

Archaeological Assessment

Introduction

Archaeology studies past human activity and remains, focusing primarily on Indigenous cultures. It includes artifacts, features, ancestral and forensic remains, animal remains, plant remains, and sediments. The BC Heritage Conservation Act governs archaeological sites and issues.

What does an Archaeologist do?

- Conduct reviews and site evaluations.
- Assess cultural and historical significance.
- Provide recommendations for site preservation.
- Ensure compliance with heritage protection laws.
- Conduct detailed surveys and excavations.
- Analyze artifacts and remains.

Why is it requested?

Archaeological assessments are requested to:

- Safeguard cultural heritage resources.
- Prevent unintentional destruction of archaeological sites during construction.
- Ensure compliance with heritage protection laws and regulations.

Scope of Work

The most common archaeological activities that will be involved in a development approvals project will be an Archaeological Impact Assessment. However, there is a wide range of work that an archaeology professional may undertake, including:

Remote Access to Archaeological Data (RAAD)

Purpose:

- To access and review archaeological data remotely to determine the probability of archaeological potential on a site.

Description:

- This work generally involves reviewing the RAAD map and determining if there are any known probabilities of archaeological assets on the site or in the immediate area. If nothing is noted, then no further action is often required. A short memo from a qualified archaeologist is often the result of this work.

Components:

- Utilize online databases and GIS systems to access archaeological site information.
- Analyze historical records and previous archaeological reports.
- Identify areas of archaeological potential within the development site.

Terrestrial Archaeological Overview Assessments (AOAs) and Preliminary Field Reconnaissance (PFR)

Purpose:

- To provide a high-level evaluation of the archaeological potential of a site, through a site visit.

Components:

- Review existing archaeological data and historical records.
- Conduct a preliminary assessment of the site's archaeological potential.
- Perform on-site inspections and surface surveys.
- Identify and document visible archaeological features.
- Identify areas that may require further investigation or protection.

Marine Archaeology

Purpose:

- To investigate and document underwater archaeological sites.

Components:

- Conduct underwater surveys
- Identify and document submerged archaeological features.
- Undertake excavations and analysis if required.
- Develop recommendations for the preservation and management of underwater sites.

For larger areas or very large projects where there is little detailed existing information, but archaeological resources are expected, additional detailed archaeology work may be advisable or required, to more fully understand the probable scale and character of archaeological resources and the potential for impact.

Archaeological Potential Modelling

Purpose:

- To predict areas of high archaeological potential within a development site.

Components:

- Use GIS and predictive modeling techniques to identify areas of high archaeological potential.
- Analyze environmental and historical data to inform the model.
- Recommend areas for further investigation based on the model results.

Traditional Use Studies (TUS)

Purpose:

- To document traditional uses of land and resources by Indigenous communities, for areas that had higher levels of use, but for which there is little documentation.

Components:

- Conduct interviews and gather oral histories from Indigenous community members.
- Document traditional land use practices and culturally significant sites.
- Evaluate the landscape through possible site reconnaissance reviews.
- Prepare a report with findings and recommendations for preserving traditional use areas.

In some cases, additional specific archaeological work and reports may be needed, possibly including the following:

Culturally Modified Tree (CMT) Assessments

Purpose:

- If CMT's are identified on a site, additional work may be required to assess the characteristics of culturally modified trees within a development site.

Components:

- Conduct field surveys to locate and document CMTs – possibly including surveying their location into plans.
- Evaluate the cultural significance of identified CMTs.
- Develop recommendations for the preservation and management of CMTs.

Aboriginal Trail Network Studies

Purpose:

- To identify and document traditional Aboriginal trail networks.

Components:

- Conduct field surveys to locate and map traditional trails.
- Gather historical and cultural information about the trails.
- Develop recommendations for preserving and managing the trail networks.

Archaeological Impact Assessments (AIA)

Purpose:

- To assess the potential impacts of a proposed development plan on a site's archaeological resources.

Components:

- Conduct a desktop evaluation of the proposed development plan on the site, with respect to the results of the AOA/PFR report.
- If significant impact is probable, this work may include additional site evaluations including:
 - Conducting field surveys and excavations to identify the characteristics of probable or known archaeological sites.
 - Evaluating the significance of the identified archaeological resources and the possible impact on them.
- Develop mitigation strategies to minimize impacts on archaeological sites.
- Prepare a detailed report with findings and recommendations.

Archaeological Monitoring & Site Mitigation

Purpose:

- To monitor construction activities and mitigate impacts on archaeological sites.

Components:

- Conduct on-site monitoring during construction activities.
- Implement mitigation measures to protect archaeological resources.
- Document and report any findings or disturbances.
- Develop and apply strategies to avoid, minimize, or recover impacts on archaeological sites during construction.
- Follow protocols if archaeological resources, artifacts or material remains are uncovered during construction.

Site Alteration Permit

Purpose:

- To undertake the process to obtain permits for altering archaeological sites where impact and alterations are inevitable or accidentally occurred during construction.

Components:

- Prepare and submit permit applications in compliance with Section 12.4 of the Heritage Conservation Act.
- Develop and implement mitigation plans to minimize impacts on archaeological sites.
- Ensure compliance with permit conditions and reporting requirements.

Dendrochronology

Purpose:

- To use tree-ring dating to analyze and date wooden artifacts or structures.

Components:

- Collect and analyze tree-ring samples from wooden artifacts or structures.
- Determine the age and historical significance of the samples.
- Prepare a report with findings and interpretations.

The Permitting Process

The typical process options for a project include:

1. A Preliminary Archaeology Review (Desktop Study)

This work generally involves reviewing the RAAD map and determining if there are any known probabilities of archaeological assets on the site or in the immediate area. If nothing is noted, then no further action is often required. A short memo from a qualified archaeologist is often the result of this work.

An applicant can also go to the Archaeology Branch website and request a Raad review by putting in the address of the site. Often an email will be received in a short time frame stating whether there are any archaeological assets of interest on the site or not.

2. Archaeological Overview Assessment (AOA)

This work is often undertaken for a larger site or any site where it is determined there may be archaeological assets present. It involves preliminary field reconnaissance (PFR) including a physical review of the land by a qualified archaeologist, often with monitors from First Nations on whose ancestral territory the site is located.

A report will be drafted outlining the results. If no areas show any visible signs of archaeological activity or assets, the recommendations are commonly that no further action be taken. However, if any assets are unearthed during future construction, then archaeological mitigation protocols are immediately implemented.

3. Archaeological Impact Assessment (AIA)

This assessment involves detailed prospecting to understand the location and significance of archaeological resources and the potential impacts of the proposed development. The AIA includes recommendations for site preservation or alteration.

4. Site Alteration Investigation

If a site is identified as having archaeological assets or importance, and it is expected that that area will be altered due to planned development, then a Site Alteration Permit must be obtained from the BC Archaeology Branch before any further investigation can proceed. It can take up to a year to receive the permit, so initial archaeology reviews are important to commence early. Based on the results of the site investigation and excavation, any artifacts discovered will be moved, or changes to the development plans may be required (an avoidance plan) to preserve the site.

5. Traditional Use Studies

If a site is identified as having been heavily used by First Nations in the past and therefore having a high likelihood of significant archaeology significance including the likely presence of many archaeology assets, then a traditional or cultural land use study may be undertaken.

The scope of a use study generally involves three elements:

- Historical document research.
- Interviews and discussions with First Nations about their knowledge of historical use patterns.

- Site reconnaissance
- Mapping and recording of traditional uses including sites and activities.

What is generally required at each stage in the development process?

Due diligence / securing land	<ul style="list-style-type: none"> • RAAD email / memo with the Archaeological Branch
Rezoning	<ul style="list-style-type: none"> • RAAD • Possibly an AOA and/or an AIA
Development Permit	<ul style="list-style-type: none"> • RAAD • Possibly and AOA and/or an AIA • Possibly a Site Investigation Permit and Alteration Plan
Subdivision	<ul style="list-style-type: none"> • RAAD • Possibly an AOA and/or an AIA
Building Permit	<ul style="list-style-type: none"> • Possibly a Site Alteration Permit
Construction	<ul style="list-style-type: none"> • Possibly a Site Alteration Permit