## GIS SPECIALIST

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

## SUMMARY DESCRIPTION

With limited supervision, install and maintain a variety of computer-based software and hardware including but not limited to Geographical Information Systems software (GIS), and Computerized Maintenance and Management Software (CMMS); perform system administration, system integration, system maintenance, project management, training, evaluate system hardware and software requirements; perform other tasks related to system development and implementation of a comprehensive GIS and CMMS; responsible for recommendations, installation, maintenance, troubleshooting and support of hardware and software used; expected to take ownership of, and complete implementation of the City's GIS and CMMS asset management and reporting system; and perform other duties as assigned. This is a skilled, journey-level position serving as the technical expert; may supervise Technicians or Interns.

## REPRESENTATIVE DUTIES

*The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.*

1. In a leading capacity, provides design, development, implementation, integration, installation, and maintenance of the City's GIS/CMMS system.

2. Recommend, purchase, install and support GIS/CMMS software.

3. Make equipment recommendations; troubleshoot hardware, software and peripheral problems.

4. Interpret base maps; monitor and maintain parcel/land use maps and databases; assign, verify and coordinate boundaries.

5. Interact with technical service teams on system solutions related to GIS/CMMS, including Information Systems Department, application developers, and consultants.

6. Prepare and maintain written records and reports.

7. Coordinate contract work and projects with City departments and external agencies.

8. Develops reporting data from existing GIS/CMMS databases.

9. May supervise subordinate staff, such as the GIS Technician, part-time assistant, or Interns.

10. Maintain safe working areas and conditions.

11. Performs manipulation of developed GIS data into Public Works Computerized Maintenance and Management Systems (CMMS).

12. Provides services for Public Works CMMS, including GIS implementation, maintenance of CMMS database.

13. Provides reporting to Public Works Divisions on work history, asset history, and state mandated requirements.

14. Performs continued development of CMMS to help enhance Public Works services, customer relationships, and asset management.

15. Ensures the maintenance of CMMS data and data input for users to withdraw and extract information for citizen requests.

16. Maintain reports, work history, and asset information to streamline Utility Divisions master plan and state mandated requirements.

17. Interpret engineering plans, future developments, annexations, Capital Improvements projects, and model interpretations for GIS layer and database development.

18. Coordinate system development to serve GIS/CMMS users, including special projects and work with contractors, consultants, and external agencies.

19. Provides administration for integrated software as it ties into the City's GIS/CMMS.

20. Provides training and instruction to users of GIS/CMMS software.

21. Perform a variety of other duties as assigned.

## QUALIFICATIONS
*The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.*

### Knowledge of:
- Operations, services, and activities of a GIS program.
- Principles and practices of land-based mapping application theory.
- Methods and techniques of implementing and deploying GIS-related applications and solutions using a variety of technologies.
- Principles of supervision, training, and performance evaluation.
- Principles and procedures of record keeping.
- Principles of business letter writing, business arithmetic, and basic report preparation.
- GIS hardware, software, server-based applications, and web-based applications.
- A range of software tools for GIS map creation and maintenance, data analysis, and Internet-enabled GIS, City standard software, database and operating systems.
- Global Positioning System (GPS) hardware and software.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.
- Pertinent federal, state, and local laws, codes, and regulations.

### Ability to:
- Coordinate and direct a GIS program.
- Supervise, organize, and review the work of assigned staff involved in City infrastructure mapping and a variety of GIS services.
- Select, train, and evaluate staff.
- Recommend and implement goals, objectives, policies and procedures for providing

GIS mapping services.
- Understand the organization and operation of the organization and of outside agencies as necessary to assume assigned responsibilities.
- Understand, interpret, and apply general and specific administrative and departmental policies and procedures as well as applicable federal, state, and local policies, laws, and regulations.
- Prepare clear and concise reports.
- Participate in the preparation and administration of assigned budgets.
- Exercise independent judgment within procedural guidelines.
- Work independently in the absence of supervision.
- Take coaching, instruction, and feedback with a cooperative and positive attitude.
- Identify and conceptualize information needs, work flow sequences, and data acquisition problems.
- Develop economical and feasible presentations, making the best use of available GIS applications and design constraints.
- Effectively participate in GIS application programming and testing activities.
- Reason logically and clearly with symbolic information.
- Perform effectively under the conditions associated with the work.
- Develop and maintain appropriate documentation.
- Exercise good judgment and maintain confidentiality regarding critical and sensitive information, records, and reports.
- Analyze problems, identify alternative solutions, project consequences of proposed actions and implement recommendations in support of goals.
- Provide technical advice, staff training, and consultation to ensure efficient GIS systems utilization.
- Adapt to changing technologies and learn functionality of new equipment and systems.
- Plan and organize work to meet changing priorities and deadlines.
- Effectively represent the GIS program to outside individuals and agencies to accomplish the goals and objectives of the unit.
- Work cooperatively with other departments, City officials, and outside agencies.
- Respond tactfully, clearly, concisely, and appropriately to inquiries from the public, City staff, or other agencies on sensitive issues in area of responsibility.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

## Education and Experience Guidelines

### Education/Training:

An Associates Degree from an accredited college, with major coursework in geography, information systems/technology, planning, computerscience, environmental science, public administration, or business administration.

### Experience:

Four years of responsible experience related system design and analysis, application development, project management, automated mapping or GIS.

## License or Certificate:

Possession of an appropriate, valid driver's license.

## PHYSICAL DEMANDS AND WORKING ENVIRONMENT

*The conditions 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 job functions.*

**Environment:** Work is performed primarily in a standard office setting with occasional travel from site to site and exposure to all types of weather and temperature conditions.

**Physical:** Primary functions require sufficient physical ability and mobility to work in an office setting; to stand or sit for prolonged periods of time; to occasionally stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate office equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

FLSA: Non-exempt

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This class specification identifies the essential functions typically assigned to positions in this class. Other duties not described may be assigned to employees in order to meet changing business needs or staffing levels but will be reasonably related to an employee's position and qualifications. Other duties outside of an individual's skill level may also be assigned on a short term basis in order to provide job enrichment opportunities or to address emergency situations.

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