

Ministry

Public (when completed) Common Government

Update

Transportation and Economic Corridors	
Describe: Basic Job Details	
Position	
Position ID	Position Name (30 characters)
	Operations Engineer
Current Class	1
Engineering & Related Level 2	
Job Focus	Supervisory Level
Operations/Program	01 - Yes Supervisory
Agency (ministry) code Cost Centre Program Code: (el	nter if required)
Employee	
Employee Name (or Vacant)	
Organizational Structure	
Division, Branch/Unit	
C&M, North Central Region, Stony Plain Operations	Current organizational chart attached?
Supervisor's Position ID Supervisor's Position Name (30 characters	Supervisor's Current Class
Design: Identify Job Duties and Value	
Changes Since Last Reviewed	
Date yyyy-mm-dd	
2024-09-12	
Responsibilities Added:	
None - Update for recruitment purposes.	
Responsibilities Removed:	
None - Update for recruitment purposes.	

Job Purpose and Organizational Context

Why the job exists:

Reporting to the Operations Manager, this position is responsible for assisting with the day-to-day administration and delivery of the highway maintenance program including P3s, roadside development control functions and providing technical support for the preparation and delivery of contracts/service agreements for projects such as highway lighting, traffic signals, etc. Working within the district/region, the Operations Engineer assists the Operations Manager by

GOA12005 Rev. 2022-11 Page 1 of 6

providing the leadership, technical support and expertise required to ensure that the highway maintenance program and other projects are delivered within the scope, cost, time, and quality to the client's satisfaction and within a safe work environment. This position may be required to assist in the various components of work and programs in the construction, bridges and infrastructure management business areas via special projects, assignments or specified period secondments. Due to the high traffic volumes on certain roadways and the political sensitivity attributed to this position, the position demands exceptional communication and interpersonal skills. The position also provides recommendations and solutions for issues regarding conflict resolution, problem solving and decision-making. This position supervises 2-4 MCIs and FSTs, whom aid in the delivery of the highway maintenance program.

Responsibilities

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

Responsibility:

Assist the Operations Manager in supervising the Highway Maintenance Contracts and Design Build Finance Operate agreements for P3 projects.

Within:

Budgets, policies, procedures, processes, specifications

End Result:

Ensure adequate levels of service requirements are being met and the work is being completed within Alberta Transportation standards and budgets.

Activities:

- Assists the Operations Manager to ensure that road maintenance contractors perform in accordance with the terms of the Maintenance Contract or Design Build Finance Operate agreements.
- Execute the audit program for the P3 contracts to evaluate contractor performance and identify deficiencies in meeting the specifications.
- Complete budget control and forecasting tasks, including reviewing contractor invoicing.
- Contribute to development and updating of maintenance specifications, budgets and forecasting.
- Provide assistance in matters involving dispute resolution, problem solving, decision making, field design changes, traffic accommodation, etc.
- Monitors performance of contractors and the transportation system.

Responsibility:

Provide engineering support to Operations Manager for roadside development.

Within:

Legislation, policies, processes, procedures, technical standards

End Result:

Ensure land development controls along the highways, within the service area, maintains the integrity of the highway network.

Activities:

- Review Ministerial Consent and permit applications for developments adjacent to and within the Transportation Utility Corridor
- Reviewing technical issues related to proposals for subdivisions impacting the highway
- Providing liaison for improvements to highways as a result of developments
- Assist in providing engineering opinion for the development of agreements for major private subdivision development
- Assist in providing engineering opinion on permits issued for commercial highway development, ie. Pipeline well sites, power and communication lines
- Assist in providing engineering opinion on the review and coordination of development of access to properties
- All development in proximity to the highway must be monitored to ensure conformity with department guidelines and provincial acts. Complexities associated with the interpretations and application of these guidelines and acts are dealt with to a relatively large extent.

Responsibility:

Provides technical support to the Operations Manager for roadway operations, new projects, and programming.

Within:

Legislation, policies, processes, procedures, technical standards

End Result:

Provide input and evaluate roadway operations, new projects, and programs to ensure the highway network is meeting

GOA12005 Rev. 2022-11 Page 2 of 6

the department's expectations for level of service.

Activities:

- Review designs from a highway operations and traffic engineering perspective. Assists with the assessment of location route surveys, consultant engineering projects and engineering proposals for future operational feasibility and the probability of associated problems.
- Suggest improvements in design, signals, lighting, signing, pavement markings, geotechnical and slope stability problem areas and related areas to the Operations Manager.
- Prepares estimates and compiles quantities for contracting purposes.
- Reviews field designs to ensure conformity with current standards.
- Assists the Operations Manager in formulating input for all transportation program development
- Participates in cross-functional departmental teams to develop maintenance standards/contracts specification to ensure that standards/specifications are practical and achievable through accepted maintenance.

Responsibility:

Assist the Operations Manager in dealing with the public and municipal authorities.

Within:

Legislations, budgets, policies, procedures, processes, technical standards.

End Result:

Ensure the public and municipal authorities are dealt with in an effective and amicable manner.

Activities:

- On behalf of the Operations Manager, draft replies for action requests, liaise and respond to other agencies, deal effectively and amicably with public concerns, may attend meetings with various local authorities, municipalities and interested groups as departmental representative.
- On behalf of the Operations Manager and upon the request of counties, municipal districts and other municipal jurisdictions, may be asked to provide engineering advice for the maintenance of roads, streets, drainage systems and other public works. Inspects work carried out on road construction grant programs by municipal districts and counties to ensure proper standards and value for funds allocated.
 - Area extends across two Contract Maintenance Areas (CMA's) in the Stony Plain District covering approximately 1800 km of Provincial Highway, Indian Reserves, various provincial park roadways and water management infrastructure and Provincial Highways within the City of Edmonton, including the Anthony Henday Drive ring road.
 - Stakeholders Municipal officials, contractors, consultants, general public, private agencies, other government departments
 - Supervision of consultants and contractors
 - Projects range from minor roadway appurtenance installations (\$5,000), Regional Tenders (\$100,000), larger construction projects (up to \$5,000,000), Maintenance Contracts for two CMA's (\$30,000,000), to Design Build Finance Operate Agreement (\$1,000,000,000,000)
 - Co-ordination between Bridge, Construction, Property and Infrastructure business units of Alberta Transportation
 - Provide effective written and verbal communications for internal and public relations
- Creative and innovative solutions to transfer initiatives, complex maintenance and construction problems. Utilization of technology transfer/innovations.

Problem Solving

Typical problems solved:

- Review contractor's work and infrastructure to assess if the contract specifications are being met.
- Respond to public concerns, balancing level of service with budgetary constraints.
- Review development/utility proposals to determine impacts to the highway infrastructure and suggest mitigation solutions.
- Review contractor testing and reporting to ensure contract performance measures are being met.
- Analyze intersections, speed limits, etc. and propose solutions to ensure public safety isn't compromised.

Types of guidance available for problem solving:

Contract documents, specifications, TAC manuals, level of service guidelines, recommended practices, Operations Manager guidance, internal & expert input.

GOA12005 Rev. 2022-11 Page 3 of 6

Direct or indirect impacts of decisions:

Decisions will impact the outcome of the highway maintenance program and subsequent satisfaction of motorists, municipalities, etc. Decisions will also impact contractor performance, stakeholder relationships, budgetary control and expenditures.

Key Relationships

Major stakeholders and purpose of interactions:

Regional Director, Operations Manager, Bridge Manager, Maintenance Contract Inspectors, Public Citizens, Contractors, Consultants and Municipalities on an as needed basis.

Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Bachelor's Degree (4 year)	Engineering		PEng
If other, specify:			

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

- Requires a solid working knowledge/expertise in engineering, specializing in roadway operations engineering. This would require a detailed knowledge of operational issues and highway characteristics. The position uses an in-depth theoretical body of knowledge in completing tasks and duties.
- A working knowledge of highway maintenance, construction, planning management, environmental and operational practices of the department.
- The ability to work co-operatively with all levels of the department, maintenance contractor employees, the public and other government and private agencies.
- Effective written, verbal, public relations skills
- Be able to provide recommendations and solutions for issues regarding conflict resolution, problem solving and decision-making.
- The ability to work independently and to set priorities and schedule to balance multiple projects on an ongoing basis.
- Relevant engineering degree with eligibility for membership in APEGA
- As considerable travel within the district and to other department offices is required, a valid Class 5 Alberta operator's license is required.
- Supervisory experience is an asset.
- Advanced knowledge of Microsoft Office software (Word, Excel, Outlook, Teams) is an asset.

Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level A B C D E	Level Definition	Examples of how this level best represents the job
Systems Thinking		Takes a long-term view towards organization's objectives and how to achieve them: • Takes holistic long-term view of challenges and opportunities • Anticipates outcomes and potential impacts, seeks stakeholder perspectives • Works towards actions and plans aligned with APS values • Works with others to identify areas for collaboration	You will need to consider how decisions impact service levels, budget, etc. in an effort to achieve TEC's overall goals in delivering a satisfactory level of service while working within budget constraints.

GOA12005 Rev. 2022-11 Page 4 of 6

Build Collaborative Environments	Collaborates across functional areas and proactively addresses conflict: • Encourages broad thinking on projects, and works to eliminate barriers to progress • Facilitates communication and collaboration • Anticipates and reduces conflict at the outset • Credits others and gets talent recognized • Promotes collaboration and commitment	You will often need to solicit input from various internal stakeholders in search of solutions to problems, which may require multi-disciplinary meetings. Working with the contractor is key to anticipate problems and find resolution before they become large conflicts.
Drive for Results	Takes and delegates responsibility for outcomes: • Uses variety of resources to monitor own performance standards • Acknowledges even indirect responsibility • Commits to what is good for Albertans even if not immediately accepted • Reaches goals consistent with APS direction	By leveraging your knowledge and relationships, you will seek to exceed level of service expectations from the public while managing budget and contractor abilities.
Creative Problem Solving	Engages the community and resources at hand to address issues: • Engages perspective to seek root causes • Finds ways to improve complex systems • Employs resources from other areas to solve problems • Engages others and encourages debate and idea generation to solve problems while addressing risks	Highway operations and maintenance problems can be complex, so you will need to focus on understanding the problem so that unique solutions can be developed and improvements can be made.

Benchmarks

List 1-2 potential comparable Government of Alberta: Benchmark

GOA12005 Rev. 2022-11 Page 5 of 6