



IDENTIFICATION

Department	Position Title	
Municipal and Community Affairs	Engineering Team Lead, Civil/Environmental	
Position Number	Community	Division/Region
21-11034	Yellowknife	Community Operations / HQ

PURPOSE OF THE POSITION

Reporting to Manager Capital Planning and Infrastructure the Engineering Team Lead, Civil/Environmental is responsible for leading initiatives related to Community Public Infrastructure development in the areas of Civil Engineering/Environmental Engineering.

The position provides direct technical support to NWT Community Governments and GNWT staff in the implementation of community public infrastructure programs in accordance with good engineering practices and the Public Health Act. The position provides assistance for community works activities including but not limited to road development and maintenance, solid waste site / sewage disposal facility operation, and building operation and maintenance.

This position is directly responsible for the management and implementation of Community Public Infrastructure projects.

SCOPE

Located in Yellowknife, the position provides expert advice to MACA and Community Governments in the development, evaluation, monitoring, maintenance, replacement and renovation requirements of community public infrastructure. The position works extensively with representatives from Community Government and Private sector and many other stakeholders, requiring travel over 20% of the time.

The work is conducted to a large extent in multidisciplinary team environment, including Public Works and Services, Transportation, Health and Social Services, NWT water boards and others. The incumbent reviews, and provides support for community public infrastructure capital plans and recommends implementation strategies for capital projects worth a combined total of \$28 million annually in communities. The position leads one staff.

The position is required to monitor various projects simultaneously in any of the NWT's communities. A challenge for the position is interacting with a diverse variety of stakeholders and to implement infrastructure programs cost effectively and with acceptable levels of risk. The position is constantly involved in multi-tasking and multiple roles including providing advice on the appropriateness of consultant's design, planning guidelines, technical specifications, construction materials, equipments, operation auditing, training or reporting.

The incumbent provides advice and recommendations regarding the continual updating of policies and procedures related to capital infrastructure projects including roads, water supply, wastewater management and the environmental impact assessments and remediation projects.

The incumbent provides technical advice to community works staff for the operations and delivery of community works program and associated municipal services activities.

This position is involved in the direct delivery of community public infrastructure projects in consultation with community governments.

RESPONSIBILITIES

1. Provisions of specialized engineering support to the GNWT and Community Governments.

- Review design submission for appropriateness and adherence to technical standards.
- Accept or reject calculations and designs submitted by consultants or others, for conformance to codes and regulation, departmental standards, objectives and good practices (i.e., Good Engineering Practice, CSA standards, AWWA Standards and guidelines).
- Identify any undesirable features or potential operation and maintenance problems associated with the designs and recommend changes where required.
- Provides assistance to Community government and or Regional MACA staff in obtaining regulatory approvals, as appropriate, throughout the design development stage.
- Leads the project-commissioning process - verify project compliance with all design parameters and functions as intended and that operations and maintenance personal have been properly trained.
- Provide technical Advice on Environmental PHC (Spills) and directly manages spill remediation projects.

2. Provides technical (municipal) engineering services in the development, maintenance, distribution and interpretation of standards and guidelines concerning the planning, design, and construction of public infrastructure projects.

- Leads in discussions with inter-governmental technical staff to develop and maintain technical standards and guidelines in designing the public infrastructure projects.

- Undertakes routine reviews/analysis of technical bulletins such as CSA standards, NRC publications, published research results, design review commentaries and other appropriate literature
- Responds to regulatory agencies and GNWT department (DOT, PWS and ENR) regarding codes, standards, guidelines and regulations concerned with the design, construction and operation of GNWT infrastructure and environmental projects.
- Coordinates directly with environmental agencies or boards to review the project proposals and/or construction methodologies.
- Provides advice and recommendation regarding the continual updating of policies and procedures related to roads, water management systems and buildings in response to on going changing (i.e. legislative) as necessary.

3. Leads the acquisition of Technical/Architectural/Engineering consulting services for the Department and Community Governments.

- Manages the provision of, or directly provides technical support and analysis of infrastructure capability and applicability to ensure optimal solutions for community public infrastructure.
- Assists community governments in the monitoring and review of opportunities to implement infrastructure cost effectively with an acceptable level of risk.
- Manages the provision, or provides direct assistance to community government staff, Department Regional staff, and others to delineate or review terms of reference for specialist consultant reports and reviews content of reports related to the planning, design, construction, operations, and maintenance of community infrastructure.
- Provides technical support in preparation of contract, award and administration processes in developing the Request for Proposals and the interpretation of environmental legislation, policies and regulations.

4. Provides technical training, mentoring and support to community governments and MACA Regional staff in accordance with good engineering practices and public health principles.

- Identify potential operation and maintenance problems associated with the designs and recommends changes where required.
- Provides ad-hoc technical support to community government where requested to deal with critical or emergency situations and maintains records of problems and solutions to optimize response time.
- Develops operational and maintenance support material for communities
- Provide assistance to any special projects completed through contribution agreement with the Department as pilot projects.
- Provides technical advice to the Regional program staff for the preparation of the projects briefing notes
- Provides training to community government staff/operators if and when requested to respond to deficiencies identified by regulatory agencies.
- Provides support when required to water sanitation staff in reviewing planning and design reports, water quality assessments and water treatment plants operator training through Circuit Rider Program

- 5. Monitors capital projects to ensure compliance with codes, standards, functional program requirements and financial status.**
 - Provides technical assistance to community governments and regional MACA staff in the development of capital plans, ensuring optimal solutions for community public infrastructure.
 - Monitors the physical and financial status of all capital projects to ensure the most effective use of the Department's total capital budget through the preparation of financial reports, budget submissions, Minister's Authorization and other budget documents as required.
 - Identify the project impacts on other Government of Northwest Territories Capital Programs.
 - Manages the provision, or provides, technical advice for community capital planning to ensure optimal solutions for community public infrastructure.
 - Coordinates and consolidates the quarterly financial reports and recommend for approval
 - Review budget adjustment requests from regional office and advises the Manager on recommendations.
- 6. To provide technical advice for the delivery of municipal services/community works program to the department and community governments.**
 - Provides technical support and advice to Community Councils, including Senior Administrative officers and community works staff in development of maintenance management system.
 - Supports community governments in the provision of efficient municipal operations and ensuring that community works staff are trained in maintenance management.
 - Reviews the O&M budgets for community public infrastructure to ensure sound financial management practices are in place.
 - Provides advice for daily troubleshooting, diagnosing and resolving maintenance management issues.
 - Provides advice, assistance and support to community governments on mobile equipment infrastructure purchases.
- 7. Manages projects in accordance with applicable codes, standards and criteria, and regulatory requirements.**
 - Initiates, researches, develop and coordinate projects.
 - Prepares presentations, briefing material for use by Senior Management in various formats as required.
 - Liaises with contractors or contract managers to ensure program delivery and standards have been maintained.
 - Develops project proposals, plans and recommendations for the Manager.
 - Provides guidance, identifies and provides appropriate resources /support for projects.
 - Establishes a monitoring system to ensure project deadlines are met, objectives and tasks are completed and deficiencies are corrected.
 - Reports on cost drivers to ensure the project is within acceptable variances.

- Liaises with managers and community representatives with respect to assigned projects.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of professional engineering practices, related to Federal, Territorial and Community Government's regulations/guidelines.
- Knowledge of strategic planning and policy development theories and principles (including problem solving, analysis and critical thinking skills) to direct or develop strategic plans and governing policy instruments.
- Ability to Interpret, clarify, explain and apply department policy and procedures, Federal or NWT laws and regulations, etc.
- Interpersonal skills, including dispute resolution skills to interact constructively with officials and decision-makers in government and non-government organizations.
- Oral and written communication skills to communicate effectively at all required levels.
- Knowledge of computer applications including word processing, spreadsheets, database, electronic communications and electronic presentations.
- Ability to work in a cross-cultural environment to interact positively with community residents and decision-makers.

Typically, the above qualifications would be attained by:

Completion of Civil or Environmental Engineering Degree, with eligibility for professional membership and 3 years related work experience or Designation as a Certified Engineering Technologist / Professional Technologist with 6 Years experience in civil/environmental infrastructure management, with 2 years being in a cross-cultural work environment.

WORKING CONDITIONS

Physical Demands

No unusual demands.

Environmental Conditions

Minimal in Yellowknife, while in communities, the position may be exposed to chlorine gas and other chemical additives in water treatment facilities or any hazardous wastes in sewage systems when inspecting community public infrastructure.

Sensory Demands

No unusual demands.