

### **Sioux Valley Dakota Nation**

# Employment Opportunity Geophysical Scientist

# Brandon Indian Residential School Missing Children Investigation Full-Time, Term

**Position Summary**: The role of the geophysical scientist will be to oversee the geophysical survey and data processing related to the Brandon IRS investigation. To do this, this position will be responsible for: 1) coordinating and designing geophysical surveys; 2) maintaining geophysical equipment including ground penetrating radar (GPR), electromagnetic systems (EM) and magnetics (MAG); 3) Data processing and analyzing; and 4) preparation of results for reports and presentations.

#### **Position Duties:**

- Coordinate with multi-disciplinary teams on best practice approaches to unique environment and soil conditions for geophysical surveys.
- Design and implement appropriate geophysical surveys of designated areas.
- Communicate and coordinate with team members regarding aerial surveys and archaeological investigations.
- Optimize geophysical survey designs and data collection methodologies.
- Maintain geophysical equipment and develop relationships with suppliers for operation.
- Conduct geophysical surveys utilizing multiple methods including GPR, EM and MAG systems.
- Utilizing GIS, GPS and GNSS positioning systems for accurate surveying.
- Signal processing and analysis of multiple geophysical systems (GPR, MAG, EM).
- Must be able to develop and implement Python scripts for data processing.
- Develop and maintain geophysical databases ensuring its accessibility, security, and compatibility with other systems.
- Create maps and models related to geophysical surveys and results.
- Prepare results for reports and presentations for varying audiences.
- Supervise a team of research assistants, providing guidance, training, and support to ensure their work aligns with project objectives and deadlines.
- Assign research tasks to assistants, monitor progress, and review their findings for accuracy, quality, and adherence to established research methodologies.
- Foster a collaborative and positive work environment, encouraging teamwork and knowledge sharing among research assistants.
- Expected to work closely with the Project Manager, Administration and Community Coordinators.
- Other duties as deemed necessary.

#### Qualifications:

- At minimum a Post-Secondary Degree in Geophysics, or a closely related field and 2 years relevant experience in potential field methods, electricity and electromagnetism, geodesy and geomatics, radar and other propagating wave physics, and/or gamma ray spectroscopy.
- Cultural and traditional knowledge an asset.
- Experience with ground geophysical surveying methodologies including field applications, data processing and analysis.
- Must be proficient in GIS software (QGIS, ArcMap, etc.) data processing and statistical programs (Python language, R, etc.) and geophysical software (EKKO Project, Surfer, Geoscience Analyst, etc.).
- Must be reliable and punctual.
- Must maintain confidentiality as required due to the sensitive nature of the work.
- Ability to maintain a respectful working relationship with staff, community representatives/members and representatives of other organizations.
- Knowledge of office equipment and computers.
- Proficient with Microsoft programs (Outlook, Word, Excel and PowerPoint).
- Proficient with virtual meeting platforms (Zoom and MS Teams).
- Excellent time management and organizational skills.
- Must be able to work independently and as part of a team.
- Excellent verbal and communication skills.
- Research, writing, and planning skills.
- Ability to budget and record accurate expenses.
- Ability to work in a fast-paced environment.

This opportunity is open to all applicants; however, preference will be given first to citizens of Sioux Valley Dakota Oyate. We thank all those who apply, but only those selected for an interview will be contacted. For full Job description, please email hrapplications@svdngovernance.com to request a copy.



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### **Employment Opportunity**

Must be able to work a flexible work schedule.

Valid driver's license and reliable vehicle.

**Competition Number: 202455** 

Submit Cover letter and Resume indicating Competition Number: Human Resources Department Sioux Valley Dakota Nation P.O. Box 38 Griswold, Manitoba ROM 0S0

Phone: 204-855-2671 Fax: 204-855-2131 Email: hrapplications@svdngovernance.com