

**CITY OF MOUNTAIN VIEW
CLASS SPECIFICATION**

Position Title: Senior Information Technology Analyst—SCADA (Supervisory Control and Data Acquisition)	Job Family: 2
General Classification: Management	Job Grade: 35

Definition: Under general supervision of the Principal Civil Engineer, Utilities Services Manager, Streets and Landfill Closure Manager, or assigned management staff, this position performs advanced-level technical duties in the analysis, design, programming, testing, installation, and maintenance of data processing systems, Supervisory Control and Data Acquisition (SCADA) systems, programmable logic controllers (PLC), and other control systems, computer equipment, and peripherals; develops and maintains database applications; designs and creates reports; represents the City in committees and technical user groups; provides user training and develops system documentation; and performs other related work as required.

Distinguishing Characteristics: The Senior Information Technology Analyst—SCADA independently performs specialized technical duties related to the development, installation, and maintenance of SCADA and data acquisition/processing systems. The SCADA Analyst also provides end-user training and support; acts as liaison between City staff, departments, and consultants; acts as systems administrator for City SCADA systems; performs technical lead project management responsibilities; and performs related duties as required. Incumbents are expected to possess senior-level technical skills and receive only occasional instruction, assistance, or direction as new or unusual situations arise. This position may directly manage or provide technical oversight to lower-level staff.

Examples of Duties: Duties may include, but are not limited to, the following:

1. Maintain the SCADA system and data networks to ensure reliability of information provided from the City's utilities and landfill gas collection systems. Use network monitoring software to receive alerts and monitor the status of servers, PCs, and IP-based SCADA equipment.
2. Design, develop, implement, and operate systems related to SCADA applications; install new releases and program fixes for SCADA system applications, software, and hardware; and provide database administration and maintenance.
3. Identify long-term needs for SCADA systems and develop system designs and implementation plans, including project costs and timelines.
4. Perform specialized duties in support of SCADA systems, including PLC programming; troubleshooting and correcting programming, configuration, and interface issues for SCADA/PLC/HMI systems; establish and maintain remote operation technology and

communication networks; evaluate SCADA system communications performance; and monitor SCADA system data collection.

5. Act as liaison between City staff and consultants regarding system development and operation and manage contracts for hardware and software support and maintenance. Participate in purchasing system equipment and software and work with various system integrators on new and existing control systems design, programming, installation, upgrades, documentation, and maintenance.
6. Monitor system security, identify unauthorized access and potential security breaches, and create and maintain SCADA network user accounts, system program files, documentation, and records. Develop and implement processes to ensure data security and recoverability to minimize the impact of system failures, security breaches, and disasters. Ensure compliance with City back-up policies and procedures.
7. Develop training materials and provide training and technical assistance to operations and maintenance staff for SCADA applications, computer control equipment, and SQL data reporting; and develop ad hoc and complex reports from enterprise applications using SQL, Access, Excel, and related reporting tools.
8. Participate on various internal and external committees and/or user groups.
9. Respond to SCADA failures and emergencies, including evening and weekend responses.
10. Perform other related duties as assigned.

Minimum Qualifications:

Knowledge of: Control systems engineering design and implementation techniques and practices; principles and practices of SCADA system design, development, documentation, and operation, including PLC and RTU programming, HMI system configuration, control systems networking and communications, and data management; principles and practices of telecommunications and network development; principles and practices of electronics and electric circuits; principles of computer systems and peripheral components; principles and practices of system security, backup, and recovery; and functions and operations of various database management systems.

Ability to: Effectively organize and complete projects and assignments in a timely manner; explain highly technical information to nontechnical individuals; analyze and develop functional and technical requirements and specifications; read and interpret complex technical publications, manuals, electrical drawings, and other documents; conduct feasibility studies; adapt and apply new technologies; operate and maintain hardware and

software systems; troubleshoot system software, hardware, and user problems; integrate various software applications; maintain accurate up-to-date records; conduct research and analysis to solve complex technical and administrative problems and recommend alternatives; learn new systems and programs as dictated by future technological advancements and City and department needs; gather information and prepare clear and concise reports and correspondence; provide support instruction and training to department staff and end users; provide good customer service; and establish and maintain effective working relationships with those contacted in the course of work.

Experience and Training Guidelines: A combination of relevant experience, education, and training that will satisfy the required minimum qualifications, knowledge, and abilities.

A technology certificate from an accredited college or trade school in information technology, computer applications, computer information systems, application development database design, programming, technology project management, or related field and five years of increasingly responsible IT Analyst-level experience in private-sector or public-sector positions in information technology, including network development, systems analysis and development, system integration, or project management. Experience in a lead or supervisory capacity or completion of the City's supervisory training course is highly desirable.

OR

An associate's degree or completion of 60 semester or 90 quarter units at an accredited college or university in business information systems, computer science, information technology, or related field and five years of experience in private-sector or public-sector positions, including network development, systems analysis and development, system integration, or project management. Experience in a lead or supervisory capacity or completion of the City's supervisory training course is highly desirable.

OR

A bachelor's degree or four years of postsecondary education from an accredited college or university with a concentration in business information systems, computer science, information technology, or related field and four years of experience in private-sector or public-sector positions, including network development, systems analysis and development, system integration, or project management. Experience in a lead or supervisory capacity or completion of the City's supervisory training course is highly desirable.

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In addition to the requirements above, experience in the following is highly desirable:

- SCADA systems in a utilities environment (water, sewer, wastewater, and/or landfill gas collection).
- Installing and maintaining electrical system wiring and components.
- Designing, installing, and maintaining telecommunications equipment and networks.

Required Licenses or Certificates: Possession of a Class C California Driver License. Possession of a license as a Control System Engineer or Electrical Engineer issued by the California Board for Professional Engineers, Land Surveyors, and Geologists is highly desirable.

Working Conditions: May be required to work extended or irregular hours and be available for after-hours response for emergencies or system failures.

Established: September 2023

Revised:

HRD/CLASS SPECS

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