



IDENTIFICATION

Department	Position Title	
Infrastructure	Project Manager	
Position Number	Community	Division/Region
33-11665	Yellowknife	Transportation/HQ

PURPOSE OF THE POSITION

The Project Manager manages major capital and Operation and Maintenance (O&M) projects involving bridges, culverts and other transportation structures for the Department of Infrastructure. The incumbent leads a team of Senior Project Engineer/Officers and Project Officers to ensure these structures are evaluated, maintained, rehabilitated and reconstructed to be capable of withstanding the demands of ever increasing and heavier traffic loads while meeting environmental regulations. The incumbent also provides structural engineering advice to other members of the Division and monitor current trends in bridge and culvert design, engineering, construction, and safety, as needed.

SCOPE

Located in Yellowknife, the position reports to the Manager, Structures Section - Bridges.

The Department of Infrastructure is highly decentralized in the delivery of its programs and services and is responsible for territory-wide government programs such as the operation and maintenance of public buildings and transportation infrastructure and systems, project management, facilities planning, design and technical support services, environmental assessment and remediation, property management, procurement shared services, information technology, information management, disposal of surplus property and goods motor vehicle and mechanical/electrical regulatory services and fleet management.

The Department is also responsible for programming aimed at increasing the use of domestic energy resources and reducing energy costs in the NWT (Northwest Territories), delivering renewable energy solutions, providing energy supply services to non-market communities, and leading efforts in energy conservation and efficiency.

On behalf of the GNWT, the Department of Infrastructure also carries the responsibility for strategic planning for the GNWT's (Government of the Northwest Territories) long term investment in the development of public transportation and energy production and distribution systems for the Northwest Territories, as well as the continuity of marine transportation services for the provision of fuel and dry goods to northern destinations.

The incumbent leads project teams in the design, maintenance, rehabilitation and construction of bridges and culverts, as well as other transportation structures.

The incumbent will lead various teams assembled to meet the needs of specific bridge and culvert maintenance, rehabilitation and construction projects. Teams may be comprised of personnel from within the Section, Division or the Department, Territorial and Federal regulatory agency staff, consulting engineers, fabricators, material suppliers and construction contractors. Departmental staff may include civil engineers, civil engineering technologists/technicians and construction superintendents.

The incumbent has authority to initiate contracts up to \$100,000 in value and to approve contract performance up to \$250,000 while managing the delivery of Capital and O&M projects with a total value of up to \$60,000,000.

The results and products of this position will directly affect the safety of the public using the territory's highway infrastructure and the environment. Decisions and recommendations will govern the safety, operational efficiency, cost effectiveness, and quality of bridges and culverts in the territory.

RESPONSIBILITIES

1. Manages project development stage for design and construction projects:

- Prepares terms of references for new projects as directed by the Head of the Structures Section.
- Coordinates and assigns pre-engineering work (surveys, geotechnical investigations, hydro-technical investigations, hydraulic studies, specialized engineering studies, material testing, environmental studies, archaeological investigations and traditional knowledge considerations) to project team staff and/or consulting engineering firms.
- Reviews requests for proposals, tender documents and project terms of reference for engineering services prepared by project team staff and selects and manages engineering services contracts.
- Oversees the preparation of detailed design and drawings by Structures personnel and/or consulting engineering firms.
- Guides project team in identifying and obtaining client, community, technical and regulatory approvals and permits, as appropriate, throughout the design stage.
- Solicits comments and input on project documentation and drawings from outside agencies and applicable regulatory bodies and incorporating into design.
- Reviews cost/benefit analyses and detailed project cost estimates.

- Develops, in collaboration with communities and local development corporations, plans to help maximize local/northern involvement, training and business development opportunities associated with projects.
- Manages pre-construction activities including pre-construction meetings, verification of project scope, budget and schedule, and addresses outstanding technical and regulatory issues.

2. Manages project construction stage:

- Approves payments (within authorities) as recommended by site inspector, resolves technical and financial issues, and justifies change orders.
- Leads meetings with contractors and affected, territorial, regional and local organizations, and individuals.
- Interprets contracts, plans, and specifications.
- Attends interim and final inspections with project team staff and Site Inspector to ensure project is in compliance with the contract, the work is of acceptable quality and has progressed in accordance with the plans and specifications.
- Investigates and resolves technical difficulties encountered during construction; negotiates and/or assists project staff with change orders and recommends approval to supervisor.
- Notifies the contractor in writing of unsatisfactory work or conditions and facilitates resolution.
- Reviews monthly claims submitted by contractor after certification by project team staff or consulting engineering firm that work being claimed has been completed, and recommends payment of claim.
- Verifies work in progress to ensure that adequate consideration and attention is given to the safety and convenience of the public.
- Ensures work is in compliance with all environmental standards.
- Reviews interim and final certificates of completion certifying work has been completed in accordance with the terms of the contract as prepared by the project team staff and makes recommendation for payment.
- Attends warranty inspections with project staff and ensures contractor corrects any identified deficiencies.

3. Manages project compliance with governing authorities:

- Identifies opportunities to achieve GNWT (Government of the Northwest Territories) policy objectives throughout all stages of project planning and implementation, (particularly Business Incentives, local accommodation, local and northern involvement policies) and directs project staff of actions to achieve policy objectives.
- Ensures consultant and contractor compliance with all the applicable and governing codes, permits, directives, regulations, and GNWT technical standards and guidelines, and takes action when in default.

4. Performs associated project management tasks:

- Provides advice to project team, colleagues or clients about alternative solutions for bridge and culvert design, construction or maintenance problems.

- Performs, or participates in, special projects (e.g. revisions to technical standards and guidelines, or policy).

5. Performs other duties such as:

- Developing standards and design criteria for highway structures in the NWT.
- Completing monthly capital management reports indicating physical and financial status of projects.
- Representing the government in court cases involving projects within employee's area of responsibility; acting as resource person to government counsel.
- Investigating emergencies involving highway structures (flood or accidental damage/destruction) and making recommendations on remedial action.

WORKING CONDITIONS

Physical Demands

Some moderate physical effort occasionally required at work sites. No unusual demands.

Environmental Conditions

The incumbent is exposed to weather while inspecting sites. Sometimes travel to sites requires travel by small single engine aircraft and watercraft. Extensive travel by automobile and air is also required. The Incumbent will travel to work-sites approximately 10 times per year.

Sensory Demands

No unusual demands.

Mental Demands

No unusual demands.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge

- Design and construction management of heavy civil works and structural projects such as bridges, culverts and other highway and transportation structures through all stages of development (planning to completion).
- Working knowledge of related engineering areas including materials, fabrication, construction, corrosion, hydro-technical, geotechnical, highway functional requirements, roadside safety, geometrics and environmental issues.
- Proven knowledge and understanding of real life behaviour of a wide range of culvert and bridge types.
- Northern anomalies with regard to project management such as logistical requirements, construction practices, environment, soil conditions, and the cross-cultural and political environment.

- Environmental guidelines, regulations and laws.
- Contract administration procedures.
- Safe work practices and WSCC (Workplace Safety and Compensation Commission) rules and regulations.

Skills

- Managerial, leadership and supervisory skills.
- Proven interpersonal and communication skills to make convincing and persuasive arguments when dealing with project engineers, consultants, regional staff, contractors and fabricators.
- Project management skills including estimating and financial skills to develop and control budgets for capital and O&M projects.
- Proven analytical, consulting, problem solving skills, combined with common sense and creativity.
- Planning and organizational skills to meet work schedules and critical milestone dates, and to co-ordinate and organize own work activities with competing priorities in a multi-task work environment.
- Computer systems and software applications such as: Project Scheduling, Word Processing, Spreadsheets, Project Management Systems, and Financial Management Systems.
- Exercise authority.
- Auditing, evaluation and analysis.
- Record keeping and documentation.
- Ability to lead public meetings and technical meetings.
- Risk Management.
- Research, evaluate, gather and compile information.

Abilities

- Ability to make the right call on critical decisions requiring balance between cost and benefits, sometimes involving safety issues.
- Remain calm under pressure while working in a high stress environment with tight deadlines.
- Deal with individuals where there is a high degree of tact and diplomacy required.
- Work collaboratively in a team setting in a cross cultural environment.
- Work within budget constraints.
- Think critically and use good judgment.
- Demonstrate initiative.
- Be safety conscious and to work and travel safely in Northern winter conditions.

Typically, the above qualifications would be attained by:

- Bachelor's Degree in Civil Engineering with a minimum 10 years of experience and eligibility for professional registration with NAPEG; or
- Diploma in Civil Engineering Technology with 12 years of experience; or

- A minimum of 15 years of construction supervision experience. Experience must be relevant and progressive.
- Must possess a valid Class 5 Driver's License.

ADDITIONAL REQUIREMENTS

Position Security

- X No criminal records check required
- ☐ Position of Trust – criminal records check required
- ☐ Highly sensitive position – requires verification of identity and a criminal records check

French language (check one if applies)

- ☐ French required (must identify required level below)
 Level required for this Designated Position is:
 ORAL EXPRESSION AND COMPREHENSION
 Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
 READING COMPREHENSION:
 Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
 WRITING SKILLS:
 Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
- ☐ French preferred

Aboriginal language: Choose a language

- ☐ Required
- ☐ Preferred