



IDENTIFICATION

Department	Position Title	
Education, Culture and Employment	Intern, GIS and Archaeology Data	
Position Number	Community	Division/Region
71-16958	Yellowknife	Culture and Heritage/HQ

PURPOSE OF THE POSITION

The purpose of the Intern, GIS and Archaeology Data position is to assist with creating, maintaining, analyzing, and providing access to geospatial data related to archaeological sites and archaeological site management in the NWT. The incumbent will gain practical experience by applying GIS to the management of archaeological sites through entering and updating information provided by archaeologists into databases, assisting in the land use review process, conducting change detection analysis with remote-sensing products for archaeological sites threatened by climate change-driven landscape disturbance, and assisting with the modernization of the NWT Archaeological Sites Database.

The incumbent will develop their knowledge of GIS and database applications in cultural resource management and land use review processes and develop professional skills in project management, problem-solving, and teamwork.

SCOPE

The Intern, GIS and Archaeology Data is located in Yellowknife at the Prince of Wales Northern Heritage Centre (PWNHC) and reports to the Territorial Archaeologist. The incumbent will assist the Cultural Places Program (CPP) team with the management of archaeological site data, including a major project to build a new geospatial database for archaeological sites; will use GIS to facilitate the management of archaeological sites at risk of impact from anthropogenic and natural disturbance factors; and will assist with preparing geospatial data for external clients. These tasks affect the delivery of the CPP's legislative responsibilities concerning the protection of archaeological sites and the maintenance of archaeological site data.



RESPONSIBILITIES

1. Archaeological Site Data Management

- Enters data for new and revisited archaeological sites into the archaeological sites geodatabase and database management software.
- Assists with editing and quality control checks of archaeological site data.
- Creates site extent polygons for archaeological sites by geo-referencing site maps and other methods.
- Assists with preparing archaeological site data to fulfill data requests from external clients.
- Assists CPP staff with migrating archaeological site data to a new database structure.

2. Lands Use Review

- Assists the Assessment Archaeologist by using GIS to analyze the potential impacts of development activities on archaeological sites.
- Assists CPP staff to create, edit, and maintain spatial datasets required for land use reviews, including archaeological survey data and archaeological potential data.

3. Change Detection for Archaeological Sites at Risk from Climate Change

- Assists the Climate Change Archaeologist to use GIS and remote sensing products to analyze the impacts of climate change-driven landscape disturbance (coastal erosion, thawing permafrost, forest fires, etc.) on archaeological sites.
- Geo-references air photos and satellite imagery to create time series to detect landscape changes and rates of change in the vicinity of archaeological sites.
- Creates mapping products that can be used to prioritize management actions on archaeological sites at risk of impact.

4. Cartography

- Assists CPP staff with the production of maps and map templates for archaeology and geographical place names applications.
- Assists with the production of maps for exhibits at the PWNHC.

5. Other Mapping Projects:

- Creates ArcGIS StoryMaps as outreach products to share the cultural heritage of the NWT.

WORKING CONDITIONS

Physical Demands

There are no unusual physical demands associated with this position.



Environmental Conditions

There are no unusual environmental conditions associated with this position.

Sensory Demands

The incumbent will spend a lot of their time concentrating on technical details, including many hours at a computer station. The incumbent will work in an open office format and will collaborate with team members on a daily basis.

Mental Demands

The incumbent is faced with mental demands stemming from the need to liaise with team members and the need for constant attention to detail.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of principles of GIS and database management.
- Knowledge of GIS-related software packages, including ArcGIS Desktop and ArcGIS Pro.
- Understanding of data collection methodologies and standards, data integrity, and quality control in relation to data.
- Knowledge of principles of cartography and digital mapping specifications, including projections and coordinate systems.
- Strong interpersonal and teamwork skills.
- Excellent oral and written communication skills.
- Ability to use Microsoft Office, email, and basic office equipment.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion, and cultural awareness, as well as safety and sensitivity approaches in the workplace.

Typically, the above qualifications would be attained by:

Completion of a Bachelor's degree in archaeology, geography, or environmental studies with at least two GIS courses or relevant on the job GIS training, OR completion of a Diploma in GIS.

Equivalent combinations of education and experience will be considered.

ADDITIONAL REQUIREMENTS

Position Security (check one)

- ☒ No criminal records check required
- ☐ Position of Trust – criminal records check required
- ☐ Highly sensitive position – requires verification of identity and a criminal records check

French language (check one if applicable)

- ☐ French required (must identify required level below)

Level required for this Designated Position is:

ORAL EXPRESSION AND COMPREHENSION

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

READING COMPREHENSION:

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

WRITING SKILLS:

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

- ☐ French preferred

Indigenous language: Select Language

- ☐ Required
☐ Preferred