

## New

Ministry

Transportation and Economic Corridors

### Describe: Basic Job Details

#### Position

Position ID

Position Name (30 characters)

Infrastructure Engineer

Requested Class

Job Focus

Operations/Program

Supervisory Level

00 - No Supervision

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

#### Employee

Employee Name (or Vacant)

#### Organizational Structure

Division, Branch/Unit

Construction and Maintenance - NCR

Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Supervisor's Current Class

### Design: Identify Job Duties and Value

#### Job Purpose and Organizational Context

Why the job exists:

To provide comprehensive highway planning for the North Central Region that addresses functional, network and roadside development planning issues/requirements (short term and long range), through ongoing liaison within the planning/programming/construction and operations branches of the department and externally with municipal stakeholders and the public at large. To administer the provincial grants program for municipalities providing financial assistance for municipal governments and organizations in the North Central Region. To deliver, through the consultative process and professional services agreements, planning studies/recommendations that are technically sound, meet accepted departmental standards and policies and are supported by internal and external stakeholders. To promote implementation of planning objectives/study recommendations through liaison with a variety of delivery units of the Region (construction, operations and maintenance) and through follow-up liaison with municipal stakeholders.

#### Responsibilities

Job outcomes (4-6 core results), and for each outcome, 4-6 corresponding activities:

1. Identify and initiate highway planning studies to address functional, network and roadside development/access management issues within the North Central and Fort McMurray Regions.  
**Activities:**

- As a project administrator for regional planning initiatives, prepare project Terms of Reference, select engineering consultants, chair Technical Review Committees (TRC) with municipal stakeholders, department representatives and engineering consultants and ensure the delivery of completed planning studies. Lead the TRC in its role of providing the consultant with relevant information available from various department sources, identifying local issues to be evaluated by the consultant, monitoring the study progress and providing technical direction or guidance to the consultant.
- As project administrator ensure ongoing liaison with local stakeholders, the TRC, and the consultant, keeping apprised of project issues, developments, and ensure any conflicting objectives of the various stakeholders' are addressed achieving the required study outcomes/recommendations within the specified project scope, timelines and allotted budget.
- Review draft reports and final reports provided by the consultant for technical accuracy and adherence to project Terms of Reference. Clearly identify potentially contentious or politically sensitive issues for information and direction by department officials.
- Identify and recommend planning studies that address both regional and provincial needs.

2. Administration of the Alberta Transportation and Economic Corridors grant program for the North Central Region.

**Activities:**

- Provide and review grant information on eligibility, funding, and application processes with Municipalities.
- Review grant application packages confirming eligibility
- Through ongoing liaison with Municipalities administer and support approved grants.

3. Participate in and provide local input on planning issues at Technical Review Committee meetings as well as providing comment and suggestions regarding the technical merit of draft information provided by engineering consultants. Participate as Regional liaison and provide local input on more complex projects initiated for the region by senior department planning experts.

**Activities:**

- Participate in and provide local input on planning issues at Technical Review Committee meetings as well as providing comment and suggestions regarding the technical merit of draft information provided by engineering consultants.

4. Provide contract administration of professional service agreements for planning studies to address network requirements for future highway upgrades within the Region

**Activities:**

- Prepare project synopsis and terms of reference for planning studies, identifying project scope and issues to be addressed.
- Initiate engineering consultant selection; negotiate quotations to ensure study objectives are achieved within defined scope of work for a reasonable dispersal amount. Coordinate contract approvals through the Region, Professional Services and Programming to ensure that funds are identified and approved for forthcoming assignments.
- As expenditure officer, monitor invoices and approve payments with approved limits and track expenditures for projects during all phases.
- Through ongoing liaison with the consultant, ensure timely completion of draft and final reports, on budget and within predetermined scope, meeting all milestones and achieving all deliverables. When a project scope changes, ensure the appropriateness of the work in light of changing environment or direction identified through the course of a project and seek necessary approvals for additional work.
- Conduct consultant performance appraisals with a goal to enhance future performance and increase consultant awareness of department policies, procedures and accepted practices.

5. Promote implementation of outcomes and recommendations from planning studies and provide continuity in transfer of accepted information to stakeholders to ensure that planning recommendations are realized and programmed for implementation in a timely manner both in the short term and as provincial priorities and budgets allow over the longer term.

**Activities:**

- Attend cross business unit functional meetings (construction, operations and property) to summarize planning

recommendations from specific studies as well as one-on-one meetings as necessary to keep delivery units apprised of potentially contentious issues, staging considerations or other information they require to deliver their programs in an effective manner.

- Attend meetings with local municipalities to discuss planning study recommendations, potential staging of improvements and identify opportunities for developing mutually beneficial implementation strategies for referral to senior management for approvals.
- Circulate final reports to all departmental and municipal stakeholders and follow up on questions or issues that may arise.

6. Prepare correspondence to encourage implementation of planning objectives and grants to update stakeholders on the department's policies, procedures, plans and programs within the context of specific planning and grant issues such as access management, functional and network plans and roadside development issues affecting long term highway plans. Provide information and recommendations to departmental officials concerning specific planning and grant issues of contentious or politically sensitive nature.

**Activities:**

- Provide briefing notes to senior officials to give background, identify issues and provide a recommended response or decision regarding specific planning and grant issues raised by municipalities or the general public within the North Central Region.
- Formulate draft response to action requests based upon current planning, grants, programming and department policies and standards.
- Other correspondence as required, including status reports, summaries, etc. in support of information dissemination to stakeholders.

7. Organize and track Grants, Geometric Assessments, Safety Assessments and Planning Study recommendations.

**Activities:**

- Work with other Regional Business Units to identify projects requiring geometric assessments as opposed to functional planning studies and provide recommended solutions to Regional management.
- Work with the department's Technical Standards Branch or other Regional staff to administer grants, identify intersections, interchanges or roadway sections that require safety, illumination, signal and railway crossing assessments. Prioritize locations and provide list to Regional Business Units for action.
- Identify projects resulting from planning activities for consideration in future construction programs.
- Participate in the region's annual ranking of planning studies.

8. Other related duties in support of documentation and maintaining records for grants, and plans and files on specific planning issues.

**Activities:**

- Provide copies of final reports, including electronic copies in acceptable format for central filing.
- Coordinate plan preparation for key plans and other plans required for planning studies to ensure appropriate formats, scales, labeling, etc. to satisfy departmental requirements and provide sufficient information for client use.
- Prepare, monitor and administer cost share agreements with municipalities.
- Work on special projects of an engineering/technical nature on an assigned basis.

9. Preparation of Scoping Projects

**Activities:**

- Prepare detailed Scope of construction projects
- Site visits for the construction projects as needed
- Coordinate meetings with Construction, Operations, Programming, Bridges branches as required
- Prepare scoping documents for Manager's approval
- Review planning studies and report for the construction projects
- Secure funding for the projects

Conduct field inspections to obtain familiarity with the rural transportation network; to note changes to the network from land or resource development.

## Problem Solving

Typical problems solved:

Types of guidance available for problem solving:

Direct or indirect impacts of decisions:

## Key Relationships

Major stakeholders and purpose of interactions:

Operate as an Infrastructure Planning Engineer and Grant Administrator for the North Central, which extends from Highway 616 in the south, to the border with the Northwest Territories in the north, as well as from the Jasper National Park boarder in the west and the Saskatchewan border in the east.

Stakeholders include consultants, local urban and rural municipalities and their planning experts, special interest groups such as Commercial Transport Advisory groups or landowner associations, departmental staff in other branches of the department, other government departments, as well as the public at large. Coordinates 2-3 planning study activities each year. The value of the studies represent a direct cost of approximately \$500,000 but can have very significant bearing on future costs of construction with decisions/recommendations on multi-million dollar options. Study duration depends on complexity but can range from 6 months to 2 years, with as many as 4-5 individual stakeholders participating on Technical Review Committees.

Responsible for the Provincial Highway network within the region, with some involvement with local roads issues affecting planning on the Provincial Highways.

As regional grant administrator, have the opportunity to influence stakeholder acceptance of the provincial grant program and outcomes through discussions of issues and build consensus concerning the approach and delivery of the program.

Refer decisions, issues and recommendations of a sensitive and contentious nature or where the department may be required to commit to a substantial allocation of resources.

Contacts: Regional Business Units, TSB, Professional Services, municipalities, consultants and the public.

## Required Education, Experience and Technical Competencies

Education Level

Bachelor's Degree (4 year)

Focus/Major

Engineering

2nd Major/Minor if applicable

Designation

If other, specify:

Job-specific experience, technical competencies, certification and/or training:

- Knowledge of engineering theory, principles and practices as it relates to the highway network and vicinity.
- Knowledge of departmental policy, procedures, practices and standards as well as business goals and objectives as they relate to planning and grant issues.
- Knowledge of accepted national highway design and planning standards as well as business goals and objectives as they relate to planning issues.
- Knowledge and understanding of department guidelines for planning agreements and project specifications.
- Ability to operate in a team environment and to function successfully as a team leader.
- Strong leadership skills (eg. as chairman of TRC's, task assignments, prioritize competing activities, monitor expenditures.
- Proficiency in computer software applications

- Excellent communication and interpersonal skills, both verbal and written.
- Ability to resolve conflicts and to analyze problems and situations to provide clear direction and solutions to issues.
- Organizational skills, time management, etc. in the coordinating of studies.
- Knowledge of the cross-functional roles and responsibilities of branches within the department.
- Eligibility for membership in APEGA.
- Valid Class 5 driver's license

### Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level					Level Definition	Examples of how this level best represents the job
	A	B	C	D	E		
Systems Thinking	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Takes a long-term view towards organization's objectives and how to achieve them:</p> <ul style="list-style-type: none"> <li>• Takes holistic long-term view of challenges and opportunities</li> <li>• Anticipates outcomes and potential impacts, seeks stakeholder perspectives</li> <li>• Works towards actions and plans aligned with APS values</li> <li>• Works with others to identify areas for collaboration</li> </ul>	
Creative Problem Solving	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Engages the community and resources at hand to address issues:</p> <ul style="list-style-type: none"> <li>• Engages perspective to seek root causes</li> <li>• Finds ways to improve complex systems</li> <li>• Employs resources from other areas to solve problems</li> <li>• Engages others and encourages debate and idea generation to solve problems while addressing risks</li> </ul>	
Agility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<p>Proactively incorporates change into processes:</p> <ul style="list-style-type: none"> <li>• Creates opportunities for improvement</li> <li>• Is aware of and adapts to changing priorities</li> <li>• Remains objective under pressure and supports others to manage their emotions</li> <li>• Proactively explains</li> </ul>	

