

Job Class Profile: Control Surveyor

Pay Level: CG-33 **Point Band:** 718-741

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	5	4	3	5	4	4	4	2	4	
Points	233	67	19	24	120	87	83	43	43	719

JOB SUMMARY

The Control Surveyor is advanced technical work responsible for performing and inspecting control surveys. Work involves the design, monitoring and inspection of control survey projects by conventional legal survey type or global positioning method (GPS).

Key and Periodic Activities

- Designs, monitors and inspects Horizontal and Vertical Control Survey projects for the extension and maintenance of the geodetic reference system in the province.
- Liaises with other departmental staff regarding the design and issuance of a variety of contracts and computes co-ordinates to be used for map compilation.
- Liaises with other government departments on the issuing of legal survey contracts that conform to the particular job requirements.
- Co-ordinates all functions related to assigned contracts from preparation of contract specifications and cost estimates; review of proposals; performance of office and field inspections and recommendation of invoice payment.
- Analyzes computer programs for the adjustment of new and existing survey observations to ensure all final co-ordinate values are produced in accordance with established reference system.
- Stores co-ordinate information obtained from surveys.
- Conducts field inspection of contractual work for progress and for adherence to specifications; initiates changes; directs field crews; prepares reports and recommends contract progress payments.
- Conducts field survey projects and performs calculations on the observed data and prepares plans for drafting.
- Co-ordinates helicopter and/or fixed wing aircraft operations during in-house or contracted work.
- Delivers technical presentations to students and/or colleagues regarding co-ordinate systems.
- Deals with the public on mapping/surveying issues.
- Attends various courses, seminars and meetings as required.

SKILL

Knowledge
<p>General and Specific Knowledge:</p> <ul style="list-style-type: none"> — Specialized knowledge of geomatics and surveying techniques. <p>Formal Education and/or Certification(s):</p> <ul style="list-style-type: none"> — Minimum: 3 Year Post-Secondary Diploma in Geomatics/Surveying Engineering Technology. Must be licensed as a Newfoundland Land Surveyor (NLS). <p>Years of Experience:</p> <ul style="list-style-type: none"> — Minimum: 3 - 4 years. <p>Competencies:</p> <ul style="list-style-type: none"> — Written and verbal communication skills; ability to utilize various computer software programs such as spreadsheets, word processing, databases, and specialized surveying programs.
Interpersonal Skills
<ul style="list-style-type: none"> — A range of interpersonal skills such as listening, asking questions, providing information, and communicating complex technical information is required. Work involves liaising with staff of other government departments on survey and mapping issues and delivering technical presentations to students and/or colleagues regarding co-ordinate systems. — Communication occurs with employees in the immediate work area, supervisors or managers. Interactions include co-operating with other departments and agencies regarding surveying and mapping projects, responding to enquiries from the public or businesses, and explaining the products or services offered by the Division. — Most significant contacts are supervisor and other staff.

EFFORT

Physical Effort
<ul style="list-style-type: none"> — The demands of the job occasionally result in considerable fatigue, requiring periods of rest. — Lifting or moving objects up to 25 lbs., is occasionally required during field work. — Work provides the opportunity to regularly sit, stand and walk within the office environment. During field work there may be a requirement to use chainsaws, carry rock drills, and use all-terrain vehicles. — The use of fine finger precision work is constantly required when compiling and manipulating geodetic data and producing reports.
Concentration
<ul style="list-style-type: none"> — Visual concentration is a regular requirement when performing field work activities (i.e. operating an all terrain vehicle, flying in a helicopter, using a geographic positioning system (GPS), etc). — Auditory concentration is a regular requirement while working in a field environment (i.e. awareness of your surroundings while in a helicopter, operating machinery in a safe manner, etc). — There are occasional interruptions and multiple time pressures/deadlines with a lack of control over work pace (i.e. project delays due to weather or other problems cannot be

predicted).

- **Exact results and precision** are required when conducting field inspections of contractual work for progress and for adherence to specifications; making geodetic adjustments and other related survey work.

Complexity

- Work typically involves tasks or activities that are similar and related in terms of skills and knowledge required.
- Problems tend to be well defined with a limited number of solutions and can be addressed by following guidelines or procedures.
- The most typical challenge/problem/issue that can occur would be technical in nature relating to the overall design, installation and maintenance of control survey projects and meeting established standards and timelines.
- Reference material available includes policies, procedures and guidelines. Co-workers, supervisor and outside agencies may also be consulted.

RESPONSIBILITY

Accountability and Decision-Making

- Work is assigned on a project basis with general guidelines on how the work is to be completed. Works with some independence in carrying out field work.
- Co-ordinates all functions of assigned contracts from the preparing of contract specifications and cost estimates; the review of proposals; performance of office and field inspections and recommendation of invoice payment.
- Involvement in field projects, purchasing of equipment, policy changes and departmental commitments require supervisory approval.
- The Provincial Geodetic Reference Network is the foundation for subsequent engineering and GIS work and it is imperative that accurate information is obtained and recorded.

Impact

- Impacts generally affect immediate work area, within and/or outside the department, and the general public.
- Resources impacted include information and health and safety.
- Inaccurate monitoring and inspection of projects to ensure established standards are met can impact the geodetic reference system used within the province. Emergency services can also be impaired if this incorrect information is used.
- In the event of a mistake or error the consequence is directly felt on the public and how they use the geodetic data published.
- Legislation, policies, and procedures are in place to mitigate the impact of errors. Work is performed under general direction of a professional who reviews work through conferences, reports and assessment of results.

Development and Leadership of Others

- Not responsible for the supervision of staff.
- Provides on-the-job advice/guidance to field crews in the performance of survey projects.

WORKING CONDITIONS

Environmental Working Conditions

- Required to wear safety equipment (i.e. safety vest, boots, hard hat) when performing field work. There is a requirement to be trained in safe work practices for field work assignments (i.e. proper use of chain saws, all terrain vehicles, etc).
- There is a moderate likelihood of minor cuts, bruises, abrasions, or minor illnesses and a moderate likelihood of occupational injury resulting in partial or total disability.
- Occasional to constant exposure to a wide range of adverse environmental working conditions while performing field work, such as unusual or distracting noise, dirt, dust, fumes, unusual odours, wet and slippery surfaces and electrical hazards, physical dangers and threats, sharp objects, and adverse weather conditions
- There is also a requirement to travel for work.