

CITY OF HAMILTON

PUBLIC WORKS DEPARTMENT

(ENVIRONMENT AND SUSTAINABLE INFRASTRUCTURE DIVISION – WATER AND WASTEWATER OPERATIONS – LOCATION – 700 WOODWARD AVENUE.)

SUPERINTENDENT - SCADA

SUMMARY OF DUTIES

Reporting to the Manager of Plant Operations, the Superintendent of SCADA will provide leadership to subordinate staff in a team environment and assume accountability and responsibility for the overall development, implementation and execution associated with the SCADA Systems for the water and wastewater treatment facilities and outstations as required as part of the City's Plant Operations Section's responsibilities. The incumbent will have overall responsibility for the planning, management, administration, operations, maintenance and upgrades of the City's SCADA systems and area wide networks. The incumbent will also provide leadership in the implementation and adherence to the SCADA standards on projects implemented under the City's Capital Programs.

This position provides SCADA expertise for all water and wastewater facilities operated by the city, including the development of SCADA standards, programming for process control and data reporting, project design specification and detailed review of engineering design and review of construction compliance with standards and specifications.

The SCADA Superintendent will be required to communicate with staff in areas of operations, maintenance, studies or design, construction, as well as with contractors and consultants to resolve problems or develop policies or specifications for SCADA systems in the City.

The Superintendent will possess a demonstrated record of strong leadership, technical competence, customer focus, innovation/creativity, team advocacy and is committed to results. The incumbent will have a high level of personal integrity and will be an excellent communicator.

GENERAL DUTIES

The Superintendent must work as part of a team to deliver technology solutions to all parts of the Plant Operations section. As a member of this team, the Superintendent is required to openly communicate plans and strategies to overcome system specific problems so that potential impacts to other systems can be mitigated.

The Superintendent will lead the overall management and supervision of the City's SCADA systems, including the integration of the new capital projects into Plant Operations facilities. Some of the key responsibilities will include:

- Operation and Maintenance of the City's SCADA system and associated communications network.
- Data collection and archiving to ensure compliance with all the regulatory requirements.
- Development and production of daily and other operational performance reports.
- Development and implementation of a SCADA Master Plan.
- Implement strategies to improve SCADA programs effectiveness and efficiency.
- Maintain SCADA standards including: graphics, tagging, database configuration and programming for all City facilities. These standards need to be maintained and documented, and must be enforced for anyone that works on the system.

- Creates and maintains a system to manage back-ups for all programmable field devices. Develops a central inventory of program back-ups including software version, code revision, and file date.
- Reviews, in detail, SCADA system programming by contractors or consultants for compliance with City's standards and provide direction when necessary for proper integration.
- Provides SCADA development implementation for all capital upgrades at City facilities.
- To direct Consultant Engineers in the preparation of SCADA contract specifications including, control, instrumentation, start-up, and commissioning. Administers contracts and consultant assignments including (but not limited to) scheduling work, coordinating with other internal and external parties, assesses work performed and compliance with standards.
- To review and approve all PLC, network, and computer hardware specifications and equipment control schematic drawings.
- To administer routine maintenance of SCADA system hardware and software (CPUs, I/O cards, front end controllers, view nodes, SCADA nodes, database servers, etc) for the division.
- Provides leadership, technical advice and direction to staff within the section. Promotes teamwork and integration between internal and external parties participating in cross functional and SCADA program initiatives.
- Providing emergency response services for data collection or SCADA equipment/system failures.
- Provides input related to Department operating and capital budgets.

Ensures that employees are provided with and use the appropriate equipment, material and/or procedures required to perform the assigned duties. Ensures that all employees perform work in accordance with applicable Health and Safety legislation and all City of Hamilton corporate and departmental policies and procedures. Ensures that appropriate action is recommended for those employees who do not work in compliance with legislation, policies and procedures.

Works in accordance with the provisions of applicable Health and Safety legislation and all City of Hamilton corporate and departmental policies and procedures related to Occupational Health and Safety.

Performs other duties as assigned which are directly related to the responsibilities of the position.

QUALIFICATIONS

1. Possess an engineering degree or diploma in Electronics, Electrical, Robotics, Instrumentation, or Software from an accredited program.
2. Previous extensive experience in the operation and management of SCADA systems.
3. Member of the Ontario Association of Certified Engineering Technicians and Technologists or registered as a Professional Engineer in the Province of Ontario preferred.
4. Previous demonstrated ability to effectively manage and supervise a multi-disciplinary staff in a results oriented environment and in a predominantly unionized environment.
5. Effective leadership, facilitation, communication, presentation, interpersonal and organizational skills. With ability to multi-task and adopt quickly to change.
6. Experience in designing and delivering customer focused programs and services

7. Previous project management experience related to SCADA projects including preparation of contract specifications, tender documentation/award, project administration and management of consultants/contractors.
8. Extensive knowledge of electrical systems and its interface with the PLC hardware/HMI software as required for effective SCADA deployment and implementation. This requires a broad range as well as in depth of knowledge to augment water and wastewater treatment process knowledge.
9. Sound judgment related to the application of automated systems in an engineering environment.
10. Ability to develop software applications for data deployment, identify SCADA implementation strategies, review operational design drawings and ensure that proposed design meets City's design specifications and standards.
11. Demonstrated ability to review and interpret analytical data, make calculations against process control parameters and determine if operations are within appropriate parameters and provide advice as to what actions are required in accordance with those findings.
12. Highly developed ability to articulate a vision to lead and inspire others.
13. Ability to read and interpret blueprints and schematics, design standards and specifications and "as-built" records.
14. Demonstrated knowledge of Health and Safety Act and applicable regulations as it relates to the position.
15. Must possess a valid Class "G" Driver's Licence and provision of a car for use on the job.

THIS POSITION REQUIRES A VALID CLASS "G" DRIVER'S LICENCE AND PROOF THEREOF IS REQUIRED AFTER HIRE.