

# MATAWA FIRST NATIONS MANAGEMENT



## FOUR RIVERS ENVIRONMENTAL SERVICES GROUP

### Job Description

## **Geomatics Technician**

## **PURPOSE OF THE POSITION**

Established in 2011, the Four Rivers Environmental Services Group (FRG) provides environmental advisory and technical services, **centered in supporting self-sufficient and self-reliant communities**. Key services focus in the areas of Project Management, Communications & Engagement, Geospatial Information Systems & Mapping, and Environmental Services.

FRG employees operate in a team environment, where tasks are shared between team members based on individual team member strength, availability and operational need. At this time, FRG requires the skills of the Geomatics Technician, who will work under the general supervision of the Manager, Four Rivers Environmental Services Group (Manager of FRG), and/or his/her designate, and will work as part of a team to deliver Four Rivers programs.

## **SCOPE**

Matawa First Nations Management (MFNM) is the parent organization to FRG. FRG carries out projects and initiatives both on behalf of MFNM and wholly owned subsidiaries of MFNM, including Four Rivers Inc. Those projects and initiatives of MFNM, which are publicly funded and in service of the Matawa member First Nations, are referred to as the operations of Four Rivers Matawa. Those projects and initiatives of Four Rivers Inc., which are for-profit and in service of any community or group, are referred to as the operations of Four Rivers Inc. The Geomatics Technician will support the advancement of any project or initiative affiliated with FRG, as well as support initiatives associated with Matawa First Nations Management's affiliate corporations, where applicable.

The FRG was initially established to support Matawa member First Nations in environmental stewardship and capacity building for resource development. Over the years, FRG has developed into a team of dedicated and enthusiastic professionals from a wide array of experiences and backgrounds. The team supports a large number of projects and initiatives across northern Ontario. FRG strives to deliver services that are community-centered and innovative.

## **RESPONSIBILITIES**

The Geomatics Technician will assist with the delivery of Four Rivers programs through research, development, outreach and communication initiatives. Responsibilities include:

### **1. Systems Maintenance**

Main Activities:

- Help to maintain and coordinate Matawa geomatics services.
- Correspond with Matawa First Nation community members to meet geomatics needs.
- Gather, analyze, and integrate spatial data in GIS as required.
- Participate in the maintenance of equipment and software used for Matawa geomatics services.
- Perform database maintenance as needed.

### **2. Mapping Support**

Main Activities:

- Generate/update regularly published mapping products produced and distributed to the Matawa member First Nation communities in both hardcopy and digital formats.
- Generate cartographic products as required and requested by member First Nation communities or Matawa First Nations Management employees.
- Standardize cartographic products.
- Conduct interviews and digitize mapping data as required.
- Complete/support Indigenous Knowledge data collection initiatives, including mapping, interviews, data processing, analysis and reporting while, performing required confidentiality/safe keeping methods on data for communities as requested.

### **3. Training and Mentoring**

Main Activities:

- Travel to member First Nation communities and deliver hands-on GIS and digital data collection (GPS, Survey123 etc.) training to community members as requested and required.
- Maintain and advance Matawa GIS training program.
- Support First Nation community members, youth, and Matawa staff in geomatics capacity building.

### **4. Service Development and Advancement**

Main Activities

- Work directly with First Nation community members to support community mapping and Land Use Planning, Indigenous Knowledge and other environmental projects, as required and requested by the communities.

- Work with Four Rivers' staff to build, populate and maintain a "hub" database project; research and support building of hub database, add existing data to the database, digitize data to be added to database, etc.
- Help to expand community access to GIS applications and functionality, including but not limited to ArcGIS Online, smartphone and tablet applications.
- Develop youth engagement activities related to geography, mapping, orienteering, GPS, and GIS.
- Foster partnerships with academic institutions and industry to expand geomatics services and accessibility.
- Provide advice and support for developing community geomatics systems as requested.

## **5. General**

### Main Activates:

- Assist with the development and delivery of Four Rivers' programs.
- Assist with preparation of general correspondence and reports as required.
- Attend meetings as requested and required.
- Assist with the preparation of proposals and funding applications for various environmental programs or projects as required.
- Assist with the development and delivery of training initiatives.
- Adhere to the Matawa Quality Management System requirements and participate in the maintenance and advancement of department standards.
- Support Four Rivers staff, environmental programs and the Matawa First Nation communities; and,
- Travel to road-access or remote (air accessible) First Nation communities, if required.

## **6. Additional duties as requested or required.**

## **KNOWLEDGE, SKILLS AND ABILITIES**

### **Knowledge**

The incumbent must have proficient knowledge in the following areas:

- Diploma/Degree in geography, environmental studies or science (or related field);
- Five or more years' experience in Geomatics preferred;
- Knowledge in Geomatics Systems, including GIS, GPS Units and cartography;
- Strong understanding of ESRI ArcGIS platforms; preference for experience with Survey 1-2-3 and ArcGIS Pro;
- Knowledge of database management systems and techniques;
- Must have a good multidisciplinary environmental background;
- An excellent understanding of First Nations environmental issues and land, resource and environmental planning;
- First Nation Traditional Values Mapping experience would be an asset;
- Knowledge of First Nations Governments, Culture, traditions and lifestyles;
- Experience working with First Nations;
- Teaching/training experience would be an asset;
- An understanding of biology, geology and geography with research/field experience, would be an asset;
- Knowledge of the methods and techniques of collecting, analyzing and reporting data, especially environmental and/or natural resource data would be an asset; and
- Project Management experience would be an asset.

### **Skills**

The incumbent must demonstrate the following skills:

- Knowledge in the operation of geomatics equipment and software, ArcGIS, Garmin and GPS units;
- Ability to self-train in technical subject areas through the use of manuals and computer-based training;
- Excellent communication (oral and written) skills;
- Excellent organizational and database management skills;
- Excellent multi-tasking skills;
- Excellent interpersonal skills;
- Ability to work under pressure
- Ability to multi-task and set priorities
- Detail oriented
- Must be self-motivated, with the ability to work with minimal supervision
- Must have strong analytical, evaluation and assessment skills, and knowledge of computer applications, including Microsoft Office;
- Ability to speak and understand Ojibway/Oji-Cree/Cree would be considered an asset; and
- Possession of a valid Ontario Driver's License.

## **Personal Attributes**

The incumbent must maintain strict confidentiality in performing the duties of the Geomatics Technician. The incumbent must also demonstrate the following personal attributes:

- Must value flexibility and adaptability;
- Must be self-motivated and able to work independently, with minimal supervision and general instructions;
- Must take initiative when performing duties;
- Ingenuity and interest in expanding community access to GIS applications and functionality.
- Reliable;
- Punctual;
- Honest and trustworthy
- Sound work ethics
- Cultural awareness & sensitivity
- Respectful
- Well-organized
- Willing to regularly travel
- Outgoing & personable
- Open to challenges & learning
- Dedicated
- Flexible/adaptive & innovative; and
- Patient.

FRG's work environment is ever changing, with great variability of projects and day-to-day responsibilities. The Geomatics Technician must be able to understand and thrive in the culture of FRG that is one of flexibility and adaptability. Individuals who value structure and repetition in their role will not be satisfied working with the FRG.

## **WORKING CONDITIONS**

The Geomatics Technician will work primarily in an office setting and may also be required to travel to the field (i.e., First Nation communities, remote communities, wilderness, lakes/streams, wetlands, heavily forested areas) to perform the roles and responsibilities associated with their position.

### **Physical Demands**

The Geomatics Technician may have to travel in all weather, in small aircraft or spend prolonged periods of time in a vehicle. They may have to lift, carry and manage office equipment and supplies. They may have to walk long distances outdoors over rough terrain, carrying heavy field equipment. They may have to wear specialized field or safety equipment which may be heavy and overly warm (i.e., steel toed boots, chest waders etc.). They, while outdoors, may be exposed to various insects, and weather conditions (hot, cold, rain, snow). They may have to work odd or long hours at a time to complete special requests or projects. They may have to spend long hours sitting and using office equipment, computers and attending meetings.

### **Environmental Conditions**

#### *Office setting:*

The Matawa Building may be a busy facility. The Geomatics Technician may have to work with a number of people and projects at one time, and may be interrupted frequently to meet the needs and requests of Matawa First Nation Communities and Four Rivers Environmental Services Group. They may find the environment to be busy, noisy and will need excellent organizational, and time/stress management skills to complete the required tasks.

#### *Field setting:*

The Geomatics Technician may be required to work in various weather conditions (hot, rain, snow cold). They may have to work alone in remote environments and wilderness. Field work can be physically demanding (carry heavy loads, walking for long periods in rough terrain). They may be required to carry and use safety gear (i.e., first aid, radios, life jackets, GPS, compass, protective gloves or glasses) and navigate by map. They may have to work for long periods of time outdoors, and may be exposed to various insects and some remote camping. Occasional site visits may be required to industrial sites. All site-specific safety controls must be adhered to, along with site-specific safety training and equipment.

### **Sensory Demands**

Sensory demands can include reading and the use of a computer which may cause eye/wrist strain and occasional headaches. The Matawa office at times may be noisy and busy making it difficult for the Geomatics Technician to concentrate.

## **Mental Demands**

The Geomatics Technician will have to manage a number of requests and projects at one time. They must be aware of Tribal Council policies and procedures. They may have to complete a number of tasks and responsibilities at one time, and must be prepared to deal with stressful situations. Travel and fieldwork may cause fatigue.

**CERTIFICATION**

<p>_____ Employee Signature</p> <p>_____ Printed Name                      Date</p> <p>I certify that I have read and understand the responsibilities assigned to this position.</p>	<p>Manager, Four Rivers Environmental Services Group</p> <p>_____ Supervisor's Title</p> <p>_____ Supervisor's Signature              Date</p> <p>I certify that this job description is an accurate description of the responsibilities assigned to the position.</p>
<p>_____ Chief Executive Officer's Signature              Date</p> <p>I approve the delegation of responsibilities outlined herein within the context of the attached organizational structure.</p>	

The above statements are intended to describe the general nature and level of work being performed by the incumbent(s) of this job. They are not intended to be an exhaustive list of all responsibilities and activities required for the position.