



## IDENTIFICATION

Department	Position Title	
Infrastructure	Project Officer	
Position Number	Community	Division/Region
33-14667	Yellowknife	Design and Technical Services, Air and Transportation

## PURPOSE OF THE POSITION

The Project Officer is responsible for the planning, initiation, managing and delivery of a variety of Capital and Operations & Maintenance (O&M) projects involving highways, bridges, culverts and other transportation related structures for the Department.

## SCOPE

The position is located in Yellowknife and reports to the Manager, Design and Technical Services – Air & Transportation. The incumbent will assist in the management of projects within the budgetary authority assigned, as well as be part of various teams assembled to meet the needs of specific highway, bridge and culvert maintenance, rehabilitation and infrastructure construction projects.

The incumbent has authority to initiate contracts up to \$30,000 in value and to approve contract performance up to \$100,000, while managing the delivery of Capital and O&M projects generally with a total value of up to \$10 million. Occasionally the incumbent may be part of larger projects (\$15-\$70 million) or complex, unique or specialized projects where a unique management structure is required.

The results and products of this position will directly affect the safety of the public using the territories' 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.

The incumbent plays a critical role in supporting the Department to achieve its overall Mission which is to provide safe, secure, accessible and reliable movement of people and goods to serve the social economic needs and aspirations of the people of the Northwest Territories (NWT).



While protecting the environment, part of the mandate of the Department is to plan, design, construct or reconstruct, acquire, operate and maintain public transportation infrastructure throughout this rugged yet delicate environment. This includes 2,200 kilometers of all-weather highway, 1,635 kilometers of publicly constructed winter roads, four ferry and ice crossings and 27 community airports.

The incumbent is a team member responsible for the planning, design, maintenance, rehabilitation and construction of highways, airfields, bridges, culverts, marine facilities and other transportation related structures.

## **RESPONSIBILITIES**

### **1. Manage project development stage for design and construction projects.**

- Develops terms-of-reference and estimates for new projects.
- Coordinates project team staff and/or consulting engineering firms to carry-out pre-engineering work (surveys, geotechnical investigations, hydro-technical investigations, hydraulic studies, specialized engineering studies, material testing, environmental studies, archaeological investigations and traditional knowledge considerations).
- Prepares requests for proposals, tender documents and project terms-of-reference for engineering services and selects and manages engineering services contracts.
- Completes and oversees the preparation of detailed design and drawings.
- Identifies and obtains client, community, technical and regulatory approvals and permits, as appropriate throughout the design stage.
- Solicits comments and inputs on project documentation and drawings from outside agencies and applicable regulatory bodies and incorporating into design.
- Conducts cost/benefit analysis as required and develops detailed project cost estimate.
- Develops, in collaboration with communities and local development corporations, plans to help maximize local/northern involvement, training and business development opportunities associated with projects.

### **2. Manages project construction change.**

- Assists in arranging for the tendering process with Contracts Section and responds to enquiries from bidders.
- Assists in tender and award of construction contracts and carries out pre-construction activities including pre-construction meetings, verification of project scope, budget and schedule, and addresses outstanding technical and regulatory issues.
- Assists in the management of the construction contracts (e.g. verifies and approves payments within authorities, resolves technical and financial issues and justifies change orders.)
- Ensures quality control/quality assurance inspections, surveying, testing and quantify measurements are completed.
- Interprets contracts, plans and specifications.



- Investigates and resolves any difficulties with contractors.
- Conducts regular inspections of all projects to ensure work is of acceptable quality and is progressing in accordance with plans and specifications.
- Conducts interim and final inspections of all projects to ensure work is of acceptable quality and is progressing in accordance with plans and specifications.
- Conducts interim and final inspections to identify any deficiencies and to turn project over to maintenance staff, conducting final inspection upon completion of all outstanding deficiencies.
- Prepares interim and final certificates of completion certifying work has been completed in accordance with the terms of the contract.
- Conducts warranty inspections and ensures contractor corrects identified deficiencies.
- Investigates and resolves technical difficulties encountered during construction, negotiating and preparing change orders, and recommending approval to supervisor.
- Checks monthly claims submitted by contractor, certifying that work being claimed has been completed and recommending payment of claim to supervisor.
- Reviews 'as-built' drawings and profiles prepared by draftsman.
- Facilitates dispute resolution.

### **3. Manages project compliance with governing authorities.**

- Identifies opportunities to achieve GNWT policy objectives throughout all stages of project planning and implementation, (particularly Business Incentives, Local Accommodation, Local and Northern Involvement policies) and takes 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 related tasks.**

- Provide advice to supervisor, project team, colleagues or clients about alternative solutions for construction or maintenance issues.
- Performs or participates in special (e.g. revisions to technical standards and guidelines or policy).

## **WORKING CONDITIONS**

### **Physical Demands**

About 75% of the time is spent working in an office environment. The remaining is spent travelling to and from job sites and performing onsite job inspections. Physical demands a Project Officer may encounter on worksites include confined spaces, climbing ladders, bridges, culverts, scaffolding, etc.



### **Environmental Conditions**

The incumbent may be exposed to adverse weather while inspecting sites (approximately 25% of work time).

### **Sensory Demands**

No unusual demands.

### **Mental Demands**

Field posting may involve up to twelve weeks travel during the construction season. During the other times of the year the incumbent will be required to travel at least one week per month for inspections, project review, planning and meeting with consultants and contractors.

### **KNOWLEDGE, SKILLS AND ABILITIES**

- Knowledge of the project management process, including project planning, scheduling, contracting, supervision of professional consultants and contractors, cost estimating and inspections of the work.
- Knowledge of design and construction management of heavy civil works and structural projects such as highways, airfields, bridges, culverts and other transportation structures through all stages of development (planning to completion).
- Knowledge of principles of engineering, general civil engineering and survey practices.
- Knowledge of engineering analysis and design procedures would be an asset.
- Knowledge of bridge, culvert and infrastructure inspection and rehabilitation/maintenance techniques.
- Knowledge of Northern animalities with regard to project management such as logistical requirements, construction practices, environment, soil conditions, and the cross-cultural political environment.
- Knowledge of environmental guidelines, regulations and laws.
- Knowledge of contract administration procedures.
- Knowledge of safe work practices and WSCC rules and regulations.
- Knowledge of computer systems and software applications such as: project scheduling, word processing, spreadsheets, project management, and financial management systems.
- Developed interpersonal and communication skills to make convincing and persuasive arguments when dealing with project staff, consultants, regional staff, contractors and fabricators.
- Communication skills in both written and verbal mediums.
- Project management skills including estimating and financial skills to control budgets for Capital and O&M projects.
- Analytical and problem-solving skills, combined with common sense and creativity.



- Experience in auditing, evaluation and analysis.
- Record keeping and documentation.
- Ability to exercise authority, manage risks.
- Research, evaluate, gather and compile information.
- Ability to make the right call on critical decisions requiring balance between cost and benefits, sometimes involving safety issues.
- Ability to remain calm under pressure while working in a high stress environment with tight deadlines.
- Ability to deal with individuals where there is a high degree of tact and diplomacy required.
- Ability to work in a cross-cultural environment and collaboratively in a team setting.
- Ability to work with budget constraints.
- Ability to think critically and use good judgment.
- Ability to demonstrate initiative.
- Ability to be safety conscious.
- Ability to work and travel in Northern winter conditions.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion and cultural awareness, as well as safety and sensitivity approaches in the workplace.

**Typically, the above qualifications would be attained by:**

A bachelor's degree in civil engineering or related discipline, with two (2) years of experience in the design, construction and management of civil earthworks projects.

Equivalent combinations of education and experience will be considered.

**ADDITIONAL REQUIREMENTS**

A Valid Class 5 Drivers Licence

Registration with the Northwest Territories and Nunavut Association for Professional Engineers and Geoscientists (NAPEG) within 90 days of hire is required, with flexibility for international registrants.

**Position Security (check one)**

- ☒ 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 applicable)**

☐ 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

**Indigenous language:** Select language

☐ Required

☐ Preferred