

City of Waterloo

One of the World's Top Intelligent Communities, Waterloo boasts a knowledge economy that is globally recognized and is home to major employers, global think-tanks, the country's leading finance and insurance companies, and world renowned post-secondary institutions. Waterloo's prosperity is at an all-time high and consistently outperforms provincial standards for wealth, educational attainment, and talent. From urban design and architecture awards to sustainability and economic development awards, Waterloo wins local, provincial and global acclaim as a premier destination for success.

Senior Project Engineer (Mechanical)

Reporting to the Manager of Facilities Design and Management, the Senior Project Engineer (Mechanical) will be responsible for the day-to-day oversight of capital construction projects at City facilities that are primarily mechanical in scope. Duties will vary from one project to the next, but generally include: overall project management, design and drafting work, field review, and technical leadership to other City staff and departments. Work will span both new construction, as well as renovations/alterations to existing City facilities. The primary duty of this position is to ensure the safe and reliable operation of mechanical systems at City facilities, as well as to ensure the timely, efficient, and effective completion of capital work for building mechanical systems.

Accountabilities:

- Responsible for mechanical engineering oversight for large projects of high complexity, including renovations and additions to existing buildings
- Complete the day-to-day project management and contract/construction coordination of capital mechanical projects at City facilities, including: the planning, design, procurement, coordinating, and safe execution of work in accordance with approved contract documents, schedules, and budgets
- Execute a range of medium to large scale capital projects across the City's portfolio of buildings, including but not limited to: office buildings, City Hall, recreation centers (including ice arenas and swimming pools), libraries, fire stations, arts & cultural buildings and heritage buildings
- Take a lead role in coordinating and facilitating design & planning discussions with a wide range of collaborators, including, but not limited to: consultants, contractors, maintenance staff, programming teams, other City staff/departments (e.g. procurement, finance, asset management, senior management, etc.), City Council, tenants, user groups, committees and the public
- Oversee mechanical related projects which may include: HVAC, plumbing, fire protection, BAS, refrigeration (i.e. ice rinks), swimming pools, commercial kitchens, and other systems that generally fall under the responsibility of the mechanical discipline
- Oversee and monitor the construction activities from start-to-finish, according to the established schedule, contract, specifications, and budget
- Self-perform the planning, design, and drafting work on small scale mechanical projects, including submission of all documentation that is required for Building Permits and other approvals as necessary. This includes acting as the Engineer of Record for the overall

design, coordination, and approval of work, including stamped drawings, specifications, and final sign-off as required

- Prepare basic cost estimates for capital planning work, as well as assist with value engineering exercises on capital projects as needed
- Coordinate final review of construction documents (drawings, specifications, contracts, etc.) prior to tender
- Ensure compliance with both internal and external policies, procedures, legislation and regulations as required (e.g. TSSA, Ontario Building Code, ASHRAE standards, City's Green Building Policy, etc.)
- Work closely with design professionals (e.g. architects, engineers, and other consultants) to understand and articulate the technical needs of the City and to oversee the preparation of comprehensive construction documents to execute the necessary mechanical work at City buildings
- Collaborate with other divisions for specific projects and initiatives, such as: capital planning, asset management, and provide technical support for the City's Building Maintenance team
- Collaborate with the City's Energy Program Manager to implement the City's Green Building Policy and other Sustainability goals, including review and implementation of renewable energy and GHG reduction projects (e.g. solar PV arrays, geothermal systems, fuel-switching, heat pumps, building envelope upgrades, and more)
- Review and process proposed changes to the project scope, including changes to the contract value, such as: Proposed Changes, Change Orders, Change Directives, etc.
- Prepare, evaluate, award, and administer RFPQs, RFPs, RFTs, RFQs, and other procurement documents required to retain professional services for construction projects
- Ensure that all construction deficiencies are recorded and follow-up with the consultants & contractors to rectify in a timely manner
- Develop Best-Practice Guidelines and Lessons Learned, as part of the continual improvement processes for the FDMS Division
- Assist in the development of new standards and specifications for the mechanical team
- Assist the City's Refrigeration Plant Head Operator with capital repair work at the City's ice rinks
- Perform general administrative functions related to construction projects for the department, including the preparation of reports and memos as assigned by leadership
- Other duties as assigned

Minimum Qualifications

- Post-secondary University degree in Mechanical engineering; additional education related to Building Mechanical Maintenance would be an asset
- Professional Mechanical Engineer (P.Eng) licensed to practice in the Province of Ontario and current registration with Professional Engineers of Ontario in good standing
- Minimum of 5 years of job related experience including design, project management, and contract/construction administration experience in facility projects; experience with municipal buildings or equivalent would be an asset; consideration may be given to combination of education and experience in building construction
- Strong knowledge of mechanical systems for buildings, including knowledge of construction materials, means, and methods. Experience with ice rink (i.e. refrigeration) systems and swimming pool systems would be an asset.

- Valid MTO 'G' class driver's licence in good standing with access to reliable transportation for business use purposes is required to perform the job
- Strong working knowledge and utilization of the Ontario Building Code, ASHRAE standards, plumbing codes, energy codes, Occupational Health and Safety Act, Ontario Construction Act, CCDC Construction Contracts, and other Industry Codes/Regulations
- Experience administering different types of CCDC contracts would be an asset
- Experience creating, reviewing, and calibrating building energy models would be an asset, as would any certifications in this field (e.g. Certified Energy Manager)
- Knowledge of Green Buildings, Net Zero Energy Buildings and other energy efficient technology such as high performance and sustainable building practices
- Thorough understanding of mechanical engineering concepts and ability to communicate ideas to others
- Excellent written and oral communication skills and an ability to establish and maintain professional working relationships with a variety of different collaborators
- Proven history as an action-orientated/goal-orientated team member
- Proficiency with the following software is an asset: Microsoft Office (Word, Excel, and Outlook), AutoCAD/Revit, PDF Editor (Adobe or Bluebeam), Energy Modelling software (e.g. eQuest or similar), VFA (or similar asset management software), and Maximo (i.e. work order management software)
- Proven negotiation, analytical, and problem solving skills and the ability to work in partnership with a variety of interested and affected parties
- Demonstrated initiative and the ability to work effectively and independently with minimal direction
- Demonstrated experience in coordinating and managing multiple activities to successful conclusions within budget and schedule requirements
- A Police Criminal Record check satisfactory to the City is required as a condition of hire

Annual Salary Range

\$87,710 - \$109,640 (2023 rates)

Application Process

Interested and qualified candidates are invited to submit a cover letter and resume through the online application process www.waterloo.ca/careers

Be You @ Waterloo

At the City of Waterloo, we are committed to recruiting a diverse workforce that represents the community we so proudly serve. All interested and qualified candidates, including Indigenous persons, Black persons, non-Black racialized persons/persons of colour, women, persons with disabilities, 2SLGBTQ+ and those interested in joining our team are encouraged to apply.

Accommodation

The City of Waterloo is committed to creating and maintaining a workplace that is welcoming, inclusive, and barrier-free. Accommodations in accordance with the Human Rights Code and other applicable legislation are available throughout all stages of the recruitment process. For accommodation during the application process, applicants are requested to make their needs known via email at recruitment@waterloo.ca, quoting the position and competition number. Applicants advanced through to subsequent stages of the recruitment process will be provided with additional opportunities to make their needs known.

Job Posting Deadline: *Posting to remain open until position is filled*