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The City work for you.



Senior Engineer, Signals and Systems

If you are committed to public service, enjoy collaborating with others, share our values and have a desire to learn and grow, join [The City of Calgary](#). City employees deliver the services, run the programs and operate the facilities which make a difference in our community. We support work-life balance, promote physical and psychological safety, and offer competitive wages, pensions, and [benefits](#). Together we make Calgary a great place to make a living, a great place to make a life.

The City is committed to fostering a respectful, inclusive and equitable workplace which is representative of the community we serve. We welcome those who have demonstrated a commitment to upholding the values of equity, diversity, inclusion, anti-racism and reconciliation. Applications are encouraged from members of groups that are historically disadvantaged and underrepresented. Accommodations are available during the hiring process, upon request.

As the Senior Engineer – Signals and Systems, you will report to the Senior Manager, LRV, Systems and Integration, who has the overall responsibility of implementing and managing engineering processes to ensure that multiple projects and procurements of the Green Line, when integrated, will produce a Light Rail Transit (LRT) system that meets the operational performance and safety objectives of the Green Line.

As the Senior Engineer – Signals and Systems, you will assist in the technical delivery of the Signaling and Train Control Systems for the Green Line. You will also contribute to integration efforts between the Light Rail Vehicle (LRV) and Infrastructure as well as the delivery of Traction Power, Communications, and Central Control Systems assets. Primary duties include:

- Chair and/or participate in project related meetings.
- Develop and steward relationships that support the success of the projects.
- Participate in multi-disciplinary teams consisting of consultants, contractors, clients and stakeholders.
- Anticipate, identify, and resolve issues that may impact the project.
- Review and approve, as required, the design and delivery of work performed by engineering consultants and contractors.
- Provide subject matter expertise in Signals and Train Control and other rail systems.
- Provide technical advice, recommendations, and project management guidance.
- Participate in the strategic planning of assigned projects, including defining the scope of the project, creating business cases/justifications and work plans, determining the objectives and measurements, determining the budget, resources, and stakeholders; setting up the project schedule.
- Prepare contracts, requests for proposals and tender documents for assigned projects, including terms and conditions, scope of work definition, technical requirements and specifications, project specific requirements and project schedule constraints.
- Present and report the assigned project progress, risks, expectations, timelines, milestones and key project metrics to leadership.
- Participate in the selection process of consultants and contractors for assigned projects.
- Manage and monitor assigned projects throughout the implementation stage, including executing the project according to project plan; creating project management records and documentation; monitoring the project progress and financial status of project.
- Anticipate and proactively manage change throughout the project life cycle of assigned projects.

Qualifications

- An Electrical/Computer/Systems Engineering degree, registration as a Professional Engineer in Canada, current licensure as a Professional Engineer with the Association of Professional Engineers and Geoscientists of Alberta (APEGA), or licensure by the first day of work.
- At least 4 years of experience in operating, maintaining, designing and constructing rail transit systems with demonstrated progressive responsibility.
- Knowledge of North American rail transit engineering design standards and best practices.
- Demonstrated practice of rail transit engineering with specialist level knowledge in Signaling and Train Control Systems including: Fixed block signaling principles; Automatic Train Protection (ATP) principles; Train to Wayside Communications (TWC) principles; At Grade Crossing Warning Systems; Canadian Rail Operating Rules;
- Knowledge of the principles, theories, concepts, and practices of system engineering including the application of ISO/IEC 15288 and EN 50126.
- Demonstrated planning, organizational, analytical thinking, and problem-solving skills to breakdown complex system problems and develop recommendations.
- Good interpersonal skills with proven ability to work effectively as part of a multi-disciplinary engineering team.
- Strong communication skills, including report writing and presenting.
- Demonstrated ability and willingness to apply a team approach, develop strong relationships and work in a collaborative, integrated manner as needed to achieve solutions on complex technical issues.
- Experience managing and working with external consultants and contractors.
- Demonstrated project management skills including an understanding of project management methods and techniques (PMBOK best practices).
- Strong conflict resolution and negotiation skills with experience in solving complex and sensitive issues.
- Advanced interpersonal skills to build and maintain relationships with multiple internal and external stakeholders.
- Advanced time management and organization skills to balance and coordinate effort across multiple, concurrent activities.

Pre-employment Requirements

- Successful applicants must provide proof of qualifications.

Union: Exempt
Position Type: Permanent
Compensation: Engineer Level F \$98,595 - \$151,009 per annum (New Rates)
Hours of work: Standard 35 hour work week
Audience: Internal/External

Business Unit: Green Line
Location: 615 Macleod Trail S.E
Days of Work: This position works a 5 day work week earning 1 day off in a 3 week cycle.
Apply By: October 7, 2022
Job ID #: 306152

Apply online at www.calgary.ca/careers