

MAJOR FUNCTION

This is skilled technical work designed to support the development, operation, maintenance, and enhancement of designated components of the City's geographic information systems (GIS). Tasks are performed in the field and office, during which class incumbents use technical expertise, in combination with a variety of electronic devices, to identify, plot, collect, store, transfer, and display mapping, geographic, land use, and demographic information, as applicable or assigned. Work is performed under the general supervision of a professional and is subject to review while in progress and upon completion, through oral and written reports, observations, results achieved and adherence to GIS protocol.

ESSENTIAL AND OTHER IMPORTANT JOB DUTIES**Essential Duties**

Assists other technical and professional staff in collecting, inputting, updating, and maintaining information for enterprise components of the City's GIS. Marks location points for data collection. Gathers specific geographic, spatial, survey and engineering data for use in the GIS. Employs accepted protocol to ensure data integrity during collection, input, editing and conversion. Assists in analyzing data and generates maps and other products, as directed. Updates or reconciles related information in related databases. Performs data distribution, transfer, and sharing functions, as directed. Conducts paper and web-based research on related technical issues, as directed. Assists other departments and the general public by providing GIS data, products and services specific to the enterprise to which the position is assigned. Performs related work as required.

Electric Utility Power Engineering: Assist technical and professional staff by collecting, inputting, updating, and maintaining information for the Electric Utility components of the City's GIS. Locate electrical facility structures/data; gather specific geographic, spatial and engineering data for use in the Electric GIS. Prepare Electric Utility design, drawings, generate electrical maps, and maintain Electric SDE dataset for Electric Utility projects and programs.

Other Important Duties

May provide input for the procurement and upgrade of electronic equipment and software. May assist in instructing other department users in proper use of GIS system software. Performs related work as required.

DESIRABLE QUALIFICATIONS**Knowledge, Abilities and Skills**

Knowledge of the core businesses of the area to which the position is assigned. Knowledge of the principles of geography as they relate to the earth's surface. Knowledge of map preparation, computer aided mapping and illustration work. Knowledge of geo-processing technology. Knowledge of mobile data collection. Knowledge of surveying and engineering mathematics and their applications to surveying and engineering computations. Knowledge of documentation and graphic representation. Knowledge of Internet technology, including HTML and FTP. Ability to comprehend GIS data structures and an understanding of how to edit, query, and manipulate them. Ability to perform technical surveying computations, including coordinate geometry calculations. Ability to use the tools and concepts of the enterprise in which the employee works. Ability to solve problems and gather necessary information. Ability to work from and interpret construction plans, utility maps, field notes, tie record books, blueprints and drawings. Ability to carry out difficult written and oral instructions. Ability to establish and maintain effective working relationships with others. Ability to explain technical information to non-technical users and tactfully deal with the public. Ability to express ideas effectively both orally and in writing. Ability to make accurate, neat and legible representations. Skill in the care and use of pertinent equipment and instruments. Skill in the use of

personal computers and associated applications and programs necessary for successful job performance.

Minimum Training and Experience

Completion of a two-year vocational or college level program in computer drafting, computer science, geography, cartography, land surveying and mapping, geomatics, engineering technology or a related field, and two years of technical experience that includes work in at least two of the following areas: computer aided drafting, GIS/GPS, surveying, locating underground utilities, utility mapping, construction inspection, or engineering technology; or an equivalent combination of training and experience.

Necessary Special Requirement

Must possess a valid Class E State driver's license at the time of appointment.

Established: 09-30-05

Revised: 02-12-10*

10-12-11