Public Works Systems Analyst

Purpose of the role:	Under general supervision, participates in the implementation, operation and maintenance of the City's Public Works computing and technology systems; analyzes, tests, installs and maintains information systems programs and applications; installs and provides technical assistance and user training for PC and other system hardware and software; provides training on standard software applications; and performs related duties as assigned.
Distinguishing Characteristics:	Incumbents work independently, applying well developed computing knowledge and exercising judgment and initiative. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit. Work is normally reviewed only on completion and for overall results.
Essential Duties and Responsibilities:	*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.*

- Participates in the analysis, implementation, operation, security, data storage and maintenance of the City's Public Works computing systems (examples include Computerized Maintenance Management Systems (CMMS), Supervisory Control and Data Acquisition (SCADA) and Geographic Information Systems (GIS); installs and provides technical assistance and user training for PC and handheld devices hardware and software.

- Performs and implements systems maintenance, making modifications as necessary to meet user requirements; reviews and modifies programs to correct errors and improve efficiency and cost-effectiveness.

- Compiles, integrates, and analyzes information gathered from users to assist in the selection or modify computer programs; evaluates third-party vendor software.

- Participates in developing systems test plans; tests programs and procedures during installation to ensure system requirements are being met completely and accurately.

- Installs computer equipment and software; customizes installed software to the specific requirements of the user department.

- Responds to inquiries and requests and provides technical assistance on Public Works PC systems and programs; troubleshoots hardware and software problems and coordinates activities by users and vendors to resolve them.

- Develops curriculum, training aids, and manuals on software programs; schedules and conducts training programs; initiates or

coordinates communications regarding PC systems, programs, and applications.

- Maintains software licensing; responds to inquiries and requests for new software programs; purchases software and appropriate licenses for all standard and non-standard software programs.

- Maintains current knowledge of information technology trends and innovations; attends and participates in job-related seminars and professional group meetings; reads applicable industry publications.

- Performs related duties as required.

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.

Desired Minimum Qualifications:

Knowledge of:
- Principles, techniques and procedures of computer programming for administrative and business system applications.
- Wireless networking, TCIP/LAN/WAN networking, including access and security
- Structured Query Language (SQL) database design and management
- Public Works computer systems, applications and programs
- Virtual storage and disaster recovery techniques and applications
- Mobile applications and devices
- Principles, methods and techniques used in the operation of management information systems.
- Principles and practices of computer systems analysis, including database design and management.
- Functions, capacity, characteristics, and limitations of standard computers and related equipment.
- Principles and practices of systems troubleshooting.
- Principles and techniques of computer systems, and networking.
- Use, capability, characteristics and limitations of computers and related equipment.
- Principles and practices of training as related to personal computers.
- Standard database, word processing, spreadsheet and report generation PC software packages.
- Pertinent federal, state, and local laws, codes, and regulations.

Ability to:

- Analyze and define user problems and requirements and develop efficient, cost-effective computer applications solutions.
- Analyze and define problems and conceptualize practical computer solutions.
- Analyze systems requirements and problems and recommend new or modified PC programs to meet department requirements.
- Plan and conduct effective user training courses.
- Prepare clear, concise and accurate program documentation, user procedures, prepare reports of work performed, and other written materials using standard office and computer equipment.
- Work on multiple concurrent projects with strict deadlines and with frequent interruptions.

- Organize work to meet rapidly changing priorities.
- Troubleshoot hardware and software problems and make or recommend modifications.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Respond and perform assigned duties in the event of a City-declared emergency.

Competencies:

➤ Effective Communicator
➤ Team Builder
➤ Strategic Thinker
➤ Accountable
➤ Problem Solver and Decision Maker
➤ Planner and Organizer
➤ Technically Knowledgeable

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:

Education and Experience Guidelines:

Education/Training:
A Bachelor's degree from an accredited college or university with major course work in computer science, management information systems or a closely related field.

Experience:
Two years of progressively responsible experience in systems analysis.

Licenses; Certificates; Special Requirements:
A valid Class C California driver's license is required.

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.

Physical and Environmental Conditions:

Physical: Sufficient physical ability to work in an office setting; sit, stand, walk, reach, twist, turn, kneel, bend, squat, and/or stoop for prolonged periods of time; perform duties requiring grasping, repetitive hand movement, and fine coordination; and operate office equipment. **Vision:** See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents and to operate office equipment. **Hearing:** Hear in the normal audio range with or without correction.

Environment: Standard office setting; regular interaction with City staff.

*Class specifications are only intended to present a descriptive summary of the range of duties and responsibilities associated with specified positions. Therefore, specifications **may not include all** duties performed by individuals within a classification. In addition, specifications are intended to outline the **<u>minimum</u>** qualifications necessary for entry into the class and do not necessarily convey the final qualifications of incumbents within the position.*

Date Adopted: 10/10/2017
Date Revised: