

New

Ministry

Transportation and Economic Corridors

Describe: Basic Job Details

Position

Position ID

Position Name (200 character maximum)

Aggregates Coordinator

Requested Class

Technologies 6

Job Focus

Operations/Program

Supervisory Level

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Organizational Structure

Division, Branch/Unit

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:

Under the general direction of the Construction Manager, the Aggregates Coordinator is responsible for providing alternate aggregate resources for the department's construction and maintenance projects. The Aggregates Coordinator coordinates the operation, management and reclamation of aggregate sources to meet the long term needs, and coordinates with outside agencies in matters of policy, referrals, and the utilization or the resource in general.

Responsibilities

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

1. Aggregates Location and Development

Activities:

- Identify the location of prospective aggregate deposits by determining the surface geology of the area, studying photos, evaluating geological and topographical maps, interpreting water well and seismic logs and by inspecting potential aggregate bearing lands.
- Plan aggregate prospecting and testing operations required to meet construction, operations, and anticipated long

term aggregate needs within the Region. Prioritize and schedule testing to ensure department commitments met. Organize and delegate work to consultants.

- Coordinate testing activities with regional personnel, landowners, and other stakeholder agencies (Environmental Protection, Forestry, Fish and Wildlife, Public Lands, Parks and Recreation, and local governments).
- Obtain agreements with landowners and aggregate suppliers. Verify legal ownership and negotiate with landowners for compensation and conditions on royalty agreements, access agreements, stockpile site agreements and compensation for crop damage due to testing.
- Manage consultants in the hiring of privately owned equipment to carry out comprehensive testing of aggregate deposits, the drafting of test plans, inventory maps and related drawings.
- Review surveys; locate topographical information and aggregate test plans received from the consultant to ensure accuracy and completeness of information. Assess pit accesses and potential haul roads.
- Select an appropriate aggregate source, assign an aggregate value, and develop a pit operating plan with conditions for all department or municipal contracts with an aggregate component where an Alberta Transportation option is given.
- Ensure that all appropriate aggregates related information is included in the tender packages for department and municipal contracts.
- Liaise with project sponsors and consultants to ensure dissemination of timely and accurate aggregate packages and completion of projects to ensure updated information, summary reports and plans are received by Alberta Transportation.
- Assist in preparation of Terms of Reference to hire expert consultants for large scale gravel studies.

2. Pit and Resource Management

Activities:

- Coordinate the operations of aggregate sources with consultants and contractors to maximize the recovery of suitable aggregates and facilitate cost effective future reclamation of the site.
- Applications for Environmental Approvals on patented and non-patented lands
 - Requires knowledge of pertinent legislation, historical information reviews, soils analysis, material balance, pit inspections, plans and application forms.
 - Logging topsoil depths and surface rock conditions.
 - Reviews of land capability and assessments
 - Update plans and cross-sections
 - Prepare written descriptions.
 - Advertising of Public Notices for Approvals.
- Ensure environmental approvals are renewed and amended as required for all department controlled sources.
- Identify and direct reclamation and disposal of depleted aggregate sources and stockpile sites to limit the land reclamation liability surplus land inventory of the department.
- Identify and dispose surplus gravel pits and stockpile sites.
- Coordinate reclamation projects with Alberta Environment and Sustainable Resources and Development.
- Initiate reclamation projects by carrying out site assessments and developing a Reclamation Plan.
- Applications for Reclamation certificates.
 - Requires historical review, description of reclamation work carried out, full site assessment and evaluation, identification and delivery of remedial work and submission of Application.
- Negotiate transfers of Environmental Approvals
 - Requires negotiations regarding department liability, method of work and payment, completion of forms, determine cost sharing, application for funding, negotiation of Release or Agreement and assurance of proper direction of compensation.
- Review license applications from the private sector, or other levels of government, for access to Alberta Transportation's Crown Reservations.

3. Administration

Activities:

- Prepare annual budgets for Regional Aggregates Management.
- Monitor monthly expenditures and maintain expenditure controls of equipment, administrative, and other costs to

ensure budgets are adhered to.

- Research and provide response for action requests on aggregate related issues.
- Respond to queries from various government agencies, other department branches, contractors, pit owners, private industry, and the public on all aggregate related matters.
- Develop and maintain a comprehensive filing system for all aggregate related data.
- Maintain the accuracy and integrity of the department's records concerning aggregates sources and stockpiles.
- Provide information to assist in the development of user and policy manuals.
- Review and advise on referrals by environmental consultants.
- Review and input all changes to the Gravel Stockpile Inventory Database on a monthly basis and ensure that all information is accurate and current. Identify and arrange for sale of surplus aggregate where appropriate.
- Liaise with Regional Office Administration for Access to Information Act (ATIA) requests and assist in the establishing of disclosure guidelines based on the Act. Provide field data as required.
- Assist in placement and withdrawal of caveats.
- Arrange and maintain consultant service agreements.
- Arrange and negotiate gravel pit and reclamation liability transfers to municipalities.
- Arrange for suitable lab testing of aggregate samples.
- Prepare initiatives to investigate and research new techniques for locating and testing aggregates.
- Ensure compliance with departmental specifications, standards, guidelines, drawings and procedures.
- Administer Regional Aggregates Consultant agreement to ensure quality services are provided personnel and scope changes are reviewed and properly reviewed in advance.
- Monitor engineering consultants' work through inspection of projects to ensure compliance with safety specifications and standards and quality of work.
- Assist in preparation of Terms of Reference and assist in Request for Proposals to prospective Regional Aggregate Consultants, review consultant proposals, and participate in consultant selection meetings.

4. Other duties as required

Activities:

- Liaise with the Region's Operations, Bridge, and Infrastructure Business Units' staff regarding project identification, scope determination, special design requirement and final acceptance of construction projects.
- Participate in various project meetings, such as project initialization meetings, pre-construction meetings, construction site meetings, interim and final inspection meetings, etc. as required.
- Participate in regular staff meetings with the construction group and pre-construction meetings.
- Provide representation at meetings where aggregates interests are present.
- Attend meetings with user groups concerning common interests or requirements in gravel areas where Alberta Transportation has sources.
- Management within Central Region of department owned gravel pits, crown dispositions, and private aggregate sources.
- All work must directed and undertaken so as to conform to municipal, provincial and federal environmental and development legislation and regulations.
- Optimize use of aggregate sources in general.
- Limit department reclamation liability and surplus land inventory in response to auditor concerns.
- Effective communication is required internally with Construction, Bridge and Property Managers and technical staff, and externally stakeholders with project consultants, landowners, aggregate suppliers, industry contractors, municipal administrators, public lands administrators and multi-level enforcement officers across the region.

Problem Solving

Typical problems solved:

-Determining economic viability of aggregate development and extraction
-Determining environmental requirements and implementing appropriate field programs and approval requests.
-Stakeholder and landowner dispute resolution

Types of guidance available for problem solving:

From an environment/legal standpoint AEP will be a regular source for guidance along with the COP and Water Act Approval for each pit.

Direct or indirect impacts of decisions:

The Aggregates Coordinator works with our regional staff, consultants and contractors in managing all our gravel pits in Central Region. The Aggregates Coordinator will also manage their own gravel consultant. They are also responsible for allocating option pits for all projects.

Key Relationships

Major stakeholders and purpose of interactions:

Construction Manager - pit operations for construction purposes,
Operations Manager - managing pits and reclamation
Property Manager - purchasing pits
Alberta Environment and Parks - COPs and Water Act approvals
Regional Environmental Coordinator - environmental aspects of pit usage
County and Municipal employees - sharing and selling resources
Landowners - haul road impacts, buying pits, care taker agreements and selling resources
Utility representatives - coordination of utilities in or adjacent pit locations

Required Education, Experience and Technical Competencies

Education Level

Diploma (2 year)

Focus/Major

Engineering

2nd Major/Minor if applicable

Designation

Other

If other, specify:

Six years related experience (or equivalent 1:1 years education/experience or vice versa).

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

Knowledge:

- Earth Surface Geology, Air Photo Interpretation to locate and assess potential aggregate sources.
- Exploration, testing, sampling and quality assessment procedures to determine access, and recoverability and suitability of potential aggregate sources.
- Alberta Land Survey System and Global Positioning systems to ensure accurate location mapping.
- Aggregate value, availability and allocation assessments to optimise consumption and sale of the resource in current and projected market conditions.
- Requirements of the Alberta Landmans Act, and Surface Rights legislation and regulations, to gain access for testing and negotiate Royalty Agreements for acquisition of reserves.
- Resource assessment and evaluation skills to determine in situ value and purchase price of aggregate bearing lands.
- Canada Land Index and Soils Survey to assist in design and delivery of reclamation plans.
- Application of theory and practice from Civil Engineering Technology Diploma.
- Diploma in Civil Engineering Technology or High School diploma supplemented by additional directly related courses and practical knowledge of roadway design and construction practices.
- Good understanding of Alberta Transportation construction specifications and contract administration procedures.
- Land Titles procedures for application of Caveats and Easements.
- Alberta Environment and Alberta Sustainable Resource Development regulations, guidelines and codes to ensure compliance of department operations to Environmental Protection and Enhancement Act, Fish and Wildlife Act, Public Lands Act and Disposition requirements.
- Project management skills to ensure contractors, consultant and hired equipment adhere to department Specifications, Guidelines and Manuals.
- Technical knowledge in aggregate gradation, detrimental matter, soundness and stability, providing input to internal and external stakeholders and consultant partners on best applications for specific aggregate.
- Knowledge of organic topsoil and sub soil characteristics to ensure best practices for salvaging and replacement.
- Knowledge of best practices to prevent compaction and restrictive root penetration, and effective remedial procedures.

Skills:

- Computer and software skills to facilitate provision and capture of technical information, Word Processing, databases, CAD Drafting and program tracking spreadsheets.
- Organizational skills to prioritize and deliver department option aggregate sources, pit management, and pit reclamation.
- Superior communication skills to ensure delivery of programs and priorities to consultants, landowners, suppliers,

outside agencies and stakeholders.

- Negotiation skills to resolve resource allocation priorities, complex land use development and Conservation and Reclamation Plan issues.

Abilities:

- Ability to review and interpret Aggregate data and reports.
- Ability to deal with consultants and contractors in a partnership relationship.
- Determine viability of access, suitability and economic recoverability of potential aggregate sources.
- Travel and work alone in remote areas to collect and review field data, meet landowners and officials and discern quality of work.
- Deliver programs on time and on budget.
- Provide input to project sponsors and consultant partners on best applications for specific aggregate.
- Develop innovative solutions such as sale of in situ pit run to advance reclamation and disposal of lands and limit department liability.

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		
Drive for Results	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Actively sets goals and remains open to advice on reaching them: <ul style="list-style-type: none"> • Sets goals and prioritizes work • Identifies and corrects areas for improvement • Suggests actions; asks for advice when lacking information or multiple priorities • Operates within APS value system 	
Develop Networks	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Works on maintaining close relations with all stakeholders: <ul style="list-style-type: none"> • Identifies key stakeholder relationships • Has contact with range of interested parties • Actively incorporates needs of a broader group • Influences others through communication techniques 	
Build Collaborative Environments	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Works in an open honest manner with colleagues: <ul style="list-style-type: none"> • Creates sharing opportunities • Actively shares, accepts and listens to others • Recognizes conflict, respects and discusses opinions openly • Supports group even to learn from mistakes • Recognizes differing 	

Benchmarks

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

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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.