



IDENTIFICATION

Department	Position Title	
Infrastructure	Project Manager, Structures	
Position Number	Community	Division/Region
33-10112	Yellowknife	Transportation

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 (INF). The incumbent leads a team of Senior Project Officers and Project Officers to ensure these structures are evaluated, maintained, rehabilitated, and reconstructed to ensure the safety of the travelling public and 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 monitors 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.



On behalf of the Government of the Northwest (GNWT), the Department of Infrastructure also carries the responsibility for strategic planning for the GNWT's 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. 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.

The incumbent has authority to manage the delivery of both Capital projects and O&M projects with a total value of up to \$500 million.

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:

- Provides either directly or as input into multi-disciplinary engineering planning, design, and construction projects the preparation of terms of reference, request for proposals, request for information and cost estimates.
- Manages, 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.
- Manages engineering services and construction contracts.
- Oversees the preparation of detailed design and drawings by Structures Section personnel and/or consulting engineering firms.
- Reviews all contract deliverables.
- 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 governments/organizations, and individuals.
- Reviews and 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, that the work is of acceptable quality and has progressed in accordance with the plans and specifications.
- Investigates and resolves technical difficulties and disputes 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 the 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.
- Ensures work is completed in accordance with all applicable safety regulations.
- 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.
- Files and organizes all project documentation in the GNWT's web-based filing system.

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 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, preparation of standard operating procedures).
- Updates briefing notes and other communication documents.

5. Performs other duties such as:

- Develops standards and design criteria for highway structures in the NWT.
- Completes monthly capital management reports indicating physical and financial status of projects.
- Represents the government in court cases involving projects within employee's area of responsibility, acting as resource person to government counsel.
- Prepares and presents presentations at divisional and departmental or public meetings regarding technical or asset management related matters.
- Investigates and assists with emergencies involving transportation 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

Field work requires working in all weather conditions. Extensive travel by automobile and air is also required. Travel by watercraft may also be required. Sensory Demands

No unusual demands.

Mental Demands

Position requires travel to project sites up to 20 times per year. Urgent situations may result in minimal notice prior to departure.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge

- Detailed knowledge of 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.
- Knowledge of northern anomalies with regard to project management such as logistical



requirements, material availability, construction practices, environment, soil conditions, and the cross-cultural and political environment.

- Detailed knowledge of environmental guidelines, regulations, and laws.
- Proven knowledge and understanding of contract administration procedures.
- Proven knowledge of safe work practices and WSCC (Workplace Safety and Compensation Commission) rules and regulations.
- Knowledge or risk management practices and identifying/mitigating project risks.

Skills

- Proven 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, and problem-solving skills combined with common sense and creativity.
- Proven planning and organizational skills to meet work schedules, critical milestone dates, and to coordinate and organize own work activities with competing priorities in a multi-task work environment.
- Ability to efficiently use computer software including various design software and Microsoft Word, Excel, Outlook, Publisher, and Project in order to record, manipulate, analyze and manage data.
- Skilled at keeping and maintaining organized records.
- Skilled at presenting to both non-technical and technical audiences.
- Skilled in researching, gathering, evaluating, and presenting information.

Abilities

- Ability to make critical decisions requiring a balance between cost and benefits, with continual consideration for safety of the asset users. Excellent verbal and written communication skills and the ability to work well under short deadlines and high-stress situations.
- Interact with individuals where there is a high degree of tact and diplomacy required.
- Work collaboratively in a team setting in a diverse environment.
- Work within budget constraints.
- Think critically and use good judgement.
- Demonstrate initiative.
- Be safety conscious.
- Plan and execute work safely in winter conditions.

Typically, the above qualifications would be attained by:

Bachelor's degree in civil engineering with a minimum 5 years of relevant and progressive experience.



Equivalent combinations of education and experience will be considered.

Must possess a valid Class 5 Driver's License.

ADDITIONAL REQUIREMENTS

Position Security

- 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

- 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:

- Required

- Preferred