

New

Ministry

Municipal Affairs

Describe: Basic Job Details

Position

Position ID

Position Name (200 character maximum)

Assessment Engineer

Requested Class

Engineering & Related Level 2

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

MAG, Assessment Services, CIPA

☒ Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Manager-Major Plants or Linear

Supervisor's Current Class

Design: Identify Job Duties and Value

Job Purpose and Organizational Context

Why the job exists:

This position is responsible for delivering critical technical analysis (assessments, advice, and opinions) to support the preparation of complex designated industrial (DI) property assessment on behalf of the Provincial Assessor (PA) for the Province of Alberta. The position is required to handle/interpret technical, engineering, and financial DI property data/information in preparation of the assessment for the Province of Alberta and provide technical advice relating to DI property assessments on the major plants list and/or electric power generation facilities. The major plant list includes Oil Sand Processing Plants, Oil Refineries, Gas processing plants, petrochemical plants, sawmills and pulp and paper plants.

This position will also act as the subject matter expert, for their area of expertise in defending the assessments. The work is done using accepted engineering principles and professional practices and standards. The Engineer will interact with policy and assessment staff throughout the department as well as external stakeholders to manage the workflow for their area.

This role provides a technical point of contact for senior industry technical experts (i.e. industry engineers) for

assessment related engineering matters.

This position will have substantial influence in decisions around significant assessment operational policy. The expectation of this position is to act independently and to work as part of an interdisciplinary and knowledgeable team of experts. The area of expertise also includes the various disciplines of assessing DI property which include, machinery and equipment, and non-residential buildings and structures at major plants, or linear improvements on electric power generation facilities. This position is responsible for providing expert opinion of the assessment practice and assessment of DI property, as well as the applicable legislation and regulations that are used.

Responsibilities

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

1. Technical review and coordination of industrial capital projects for complex major facility assessments (often > \$1 billion)

Activities:

- Review major plant project technical data to complete assessment including the following: Design Basis Memorandum, Process Flow Diagrams, construction drawings, petroleum and natural gas, petrochemical, Carbon Capture, sawmill and pulp and paper related projects.
- For a variety of different complex facility types have a detailed understanding of how the facility process flows in each unit of the facility and between units of the facility. A strong understanding of what equipment is at each facility and what its purpose is for within the facility and have the ability to follow the flow process at the site.
- To provide technical expert assessment advice on inventory being valued; and ensuring the processes and procedures described in the MGA and its regulations in the valuation of DI property assessments.
- Conduct technical research in the preparation of the designated industrial assessment.
- Conduct field inspections as required for the property inventory. Technical point of contact for senior industry technical experts (i.e. industry engineers) for assessment related engineering matters
- Provide technical input to working groups on assessment within Alberta.
- Provide technical input to the business area to support the decision-making process for best practices, operations, program decisions and policy development.
- Stay current with technological developments as they occur and will demonstrate and document compliance with the CPD (Continuing Professional Development) requirements of APEGA.
- Review innovative energy related technologies.

2. Provide construction related financial assessments:

- Review cost reporting for assessment evaluation.
- Review technical change orders.
- Review financial purchase orders.
- Review construction schedules.
- Interpret construction cost reporting through the legislated and regulatory requirements for industrial property assessment.

3. Assist in defending the assessments before the Land and Property Rights Tribunal (LPRT) ;

- Provide technical input as part of a team defending the assessment complaints before the LPRT for DI properties on behalf of the PA.
- Provide interpretation and analysis of engineering concepts as they relate to industrial property assessment to support defending assessments.
- This may entail being an expert witness at a quasi-judicial hearing.

4. Prepare industrial property assessment

- Be adept at using computer assisted mass appraisal (CAMA) systems.
- Provide subject matter expertise, guidance and advice on DI property issues to ensure compliance with the requirements of assessment business operations as required by government policy, the MGA, and regulations;
- Assist in development and review of the annual request for information (RFI) to collect updates to the

property.

- Communicate and develop a working relationship with property owners and their representative.
- Coordinate with quality assurance staff to support the DI property assessment process by verifying the assessments calculated and reported by the system are accurate.
- Provide coordination and assistance in the preparation of complex data analysis for the preparation of the DI property assessments.

5. Provide guidance and advice to staff and stakeholders on the application and interpretation of DI property inventory, valuation and other external data interfaces (i.e. AER, AUC).

- Provide impact analysis for proposed or accepted changes to guidelines and regulations.
- Advise assessment stakeholders on DI property assessment and tax policy, particularly as it relates to understanding the operations of major plants in the context of assessment.
- Prepare DI property business, impact, and analysis reports required to support the DI assessment function.
- Liaison with all stakeholders in the province, including senior government officials, to inform them on the DI property assessment process. Being proactive is required as there are constant changes in technology, government policy and demands from the public.

6. Support the Assessment Services Branch by ensuring that information given to assessment stakeholders relating to DI property assessments is consistent, appropriate and in conformance with the *MGA* and related regulations.

- Use diplomacy and tact with company staff, company representatives, municipal assessors and elected or senior municipal officials while undertaking any part of the DI property assessment process.
- Prepare and present presentations to stakeholders about the DI property assessment procedures, processes and annual changes.
- Work with a team in the preparation and delivery of education and information seminars on the assessment and taxation of DI property assessment to stakeholders as required by the Branch.
- Explain the scope and process of the DI assessment function to municipal assessors.
- Attend and participate in unit and branch meetings and committees as required.
- Respond to action requests (AR) as required. This can involve drafting memorandums, letters, briefing notes and reports relating to the appropriate application of DI property assessments.

Problem Solving

Typical problems solved:

This position is responsible for delivering critical technical analysis (assessments, advice, and opinions) to support the preparation of complex designated industrial (DI) property assessment on behalf of the Provincial Assessor (PA) for the Province of Alberta. The position is required to handle/interpret technical, engineering, and financial DI property data/information in preparation of the assessment for the Province of Alberta and provide technical advice relating to DI property assessments on the major plants list or electric power generation facilities. The major plant list includes Oil Sand Processing Plants, Oil Refineries, Gas processing plants, petrochemical plants, sawmills and pulp and paper plants.

This position will also act as the subject matter expert, for their area of expertise in defending the assessments. The work is done using accepted engineering principles and professional practices and standards. The Engineer will interact with policy and assessment staff throughout the department as well as external stakeholders to manage the workflow for their area.

This role provides a technical point of contact for senior industry technical experts (i.e. industry engineers) for assessment related engineering matters.

This position will have substantial influence in decisions around significant assessment operational policy. The expectation of this position is to act independently and to work as part of an interdisciplinary and knowledgeable team of experts. The area of expertise also includes the various disciplines of assessing DI property which include, machinery and equipment, and non-residential buildings and structures at major plants. This position is responsible for providing expert opinion of the assessment practice and assessment of DI property, as well as the applicable legislation and regulations that are used.

Types of guidance available for problem solving:

This position must rely on their engineering training, work experience, and expertise to solve problems and determine

solutions that ensure DI property assessments are fair and correct. This position can seek guidance from the Provincial Assessor, the Manager of Major Plants or Linear Assessment while problem solving, however they are relied on to be a technical engineering expert for the analysis and valuation of DI property assessments. They must be an expert in engineering, knowledgeable on Alberta legislation and regulations, and experienced in assessment valuation practices for all problem-solving activities.

Direct or indirect impacts of decisions:

In the Province of Alberta, the Assessment Services Branch is responsible for the preparation and dissemination of assessments of DI property which has a currently annual value of over \$211 billion. Property assessment is the basis for municipal taxation and the accuracy and fairness of assessments has a direct impact on municipal finances. This position is responsible for ensuring the properties in their portfolio are fairly and accurately assessed. This is done by reviewing complex engineering materials, inspecting properties, and creating assessments so that Provincial Roll is correct. This position involves applying critical thinking in order to analyze engineering materials and calculate industrial major plants or electric power generation property values.

Key Relationships

Major stakeholders and purpose of interactions:

Minister/other Ministers/MLAs

- Directives are carried out, expert technical information and advice are provided, recommendations are made, and alternative policy options are provided.

Assessed Persons

- individual property owners and / or their business representatives, including engineers, site operators, accountants, and tax agents

Municipal Industry Stakeholder groups including:

- Alberta Urban Municipalities Association (AUMA),
- Alberta Association of Municipal Districts and Counties (AAMDC),
- Alberta Assessors' Association (AAA),
- Canadian Property Tax Association (CPTA),
- Canadian Association of Petroleum Producers (CAPP)

Elected Municipal Officials

- Present findings and recommendations of an audit as required.
- Provide expert advice and respond to queries.

Chief Administrative Officer of Municipality

- Review and evaluate practices and procedures used in the management of the local assessment function.
- Present findings and recommendations of an audit as required.
- Provide expert advice and respond to queries.

Municipal Assessor

- Review and evaluate practices and procedures used in the preparation of a municipality's assessment.
- Present findings and recommendations of an audit as required.
- Provide expert advice and respond to queries.

Executive Management

- Directives are carried out, expert technical information and advice provided, recommendations are made, issues of significance are identified and solutions are provided to resolve issues.
- Initiatives are implemented to achieve business plan and operational plan goals, targets are met, and departmental and divisional human resource strategies are promoted.

Assessment Services Branch Senior Management Team

- Information and advice are provided, and consultations are carried out on business plan, operational plan, and resource and administrative issues.
- Appropriate support is provided and solutions are provided to resolve issues.

Other operational branches in the department

- Expert technical advice on assessment matters and feedback regarding proposed amendments to the legislation or regulations are provided to the Legislative Projects unit, Municipal Services Branch.
- Information and advice are provided, and consultations are carried out on departmental and divisional issues.

Legal Services (Internal and Outside Counsel)

- Consultations are carried out on issues requiring legal input or interpretation.

Other Valuation Professionals (e.g., Appraisers, Real Estate Agents, Property Agents, etc.)

- Information related to property value, real estate transactions and valuation trends are monitored.

External agencies and boards

- These entities have regulations and approval processes for the development, construction and operations of the DI property inventory. As such they collect necessary data that is available and used by the provincial assessor to determine the assessment.
- Such entities include: National Energy Board (NEB), Alberta Utilities Commission (AUC) and the Alberta Energy Regulator (AER).

Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Bachelor's Degree (4 year)	Engineering	Business	PEng

If other, specify:

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

- This position will work on complex assignments requiring professional judgment.
- A minimum of an undergraduate degree in Engineering.
- Must be registered with APEGA, and maintain in good standing with APEGA.
- Fluency in English and excellent written and verbal communication skills.
- A minimum of ten years of experience as an engineer working on bitumen, oil, natural gas, or forestry projects.
- Five years of experience is preferred in the preparation, delivery and defence of industrial property assessments using the accepted approaches to value property and appropriate mass appraisal techniques.
- Sound knowledge of engineering principles, industry standards and practices, knowledge of facilities used for resource development. Including by not limited to
 - o cost engineering and practices related to major oil sands, oil and gas, upgrading, and forestry projects.
 - o project or process engineering and project management at upgrading, mining refinery, and forestry projects or similar experience relevant to the oil sands and forestry sector.
- Subject Matter Expert on oil and gas field equipment and facilities, or other heavy industrial equipment.
- Knowledge of oil and gas and forestry industry to assess validity and applicability of technical data.
- Ability to interpret information from technical documents including process and instrumentation drawings for the determination of DI property assessments.
- Comprehensive working knowledge of the *Municipal Government Act* and related legislations
- Analytic and logical reasoning skills
- Research skills
- Knowledge about the assessment administration of municipalities and their unique requirements.
- Strong awareness of provincial policies and legal precedents.
- Excellent verbal and written communications.
- Ability to communicate complex and technical information to a wide variety of stakeholders.
- Ability to work effectively with different levels of government and a diverse group of clients, including elected officials, senior leaders, legal counsel, and taxpayers.
- Project management and coordination skills.
- Excellent computer skills specifically
 - o Computer assisted mass appraisal (CAMA) assessment systems
 - o ACCESS application for impact analysis
 - o MS Office, specifically Word, Outlook, Excel, SharePoint, Teams and PowerPoint
 - o GIS
 - o PetroNinja Journal, and other AER data sources
- Skills associated with assessment/valuation of DI properties.
- Excellent public presentation and speaking skills.

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 type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<p>Integrates broader context into planning:</p> <ul style="list-style-type: none"> • Plans for how current situation is affected by broader trends • Integrates issues, political environment and risks when considering possible actions • Supports organization vision and goals through strategy • Addresses behaviours that challenge progress 	<p>As the Assessment Engineer, the work of this position directly impacts the revenue and cost base for Municipalities and industry across Alberta. The impact of the work has significant financial implications on both industry and Municipalities throughout Alberta as the assessment is used in the calculation of taxes that industry pays to the Municipality. These taxes are a significant source of revenue for the Municipality. Therefore, this position not only provides their engineering expertise for each property, but they are also aware and plan for broader impacts to both property owners and municipalities which rely on the property assessments that are produced.</p>
Creative Problem Solving	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/>	<p>Creates the environment for innovative problem solving:</p> <ul style="list-style-type: none"> • Generates new ways of thinking; ensures right questions are being asked about a problem • Eliminates barriers to creativity and innovation • Encourages a culture of innovation 	<p>This position must utilize their expertise to find innovate ways of improving assessment practices and address issues/gaps. To achieve this the position will encourage a culture of innovation while working within accepted engineering principles, professional practices and standards, and legislation and regulations. Technical knowledge is required for a variety of different complex major projects throughout Alberta. And this work requires the ability to apply engineering principles to varied situations while also finding innovations for improvements.</p>

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"> • Creates opportunities for improvement • Is aware of and adapts to changing priorities • Remains objective under pressure and supports others to manage their emotions • Proactively explains impact of change on roles, and integrates change in existing work • Readily adapts plans and practices 	<p>Work for this position requires the coordination of input/resources from a wide range of technical, financial and professional sources to address specific issues in determining the assessment. This also directly leads to the development of operational policies, best practices, standards and guidelines. This position is required to find opportunities for improvement so assessment practices can be as efficient, transparent, and accurate as possible.</p>
Drive for Results	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/>	<p>Aligns different groups to achieve goals and realize broader outcomes:</p> <ul style="list-style-type: none"> • Defines work mission to achieve APS goals and integrate projects • Provides bold advice to stakeholders • Proactively improves overall performance, measured through metrics 	<p>The Assessment Engineer provides expert technical advice and consultation to department staff and senior management, external/ internal working groups, legal counsel, municipal and industry representatives to facilitate understanding of departmental requirements for the assessment and to influence outcomes that comply with these requirements. The advice provided by this position is crucial for the branch to meet our legislated requirements and meet annual branch performance goals (ie. the Provincial Roll).</p>

Benchmarks

List 1-2 potential comparable Government of Alberta: [Benchmark](#)

Industrial Approvals Engineer - 522ER07
Municipal Approvals Engineer - 522ER03
Regional Planning Engineer - 522ER13

Assign

The signatures below indicate that all parties have read and agree that the job description accurately reflects the work assigned and required in the organization.

Employee Name

Date yyyy-mm-dd

Employee Signature

Supervisor / Manager Name

Date yyyy-mm-dd

Supervisor / Manager Signature

Director / Executive Director Name

Date yyyy-mm-dd

Director / Executive Director Signature