

**BENCHMARK CLASSIFICATION RATIONALE – BM #9
INTEGRATED LAND MANAGEMENT BUREAU**

1. POSITION TITLE Geo-Spatial Reference (GSR) Development & Standards Engineer	2. CLASSIFICATION LEVEL LSO 3
3. DIVISION GeoBC	4. BRANCH Crown Registry and Geographic Base
5. IMMEDIATE SUPERVISOR Manager, GeoBC Atlas	6. LOCATION Victoria

Program Function Describe the purpose of the program and organization in which the position operates.

The primary function of the Crown Registry and Geographic Base Branch is to provide research, technical and management expertise for base mapping related to topography, the cadastre and tenures. The Branch undertakes, coordinates and sets standards for Provincial baseline geographic data, related remote sensing, geodetic survey control functions and the crown cadastre, tenures and boundaries. The branch is also responsible for the development and maintenance of all base mapping products, services; policies, standards, specifications and for the provision of expert professional advice and recommendations to government and industry Base mapping is a critical foundation geographic tool that is essential for resource management, other provincial government services such as emergency response, community planning and development, and First Nations treaty development.

Purpose of Position and Summary of its Functions This may be used for POSTING purposes.

The position is responsible for developing and recommending, to the Branch Executive, geo-referencing policies, procedures, protocols, and other guidance. The position provides professional direction for the ongoing operation, maintenance and modernization of the Geodetic Reference System. The position also provides expert technical advice to the section, Branch, GeoBC, ILMB Staff, other ministry staff, agencies, industry, local government and the general public on geomatics and geo-referencing, and provides program support and performs other related duties.

Organizational Structure and Working Environment

The Branch is comprised of three basic business lines: base mapping (including the geo-spatial reference); digital image capture/management/services; and cadastral fabric, tenures and boundaries. The GeoBC Atlas Section, in addition to providing base mapping products and services, also provides geomatics support to the other sections in the branch due to staff education, knowledge and experience.

The GSR Development & Standards Engineer reports to the Manager, GeoBC Atlas Section. The position takes general direction from the Manager, but frequently deals directly with the Branch Director, other Branch Managers and staff, and GeoBC Executive on matters of geomatics and geo-referencing. Although this position does not administratively supervise any subordinate staff, the position works in a matrix/team environment where it may be leading some projects (with the staff and budget).

The GSR Development & Standards Engineer is guided by the Land Act, other provincial legislation, regulations and initiatives, the work involves technical, economic and cross-jurisdictional factors associated with federal, provincial and municipal infrastructure.

Position's Specific Functions and How They Are Performed

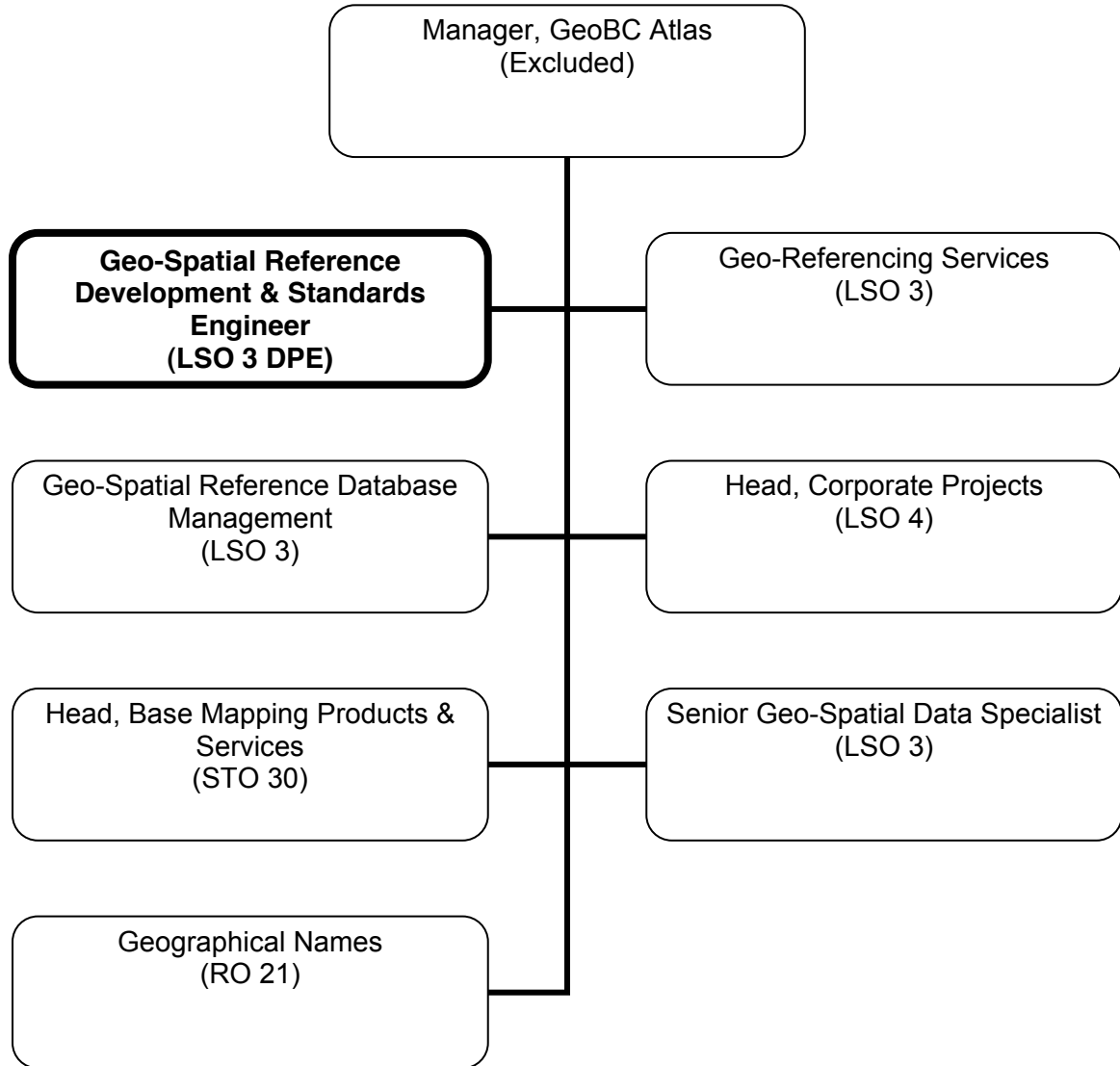
- 1. 35% Provides professional direction for the ongoing operation, maintenance and modernization of the Geodetic Reference System by:**
 - Recommending and developing the future vision and direction of the provincial geodetic reference system
 - Recommending and developing algorithms and/or computer software
 - Designing and engineering geodetic networks

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- Recommending standards for positioning processing and maintenance of the geodetic control system
 - Providing technical supervision of the GSR Development and Standards staff
 - Evaluating technical procedures and algorithms
 - Recommending action to improve existing standards
 - Ensuring agencies and professionals conducting control surveys adhere to provincial standards
2. **30% Provides expert technical advice to the section, Branch, ILMB Staff, other ministry staff, agencies, industry, local government and the general public on geomatics and georeferencing by:**
- Advising stakeholders, clients and users of GSR system standards specifications and guidelines
 - Evaluating georeferencing activity both within government and the private sector to ensure effective integration capability of the GSR into their geospatial data holdings
 - Testing and analysis other geomatics / referencing technologies (e.g., LiDAR, digital cameras, etc.) to groups within government and the private sector
 - Providing expert technical advice to ministry staff, other government staff and the private sector
 - Representing the branch on inter-ministry/government/agency committees, public information meetings, technical planning meetings, and hearings
 - Responding to data enquiries
 - Organizing and participating in professional and/or technical seminars and presentations
 - Liaising with other agencies, First Nations and the public
 - Providing testimony as an expert witness during legal proceedings
3. **25% Developing and Recommending, to the Branch Executive, Geo-Referencing Policies, Procedures, Protocols, and other guidance by:**
- Defining the geodetic reference system and developing the associated standards, policies and guidelines
 - Developing internal and external communications, technical guidance, policies for georeferencing
 - Leading and participating on committees, in task groups and other consultative bodies
 - Developing and delivering training on geo-referencing for Ministry staff and external stakeholders
 - Interacting with Geodetic Survey of Canada, other provinces, and research institutions to optimize algorithms and software for processing geodetic data control
4. **5% Provides program support by:**
- Preparing and/or reviewing reports, briefing notes, ministerial letters and other correspondence
 - Developing budget and expenditure recommendations, monitoring and forecasting budget expenditures
 - Recommending policy reviews and adaptations
5. **5% Performs other related duties**

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ORGANIZATION CHART - GSR DEVELOPMENT & STANDARDS ENGINEER



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TITLE: Geo-Spatial Reference (GSR) Development & Standards Engineer LEVEL: LSO 3

DIVISION/BRANCH: GeoBC/Crown Registry and Geographic Base

FACTOR	POINTS
<p><u>PURPOSE OF POSITION</u> The primary focus of this position is to develop and recommend Geo-Referencing policies, procedures protocols and other guidance. The position will also provide professional direction for the ongoing operation, maintenance and modernization of the Geodetic Reference System.</p> <p><u>KNOWLEDGE</u> The work requires a considerable depth of knowledge of geomatics in order to develop geo-referencing policies, procedures and protocols. Evaluating geo-referencing activity both within government and the private sector to ensure effective integration of GSR data and the design and engineering of geodetic works is analytical and interpretive requiring the position to make some judgements based on considerable experience. Requires registration as a Professional Geoscientist.</p>	D(2) 113
<p><u>JUDGEMENT</u> <u>Originality and Complexity:</u> The work involves making major adaptations to previously developed geodetic network solutions and algorithms. The position develops policies, procedures and other instructional materials and analyzes a variety of complex GSR data in the development and engineering of geodetic networks. <u>Technical Supervision Received:</u> The policies, procedures and other materials are reviewed upon completion.</p>	C2 86
<p><u>ORGANIZATION AND PROGRAM ROLE</u> The primary role of the position is to provide advice, recommendations and consultative services to ministry staff and the private sector.</p>	II(a) 43
<p><u>ADMINISTRATIVE SUPERVISORY RESPONSIBILITY</u> The position does not administratively supervise any staff.</p>	0

TOTAL POINTS 242

LEVEL	POINT RANGE
1	168 – 203
2	204 – 237
3	238 – 267
4	268 – 295
5	296 – 365