- Two years of experience using Geographic Information Systems including: ArcMap and/or ArcGIS Pro, ArcGIS Online and Web Apps (Field Maps or Collector, Survey123, WebApp Builder). A Bachelor's degree in GIS, Computer Science, or a closely related field from an accredited college may be substituted for the experience requirement.

- Experience using ArcGIS Enterprise (Portal, ArcGIS Server, SQL Server) and QGIS is preferred.

Knowledge of:

- General knowledge of:
  - Geography and cartography;
  - ESRI and other open source GIS software/applications such as QGIS;
  - Microsoft Office software, and
  - Other software as required, or the ability to learn;
  - Methods, practices, and techniques for the coordination and implementation of GIS system application;
  - Database geo-referencing, scanning, plotting and conversion routines.

- Basic functionality and minimal scripting techniques using Arcade, Python, or similar tools is desired.

Ability to:

- Produce cartographic maps and reports using GIS databases.

- Create and maintain derivative GIS databases including functions such as domains, subtypes, relates, and attachments;

- Perform data and geographical analyses;

- Customize pre-built applications from ESRI.

- Continually enhance scripting techniques and skills using Arcade, Python, or similar tools.

- Read, analyze, and interpret technical manuals and data, construction plans, plats, deeds, easements, etc.

- Demonstrate sound time-management skills by effectively or efficiently organizing, prioritizing, and completing multiple assignments in a timely manner.

- Communicate effectively, both verbally and in writing, with a wide variety of audiences, including the communication of complex technical knowledge to City Council, boards, commissions, citizens.

- Work effectively in a team environment.

- Work flexible hours as needed.

- Assist with management and coordination of projects, consultants, contractors, and staff as necessary to build, operate, maintain, and enhance GIS datasets

Licenses, Certifications and Memberships

- Due to the performance of field duties, the ability to operate a City vehicle will be required; therefore, a valid Illinois Class D driver's license and acceptable driving record at time of hire and throughout employment in the position is required.

Supervision Received

- This position is expected to work with limited supervision.

Security Level

- Level MVR: Essential functions require frequent use of City vehicles.

Supplemental Information

Working Environment: Work typically involves light to moderate work in an office setting, although some fieldwork in inclement weather may be necessary.

Physical Requirements: There is a frequent need to sit and an infrequent need to stand, walk and to lift objects up to 50 pounds.

Vision: See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; visually inspect work in progress.

Hearing: Hear in the normal audio range with or without correction.

The work environment characteristics described herein are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The physical demands described 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 functions.

The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

The job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.

Class Specification History

New class: 03/02/2022
General revisions: 05/29/2024

For HR/Finance Use

Job Class Code	Pay Grade
	~~236~~107
EEO Category	**LVL**
2--Professional	