CITY OF HAMILTON

<u>PUBLIC WORKS DEPARTMENT</u> (HAMILTON WATER – CUSTOMER SERVICE & COMMUNITY OUTREACH - LOCATION - 330 WENTWORTH STREET NORTH)

APPLICATIONS ANALYST- WATER INFORMATION SYSTEMS - CUPE 5167

SUMMARY OF DUTIES

Reports to the Senior Project Manager Water Information Systems (WIS) Facilitates the effective use of; resources, business technologies, databases and applications as well as support of the Asset Management Systems and GIS software to meet the needs of both internal and external clients within the Hamilton Water division.

The Applications Analyst works with the various HW user groups to leverage and improve the use of existing or new software applications including HW's asset management and Geographical Information Systems (GIS). This is accomplished through continual improvement initiatives, data analysis, reporting, workflow design/documentation, and enabling efficient data collection and management processes.

Responsible for leading projects and staff in a variety of staff resource configurations ranging from individual work to leadership of cross-departmental work teams, through facilitation, coordination exercising leadership, guidance, technical competence, innovative problem-solving and the achievement of results in all such settings.

GENERAL DUTIES (INCLUDING BUT NOT LIMITED TO)

Analyzes designs, and develops processes and workflows that integrate various asset management and GIS data sources.

Analyzes and reviews nonfunctional and functional requirements, including resources, hardware/software, and data sources, training and preparing preliminary impact analysis. Coordinates with Information Technology Services (IT) and Public Works Information Technology Team (PWITT) for any technological requirements and/or resources.

Analyzes, designs, develops, implements, and maintains standard workflows and procedures, Undertakes and assists in the analysis and reconciliation of conflicting data, whether from spatial or relational database sources.

Undertakes and participates in continual improvement initiatives.

Records, analyzes and co-ordinates solutions to complex technical problems related to the operation and performance of asset management systems, GIS databases and/or applications within various departments and external partners, and recommends any necessary enhancements to these systems.

Designs, plans, and conducts queries to identify data that will support the business needs of the division. Compiles results and prepares special data reports. Plots plans/maps and creates custom thematic maps.

Collaborates with IT on the development, implementation and maintenance of Infrastructure Management application development standards, and the development and review of business specification and design documents for both "in-house" and contracted applications development.

Identifies topics where additional education and training is required, works with the Applications Support Technologist to develop training programs and supplementary documentation, co-ordinates and conducts training programs for the user community, and analyzes, designs, develops, implements and maintains on-line metadata and/or application help databases to include new or revised business data layers and/or application functionality.

JOB ID 20858\ 21156

Liaises with the Departments` and other functional sections with respect to client support, data management, project and resource management and customer relationships with respect to application implementation and use.

Collaborates on cross-functional teams with other City staff and consultants that may be involved in application support projects throughout the City of Hamilton.

Collaborates on the planning, scheduling and procurement of services, contributes to the procurement process and may participate in evaluating submissions.

Assists in the preparation of project plans and estimates for current budgets required for the analysis, design, development and implementation and maintenance of sectional work.

Employs existing software tools and procedures to analyze, extract and distribute data in a variety of standard and media formats, maintaining a detailed data service request log, ensuring data distribution contracts, copyright and statement of liability are complete and properly authorized.

Receives data from external agencies and, using existing tools, analyzes, verifies and documents the content and quality of the data, imports it into the business environment, and proposes a maintenance plan that meets the business user's requirements.

Identifies and assists in the resolution of problems related to asset management data and geo-spatial data.

Receives and answers enquiries from staff and provides daily support to users as they relate to business processes and data.

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.

Perform other duties as assigned which are related to the major responsibilities of the job.

QUALIFICATIONS

- 1. Demonstrated level of expertise related to the duties described above, normally acquired through a Bachelor of Computer Science or Computer Science or other related discipline or a combination of University education as well as relevant work-related experience.
- 2. Proven experience analyzing, designing, developing, and implementing technical solutions related to business processes.
- 3. Must be able to demonstrate the ability to develop creative and innovative solutions to significant operational challenges.
- 4. Demonstrated ability to compile, prepare and analyze source files for conversion, perform manual and automated quality assurance/quality control data validity checks,
- 5. Proven ability to establish and maintain strategies, policies and procedures that relate to GIS and asset management applications and to work with user groups.
- 6. Must have excellent presentation, analytical, report writing, and interpersonal skills to communicate effectively with all levels of City staff, external consultants and suppliers.
- 7. Must be able to handle multiple changing priorities.
- 8. General knowledge of infrastructure systems such as Water, Wastewater, and Road networks and applicable system components is an asset
- 9. Demonstrated working knowledge of Project Management principals and techniques.
- 10. Experience with Enterprise Asset Management Systems such as Hansen 8, IRISS (Integrated Right of Way Infrastructure Support System), CPMS (Capital Project Management System), OBMS (Ontario Bridge

Management System), and Asset Planner would be an asset.

- 11. Must have and be able to demonstrate a working knowledge of Intergraph GeoMedia or related GIS Systems such as ESRI ArcGIS.
- 12. Working knowledge of spatial and relational database management system software (ORACLE Spatial, SQL Server along with Microsoft Access) and SQL (Structured Query Language).
- 13. Must have an advanced skill level in Microsoft SQL
- 14. Must have an intermediate to an advanced skill level in data visualization tools (such as Power BI).
- 15. Must have an advanced skill level in Crystal Reports and SQL Server Reporting Services (SSRS).
- 16. Must have an intermediate to advanced knowledge of Microsoft Word, Excel, Access, and PowerPoint.
- 17. Demonstrated experience in the extraction and importing of data from relational databases such as MS SQL Server or Oracle.
- 18. Experience with Ticketing Systems (JIRA, Service now, Ivanti, etc.) is a desirable.
- 19. Must be able to work well independently as well as part of a team
- 15. Must possess a valid class "G" driver's license.

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