Corporate Policy

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Section:	Engineering, Operations, and Public Works	11
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Title:	Archaeology and Heritage Resource Protection for Construction and Maintenance Projects	2020-01

Related Policies

Number	Title	

Approvals

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Archaeology and Heritage Resource Protection for Construction and Maintenance Projects

Policy

City-led construction projects requiring ground-altering activities shall comply with the provisions of the BC *Heritage Conservation Act* (*HCA*). The purpose of the *HCA* is to facilitate the protection and conservation of heritage sites in British Columbia, including archaeological sites within the City of Port Moody. This policy is to provide guidance to project managers and staff involved in construction projects and exceeds the requirements set forth by the *HCA*.

Legislation

All archaeological sites, whether on Provincial Crown or private land (including land under water), that are known or suspected to predate 1846 are automatically protected under the *HCA*. Certain sites, including human burial and rock art sites with heritage value, are automatically protected regardless of their antiquity. Shipwrecks and plane wrecks greater than two years of age are also protected under the *HCA*. The *HCA* does not distinguish between those archaeological sites that are "intact" (i.e., those sites which are in a pristine, or undisturbed state) and those that are "disturbed" (i.e., those sites which have been subject to alteration, permitted or otherwise). All archaeological sites, regardless of condition, are protected by the *HCA*, as described above. Some sample images of archaeological sites are included in the Definitions section below.

HCA-protected archaeological sites or objects cannot be disturbed or altered without a permit issued by the Archaeology Branch (Ministry of Forests, Lands, and Natural Resource Operations). The Archaeology Branch is responsible for issuing permits to conduct archaeological studies.

Projects which have the potential to disturb archaeological sites generally require an assessment prior to the project being conducted. This assessment, referred to as an Archaeological Overview Assessments (AOA), typically involves a review of known information regarding the project area to determine if previously recorded archaeological sites are present and if unrecorded sites are likely to be present. Field visits done as part of the AOA process are referred to as Preliminary Field Reconnaissance (PFR). Permits are not required for this type of study.

If the AOA shows that archaeological sites may be present, a heritage inspection or field study, known as an Archaeological Impact Assessments (AIA), is required. These studies, conducted by a registered professional archaeologist, involve a visual inspection and possible subsurface testing of the project area to determine if buried materials are present. A heritage inspection permit is required for this study. The Archaeology Branch sets standards for testing and reporting for AIA studies, and will determine if the AIA report is adequate and if additional work is required.

If a project will likely cause significant damage to an important archaeological site as a result of site alteration or destruction, additional archaeological work known as a heritage investigation or excavation may be required. This involves systematic data recovery and may include the recording, removal, and analysis of artefacts. This work requires a heritage investigation permit issued by the Archaeology Branch.

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Scope

This policy applies to all City-led construction work sites where ground-altering activities are proposed. Works may include Capital Projects, Maintenance, and Rehabilitation Projects, as well as any required maintenance activities designated as emergency works. The Archaeology Chance Find Management Guidelines, an appendix to this Policy, may be updated from time to time based on changes in implementation to be consistent with provincial legislation and prevailing best practices.

Heritage Conservation Act (HCA) Blanket Heritage Inspection Permit

In 2019, the City secured a *Heritage Conservation Act (HCA)* Blanket Heritage Inspection Permit with the Archaeology Branch. This permit covers all City works and will be refreshed as necessary based on City needs regarding capital program and operational activities. The objective of the *HCA* blanket permit is to expedite the process of Provincial approvals on any relevant City works.

The *HCA* Blanket Permit requires the following activities for each project:

- Advance written notification will be provided to the Archaeology Branch and to appropriate First Nations groups of all individual works to be assessed under this permit.
- 2. Permitted activities generally include excavation during maintenance or construction, as well as ecological restoration work where soil disturbance is anticipated.
- 3. If significant and/or substantial archaeological remains are encountered, the Archaeology Branch will be contacted to discuss the findings and determine whether additional *Heritage Conservation Act* permits will be required.
- 4. Additional *HCA* permits may be applied for using Field Directors from archaeological consulting firms.

If an *HCA* Blanket Permit is not secured, the City would need to apply and obtain Provincial approval for a heritage inspection permit on each project that required such a permit. It should be noted this blanket permit does not circumvent the First Nations referral process which may require separate permits from each First Nations partner.

Definitions

Archaeological Impact Assessment (AIA) – A study that is required where potential conflicts have been identified between known archaeological sites or areas with the potential to contain archaeological resources and a proposed development. Sites are located and recorded, site significance is evaluated, and the nature and extent of expected impacts are assessed. Recommendations to mitigate potential project effects on sites are provided.

Archaeological Potential – Generally speaking, most locations have *some* potential to contain archaeological resources. Exceptions would include building footprints that have been fully excavated for underground parking. In practice, "archaeological potential" is most commonly used to refer to those locations that have a significantly greater likelihood for archaeological deposits to be present and detectable using standard investigative techniques. Such determinations of potential are most commonly based on an analysis of known site locations, cultural practices, and

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those biophysical characteristics (e.g., aquatic features, slope, forest cover, aspect) that typically correlate with archaeological site locations. These locations are usually subject to an archaeological impact assessment prior to development.

Archaeological Site – A location that contains physical evidence of past human activity and that can be studied by archaeological methods of investigation, including site survey, excavation, and data analysis.

Federal Crown Land – A parcel of land that falls under the jurisdiction of the federal government (e.g., First Nations Reserves, Stanley Park and parts of Vanier Park). The *Heritage Conservation Act* does not apply on federal lands.

Heritage Conservation Act (HCA) – The provincial Act that provides for the protection and conservation of heritage sites and objects within BC. All archaeological sites, whether on Provincial Crown or private land, including land under water, that predate AD 1846 are automatically protected under the HCA. Certain sites, including human burial and rock art sites with heritage value, are automatically protected, regardless of their antiquity. Shipwrecks and plane wrecks greater than two years of age are also protected under the HCA. The HCA does not distinguish between those archaeological sites which are "intact" (i.e., those sites which are in a pristine, or undisturbed state) and those which are "disturbed" (i.e., those sites which have been subject to alteration, permitted or otherwise). All archaeological sites, regardless of condition, are protected by the Act, as described above. HCA-protected archaeological sites or objects cannot be disturbed or altered without a permit issued by the Archaeology Branch (Ministry of Forests, Lands and Natural Resource Operations). While the HCA does not apply on Federal Crown land (e.g., First Nations Reserves, Stanley Park, and parts of Vanier Park) and HCA permits are therefore not required, heritage resources are otherwise managed in the same manner as on Provincial Crown or private land in British Columbia.

Provincial Crown Land – A parcel of land that falls under the jurisdiction of the provincial government. The *Heritage Conservation Act* applies to provincial land.

Registered Professional Archaeologist – A Professional Member of the BC Association of Professional Archaeologists.

Remote Access to Archaeological Data (RAAD) – A web-based application for accessing information about heritage sites in BC.

Procedures

The following procedures are required for any Project works or Public Works and Operational Maintenance completed by the City that require ground-altering activities. The process is summarized in Figure 1.

Project Planning and Design Phase

The Project Manager assigned to the project or maintenance activity is responsible for ensuring work is completed in accordance with the *HCA*.

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- 1. The Project Manager will consult the Provincial Remote Access to Archaeological Data (RAAD) map to determine whether any part of the work site is within or near a known archaeological site. If the work site is not near a Protected Heritage Site (PHS), it may still be within an area of significant archaeological potential. The Project Manager shall treat the following as areas of significant archaeological potential:
 - a. Work sites in or around watercourses
 - b. Work sites in or adjacent to the Burrard Inlet
 - c. Work sites with significant excavation
 - d. Works sites that encompass areas with established First Nation names
- 2. Archaeological potential may be ascertained through project engagement activities. Other resources or inputs such as First Nations databases to determine archaeological potential of the site may be made available to the Project Manager as the project develops. The Project Manager should consider engaging applicable First Nations at or near project initiation, particularly for large planned capital projects.
- 3. If the work site is within a known archaeological site, or within an area of significant archaeological potential, the process shall be as follows:
 - a. The Project Manager completes the First Nations Project Referral Sheet and Project Notification Letter for distribution by email to the Kwikwetlem First Nation, Musqueam Indian Band, Squamish Nation, Sto:lo Nation, and Tsleil-Waututh Nation. The Transmittal will include an introduction to the project and an opportunity to review and discuss the project; and
 - b. The Project Manager engages the services of a Registered Professional Archaeologist (RPA).
- 4. If the work site is outside of, but within a 50m buffer of any known archaeological sites or areas of significant archaeological potential, the process shall be as follows:
 - a. The Project Manager completes the First Nations Project Referral Sheet and Project Notification Letter for distribution by email to the Kwikwetlem First Nation, Musqueam Indian Band, Squamish Nation, Sto:lo Nation, and Tsleil-Waututh Nation. The Transmittal will include an introduction to the project and an opportunity to review and discuss the project; and
 - b. A Registered Professional Archaeologist should be contacted, unless it is determined that the scope of work would incur very little to no risk of encountering archeological materials.
- 5. If there is a need for services from an RPA, the Project Manager may use two options to retain the necessary services:
 - a. Under the project design contract, the design consultant may employ an RPA on a sub-contract basis.
 - b. The Project Manager may utilize an RPA under an as-and-when Archaeological Consultant contract when held by the City.
- 6. The Project Manager shall meet with the RPA to review recommendations and determine next steps. These may include:
 - a. Assess impacts or risk;
 - b. Conduct an Archaeological Overview Assessment (AOA):
 - c. Conduct an Archaeological Impact Assessment (AIA);
 - d. Re-evaluate potential redesign to eliminate or mitigate impact to known archaeological sites or areas of significant archaeological potential;

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- e. Proceed per scope of the project; and/or
- f. Re-evaluate project scope, schedule, and budget.
- 7. The Project Manager shall also track all project communications with First Nations and record them in the First Nations Engagement Record (reference provided below). This document may be shared during the course of the project with the Archaeology Branch, the BC Provincial Government, or Federal Government.
- 8. During any required project investigation or construction activities, the guidelines detailed in the City's Chance Find Management Guidelines (Appendix B) shall be employed. These guidelines shall be included in all Contract Tender documents. Training shall be provided to any staff involved in implementing Chance Find Management Guidelines, and should be considered for the Construction Contractor on the project.

Project Construction Phase

Based on the outcome of the Project Planning and Design Phase requirements above, there may be further archaeological resource management requirements for the project. Any specific requirements shall be detailed in contract documents, and associated reference materials be included in contract tender package.

If no specific archaeological activities are identified for the proposed project, construction crews shall at all times rely on the Chance Find Management Guidelines. Under these guidelines, if known or suspected archaeological materials are encountered during the course of project activities, work in that area must immediately cease and the steps outlined in the Chance Find Management Guidelines must be followed.

In the event of an archaeological find, there may be a need to refer financial implications to the Finance Committee to approve and identify an appropriate funding source.

Emergency Work

By its very nature, emergency work (e.g. broken water main repair) is unpredictable and can have tight timelines to ensure public safety and minimize property damage. In all likelihood, there will be a delay between the emergency response and the notification of First Nations or engagement of an RPA to assist.

In these instances, time is of the essence and completion of the steps outlined for the Project Planning and Design Phase, as described above, need to be completed as quickly as possible after initiating the emergency response to minimize the chance of the emergency work contravening the *HCA*.

In instances where the emergency work conflicts with a known archaeological site location, the Province has the ability to issue an *HCA* permit without delay or referral to First Nations in certain circumstances. The Project Manager will engage the assistance of an RPA through the City's standing as-and-when contract.

For emergency work within a known archaeological site, or within an area of significant archaeological potential, the Project Manager will:

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- 1. Ensure public safety and minimize impacts as follows:
 - a. take immediate steps to make the site safe with no impacts or minimized impacts to any known or suspected archaeological materials;
 - b. implement the Chance Find Management Guidelines; and
 - c. notify the Kwikwetlem First Nation, Musqueam Indian Band, Squamish Nation, Sto:lo Nation, and Tsleil-Waututh Nation and as soon as practicable during or following the event.
- 2. Plan permanent work with consideration of archaeological requirements as follows:
 - a. notify the Kwikwetlem First Nation, Musqueam Indian Band, Squamish Nation,
 Sto:lo Nation, and Tsleil-Waututh Nation via Referral Sheet;
 - b. consult a Registered Professional Archaeologist;
 - c. ensure any necessary monitoring or other archaeological measures are arranged before starting work; and
 - d. refer to procedures in Planning and Design Phase. In any communication with agencies or First Nations, note the status of the works and advise of any follow-up work or longer-term work planned as an outcome of or response to the emergency work.

Remote Access to Archaeological Data (RAAD) Map

City staff have access to the Provincial Remote Access to Archaeological Data (RAAD) as approved by the General Manager of each department. In general, staff access is limited to only those that need to access the information on a regular basis to support their work.

In accordance with the provincial information sharing agreement, permissions granted by Archaeology Branch Administrator is required to gain access to the RAAD, and it is understood that the RAAD map includes confidential information. The information will not be shared or distributed, and staff will only utilize the information for the protection of those sites in relation to City construction work.

References

Additional Definitions and Sample Photos (Appendix A)

City of Port Moody Chance Find Management Guidelines (Appendix B) (EDMS #493334)

First Nations Project Referral Sheet (EDMS #493827)

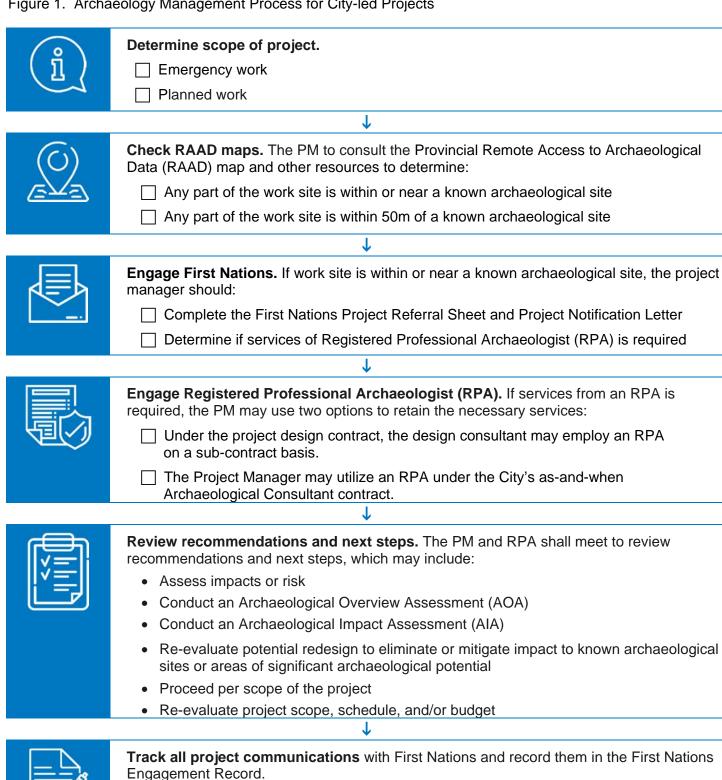
First Nations Engagement Record Template (EDMS #494351)

First Nations Project Notification Letter (EDMS #493979)

Monitoring/Authority

The General Manager of each department completing work per the Scope section above is responsible to ensure this policy is followed.

Figure 1. Archaeology Management Process for City-led Projects





Engagement Record.







Monitor for any further interests, responses, engagement needs. Any construction activities shall follow the City's Chance Find Management Guidelines.

Appendix A

Additional Definitions

Artifact – A portable object made, modified, used, or transported by humans; includes finished objects, waste products, and unmodified raw materials (e.g., stone nodules).

Feature – Non-portable archaeological remains such as hearths or stone wall fish traps.

Fire Cracked Rock (FCR) – Heat fractured stone that results from rapid or alternate heating and cooling as in stone boiling or campfires.

Flake – A piece of stone struck off a larger mass by the application of force. Flakes exhibit distinctive physical attributes by which they can be differentiated from naturally fragmented rocks.

Shell Midden – Cultural accumulations of shells, stratified in intricate white and grey layers, mixed with streaks of charcoal, ash, and other debris. Shell middens result from the successive deposition of food remains and general refuse, and are a particularly valuable archaeological resource as they provide detailed ecological information that can be used to reconstruct local marine and terrestrial ecosystems, human subsistence patterns and diet, technology, and other aspects of society through time. Shell middens were also commonly used as human burial sites.

Site Inventory Form – A form used by the province to document archaeological site information in a consistent and standard format. Every archaeological site on record with the Province has its own site inventory form.

Sample Photos



1. Bone and antler fragments



2. Shell midden



3. Chipped stone flakes



4. Fire cracked rock