Alberta Archaeological Site Reporting Guide



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Archaeological Site Recording Guide | Culture
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Introduction

The Archaeological Site Inventory Form (site form) is used to record basic information about an archaeological site. An archive of completed forms is maintained by the Archaeological Survey. The data collected from site forms are stored in a comprehensive, searchable database.

Archaeological Site Form Submission Process

- Archaeological spatial data and cataloguing must be finalized before a site form is completed. Details on the
 coordination with the <u>Standards for Archaeological Spatial Data Submissions</u> can be found in <u>Appendix 6</u>. All
 information and counts in a site form (i.e., features, total # materials observed, screened and not screened
 investigation locations) must be consistent with the details provided in the archaeological spatial data
 submission, final report, artifact catalogues, and any other materials submitted under the same permit.
- All Borden number reservation applications, site forms, and site boundaries/boundary updates are submitted by email to the Archaeological Information Coordinator.
- The process for documenting a newly recorded site (not previously recorded with a Borden number) differs slightly from the process for documenting a re-inspection of a previously recorded site.

New Sites

- When a previously unrecorded site is identified as part of a project conducted under an Archaeological Research Permit (mitigative, research or student), documentation is to proceed as follows:
 - Consult all previous site forms, archaeological reports, and spatial data that may be relevant to the site.
 - If it is determined that assigning a new Borden number is appropriate, submit the necessary information to the Archaeological Information Coordinator following the Borden number reservation process outlined in Appendix 1.
 - Contact the Archaeological Information Coordinator if uncertain how a new site should be recorded (e.g., if a site is a new site or a component of a previously recorded site, or if a site should be recorded as one or more sites).
 - Submit an Archaeological Site Inventory Form as outlined in this guide. The submission must include a FileMaker Pro form (and associated printed PDF) or a fillable PDF form.

Site Revisits

- When a previously recorded site is visited, documentation proceeds as follows:
 - Consult all previous site forms, archaeological reports, and spatial data that may be relevant prior to revisiting the archaeological site.
 - Subsequent to the site visit, prepare and submit an Archaeological Site Inventory Form as outlined in this guide. The submission must include a FileMaker Pro form (and associated printed PDF) or a fillable PDF form.
 - If necessary, provide updated site boundary shapefiles with the site form submission.
 - The revised site boundary shapefiles must include the areas where previous archaeological evidence was recorded, as well as the additional information from the current visit.
- Additional notes:
 - The site location points and boundary polygons found on the Archaeological Survey's spatial data service¹
 may have accuracy errors depending on the technology available when the site was first recorded. As part of

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¹ At the time of publication, the Archaeological Survey's spatial data service is the Alberta Geospatial Services Platform (AGSP).

- a site revisit, the researcher² must review all previous site forms for the site to verify that the existing point and polygon are accurate and submit updated information if necessary.
- A site form must be completed whenever a site is purposefully revisited, regardless of whether or not cultural
 materials are observed during the revisit. This requirement applies to sites revisited for the sole purpose of
 flagging or fencing site boundaries and includes sites that have been assigned a Historic Resource Value
 (HRV) 0.
- A revisit site form must focus on new information from the current visit. A brief history of past work at the site may be included in the Site Description (Section 14), but should be limited to 1-2 sentences. Site form Sections 1-13 summarize all past and present research at the site.
- If the researcher updates a site boundary, both the previous site boundary and the recommended updated site boundary must be illustrated in the site map.

Site Form Review and Revisions

- Sites are to be reported to the Archaeological Survey within 30 days of site discovery. Where sites are under immediate threat, they must be reported within 48 hours.
- The site form due date is printed on the issued mitigative, research, or student Archaeological Research Permit and can be accessed through the permit holder's Online Permitting and Clearance (OPaC) account.
- While preliminary site forms must be submitted with interim permit reports, these forms will not be reviewed by the Archaeological Information Coordinator.
- Site forms must be submitted as FileMaker Pro files (and associated printed PDF) or fillable PDF forms.
- Submission is to be made well in advance of the submission of an archaeological final report but only after cataloguing has been completed, the archaeological spatial data has been finalized, and site form contents have been checked and all foreseeable edits have been made.
- In response to the submission of a review copy of the site form, the Archaeological Information Coordinator will complete a review and notify the researcher of any required corrections.
- The Archaeological Information Coordinator will return approved site forms to the researcher with a watermarked approved date in the top right corner of the site form. This watermarked version of the form must be included in the archaeological final report.
 - Note that additional corrections may be required after an approval has been issued by the Archaeological Information Coordinator if problems are identified during the spatial data or report review processes.
- The researcher must not edit a watermarked form.
- If the researcher needs to make additional changes to the site form after a watermarked form has been provided, the researcher must send a new site form to the Archaeological Information Coordinator. In such cases, a new watermarked form will be issued by the Archaeological Information Coordinator.
- See Appendix 8 for a diagram on the site form review process.

Site Boundaries

- The Archaeological Survey maintains the master record of archaeological site boundaries in Alberta. Site boundaries are submitted by researchers but may be modified by the Archaeological Survey to include additional information (e.g., information from previous revisits).
- The master record of site boundaries can be accessed by approved users through the Archaeological Survey's spatial data service.
- In addition to site locations and extents recorded using modern technology, the Archaeological Survey's spatial data service includes legacy archaeological boundary polygons and site location points (i.e., those recorded before the GIS and GPS technologies were available). Due to these technological limitations, a legacy site location point and/or boundary may not be accurate. As a result, as part of a site revisit, a researcher must review all previous site forms to confirm the likely site location. If the researcher determines that the legacy site boundaries or locations are not accurate, updated site boundary polygons and site location points must be submitted to the Archaeological Survey. A description of the evidence used to justify moving the site boundaries

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² The term "researcher" applies to any permit holder, employee, or other individual working under a mitigative, research, or student Archaeological Research Permit in Alberta.

must be provided in Section 14 of the revisit site form. Both the previously recorded and the revised site boundary must be represented on the site map.

- Researchers must provide archaeological site boundaries in the form of ESRI shapefiles for all newly recorded sites and when the researcher determines that a previous boundary must be moved, refined, or expanded.
- If the researcher detects an error in a site boundary after it has been submitted with the Borden number reservation, updated site boundary data must be emailed to the Archaeological Information Coordinator as soon as possible.
- The site boundary shapefiles must be consistent with information provided in Section 6 (site dimensions) and Section 35 (site map) of the site form.
- The extent of the site boundary must be based on the locations of observed archaeological cultural materials and/or features (observed during the current visit and, if applicable, from previous site records) with a buffer of 5-15 m applied around these locations to account for GPS error.
- Areas positive for cultural materials and/or features from a previous site recording must remain included in the site boundary, even if they were not observed during the current site visit or have now been disturbed or removed.
- The site boundary is the actual extent of the site and does not include any recommended avoidance buffer or unexplored areas that may exhibit potential for associated cultural materials. The only exception is for historic structure sites that exhibit high potential to contain subsurface archaeological components but where testing is precluded by access or development limitations.
- Archaeological features or artifacts recorded within 100 metres of each other are usually recorded as a single site. Exceptions to this rule are provided in Appendix 1.
- Overlapping site boundaries will not be accepted.

Special Case Site Form Updates

Occasionally a researcher may wish to combine two previously recorded sites into a single site or split a previously recorded site into multiple sites. In such instances, the circumstances must be discussed with the Archaeological Information Coordinator prior to the creation of any other documentation related to the site, including the site form(s) and report. A change to an existing Borden number can create issues with existing site records and reports, previously catalogued artifacts and artifact records, as well as previously issued regulatory requirements. Circumstances will be assessed on a case-by-case basis, and permission must be granted by the Archaeological Information Coordinator before any changes proceed.

Consistency Between Datasets

- Archaeological spatial data and cataloguing must be finalized before a site form is completed. All information
 and counts in a site form (i.e., features, total # materials observed, screened and not screened investigation
 locations) must be consistent with the details provided in the archaeological spatial data submission, final
 report, artifact catalogues, and any other materials submitted under the same permit.
- Common inconsistencies between these datasets currently include the number of subsurface tests, exposures, features, and observed/collected archaeological materials.
- If the information and data are not consistent and clear, final report review and regulatory responses will be delayed.
- Detailed information regarding the coordination with the Standards for Archaeological Spatial Data Submissions is outlined in Appendix 6.

Coordination with Other Historic Resource Types

In some cases, in addition to be recorded in archaeological site forms, archaeological features will have to be documented with the Historic Places Stewardship Section (Heritage Survey) and/or Indigenous Heritage Section of the Historic Resources Management Branch.

Historic Structures

- Historic sites, structures, and structural remains thought to be 50 years old or older must be reported in the
 Heritage Survey using the HS eForm. Information about the Heritage Survey program and the requirements for
 Recording and Reporting Historic Structures can be found at: https://www.alberta.ca/albertas-heritage-survey.aspx
- When the vicinity of a structure/structural remains contains or has good potential to contain a subsurface component (e.g., homestead with standing buildings), the area containing a structure also must be recorded as an archaeological site. In such cases, both a Heritage Survey (HS) Site Form and an Archaeological Site Inventory Form must be completed.
- If a historic structure/structural remains (either above or below ground) is reported in an archaeological site form and is within or immediately adjacent to the development footprint, an HS Key numbers is required. If an HS Key is not provided in the site form, the researcher must provide verification to the Archaeological Survey that staff of the Historic Places Stewardship Section have confirmed that the structure does not require recording as a historic structure site.
- Being proactive regarding this requirement will prevent delays in the review and *Historical Resources Act* approval process.
- If an HS Key number(s) has been assigned to a structure at an archaeological site, it must be documented at the top of the archaeological site form.
- Note: The Heritage Survey refers to trails, earthworks, and wells as "structures," but the Archaeological Survey
 refers to them as "features."

Traditional Use Sites

- Sites that are considered to be traditional use sites of a historic resource nature must be reported to the Indigenous Heritage Section of the Historic Resources Management Branch. Information about these types of sites can be found at: https://www.alberta.ca/Indigenous-heritage-section.aspx
- Archaeological Site Inventory forms are not completed for these sites unless an archaeological component also has been identified.
- Traditional use features that are not archaeological (e.g., culturally modified trees) are not included as archaeological features in Section 15 of the site form. A description of such features can be included in Section 14
- Culturally sensitive information (e.g., lodges, prayer flags, etc.) must not be included in archaeological site forms or reports. Any detailed reporting about traditional use sites must be provided directly to the Indigenous Heritage Section and not included in the contents or appendices of an archaeological report.

Completing the Archaeological Site Form

General Notes about the Site Form

- Sections 1-13 (Location and Site Typology) are reflective of the site in general and should remain consistent in all revisit site forms unless new information necessitates a change.
- Complete all fields as thoroughly as possible but be concise. If information is unknown, not applicable, or unavailable, please leave fields blank unless otherwise instructed below.
- Make use of an "other" field option only when the specifics don't fit within the list of choices provided.
- All information must be checked for consistency and completeness prior to submission. If multiple sections are incomplete or inaccurate, the form may be sent back for revision without thorough review.
- Use Section 34 (Additional Remarks) or an additional page for any information that does not suit inclusion in existing fields and/or for overflow text from previous fields. An additional page template can be found in the FileMaker Pro file as a separate layout called "Form Additional Page" and can be customized to include text, tables, maps or photos.
- When converting a FileMaker Pro site form to a PDF, use the "Print to PDF" function to preserve formatting.

Site Identification Information

Borden No.

- Borden numbers are assigned to newly identified sites by the Archaeological Survey using the process outlined in Appendix 1.
- Borden numbers must be entered in the format AaBb-123. Other formats (e.g., a space replacing the hyphen) in the Borden No. field or elsewhere in the site form will not be accepted.

Permit No.

- If the site has been located during the course of a project conducted under an Archaeological Research Permit, provide the assigned permit number starting with a two-digit reference to the year and ending in the three digit sequential number assigned to the permit by the Archaeological Survey (e.g., 17-001).
- If the site identification was not associated with an archaeological permit, fill in this field with the researcher's or site recorder's last name, first initial, and the year the site was located (e.g., Smith, J. 2017).

Revisit Date

• If applicable, indicate the date that a site was last revisited under the current permit or study. Leave blank if the site was first recorded under the current permit or study.

Related Heritage Survey Key No.(s)

- If the site has associated historic structures or structure remains that have been recorded through the Heritage Survey program, fill in the applicable Key number(s) from the Heritage Survey (e.g., HS 47961, HS 47812).
- See section above on Historic Structures for information about when to request a Heritage Survey Key number.
- · Leave field blank if not applicable.

Site Name

- If applicable, enter a site name.
- If a site does not already have a site name, new names will be considered on a case-by-case basis and will
 need to be approved by the Archaeological Information Coordinator. Appropriate cases for site names may
 include a name for a site already known to local residents or a name for a particularly significant site.
 Suggested site names can be provided in Section 35 (Additional Remarks) when the review site form is
 submitted for review. Site names deemed to be inappropriate by the Archaeological Survey will not be
 accepted.
- List all previous site names recorded with the preferred name in the leading position.
- Leave field blank if not applicable.

Field No.

- If applicable, enter the number or code assigned to the site by the field researcher or reporter prior to obtaining a Borden number.
- Leave field blank if not applicable.

Location

1. Elevation

- Provide the central elevation (above sea level) of the site area, to the nearest metre.
- · Field must be completed.

2. N.T.S. 1:50,000 Map No. & Name

- Indicate the appropriate 1:50,000 series National Topographic Series map.
- Provide the number and name of the map sheet, in that order (e.g., 72M/12 Sunnynook).
- Field must be completed.

3. Legal Description

- Using the Alberta Township Survey (ATS) system, enter the legal land description of the entire site boundary to the nearest legal subdivision (LSD) of a particular section, township, range, and meridian.
- The legal description must encompass to the entire site boundary, not just the area observed under the current permit or the site centre point.
- If the site area includes multiple LSDs the numbers must be separated by commas (e.g., LSD 1, 2). Use semicolons to differentiate LSDs from multiple sections (e.g., LSD 4; 1, 2 Section 3; 4), townships or ranges.
- Any error(s) in legal land descriptions in previous site forms must be corrected in revisit site forms.
- Field must be completed.

4. Point Coordinates

- Using Alberta 10-TM (Forest) (EPSG: 3400) projection, provide the point coordinates for the densest or most representative portion of the site to the nearest metre. The point may not necessarily be the centroid of the site.
- Field must be completed.

5. Landowner

- Select the appropriate landowner type.
- Landowner Name/Address:
 - Provide the name, address and telephone number of the current landowner.
 - For government lands provide the name and address of the ministry responsible for administering the lands.
 Be as specific as possible (e.g., Alberta Culture, Alberta Environment and Protected Areas).
- Field must be completed.

6. Dimensions

- Provide the estimated length (longest portion) and width in metres of the site extent and indicate the long-axis orientation (e.g., NE-SW).
- The site dimensions provided must match the site boundary illustrated on the site map and the site boundary GIS polygons.
- If a site could not be relocated during a revisit, include the dimensions of the site as reported in the previous site form(s).
- In a site form update, the dimensions must reflect the whole site extent, not just the portion that was revisited.
- Provide depth below ground surface of the site to the nearest hundredth of a metre (e.g., 35 cm = 0.35 m). Fill in "0" if the artifacts and features were observed on the surface only.
- Use "N/A" for the Long Axis Orientation when the length and width of the site are the same.
- Use "N/A" for Depth Below Surface if no artifacts were observed during a revisit and the depth of artifacts cannot be determined from previous records.
- All fields must be completed.

7. Access

- List the nearest named place and provide directions from this location to the site using specific distances and cardinal directions.
- Access information must include proper road names and reference to permanent landscape or cultural features that serve to pinpoint the site location.
- Provide any additional information that cannot be obtained from a map, such as obstacles, difficulties with access or useful tips (e.g., Argo or ATV required, road closures, etc.).

8. Site Environment/Setting

- Water Source: indicate if the water source nearest to the site is permanent or seasonal.
- Water Source Type: indicate the type of water source that is nearest to the site.

- See <u>Appendix 2a</u> for descriptions of water source terms. If these terms do not apply, fill in the 'other' field with a short description of the water source.
- Select all applicable boxes
- Fill in the distance and direction in metres from the site to the water source. If the water source does not have a name, leave the Name field blank.
- Landform: fill in the landform type.
 - See <u>Appendix 2b</u> for descriptions of landform examples. If the listed terms do not apply, provide a brief description of the landform.
- Slope: fill in with the degree of slope within the site boundary only.
 - If there are varying degrees of slope, use the average slope across the site.
 - Do not include the side-slope of the landform.
 - If the landform is flat, indicate "0."
 - Most entries will be less than 5 degrees.
- Aspect: fill in the landform's dominant viewshed direction.
 - This must be filled in with cardinal or intercardinal directions, for consistency (N, E, S, W, NE, NW, SE, SW). "N/A" can be used if there is no aspect.
- Sediment: indicate the types of sediment observed at the site, select all checkbox(es) that apply.
 - See Appendix 2c for size categories of sediment types.
- **Text Box:** describe the vegetation at and around the site as well as the stratigraphy if subsurface testing was completed.
 - The text box can also be used to provide any other relevant environmental information.
- All fields in Section 8 must be completed.

Site Typology

The Site Typology section (fields 9-13) represents the cumulative information known about the site from all visits.

9. Site Class

- Select the term that best describes the class of the site. Select all that apply.
 - Prehistoric: evidence of Indigenous material culture prior to European contact.
 - Indigenous Historic: Indigenous sites 50 years old or older, after European contact, with an archaeological component. Sites of this nature should also be reported to the Indigenous Heritage Section of the Historic Resources Management Branch.
 - Historic: non-Indigenous sites 50 years old or older with an archaeological component.
 - Contemporary: evidence of recent or on-going use, when there is also a historic or prehistoric component at
 the site. Contemporary sites with no historic or prehistoric component are not to be recorded as
 archaeological.
- At least one class choice must be selected.

10. Site Context

- Select the term that best describes the context of the site. Select all that apply.
 - Surface: cultural material has been identified on the ground surface.
 - **Subsurface:** cultural material has been located below the ground surface.
 - **Stratified:** depositional cultural layers have been observed.
 - Underwater: site is submerged under water.
 - **Undetermined:** the specific context of the site is unknown or cannot be determined.
- At least one context choice must be selected.

11. Component

• Select the term that best describes the number of cultural occupations observed at the site.

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- Indicate the number of confirmed cultural components from all cumulative visits.
 - **Single:** one cultural component has been observed at the site. **Fill in 1 for # components**.
 - Multi: more than one cultural component has been observed at the site. Fill in the # components.
 - **Undetermined:** the number of cultural occupations of a site is unknown or cannot be determined.
- At least one component choice must be selected.

12. Site Type

- Select the appropriate term(s) to describe the nature of the site. Select all that apply.
 - See Appendix 3 for site type descriptions.
- Scatters ≤ or > 10 are not to be selected as secondary terms when a more appropriate site type (e.g., campsite, killsite, workshop, quarry) has been determined.
- At least one type choice must be selected.
- Sites containing only fire cracked rock and/or faunal material with no unequivocal evidence of cultural modification must not to be recorded as archaeological sites. Culturally modified trees (CMTs) are not archaeological features.

13. Culture

- Select the term that best describes each cultural time period represented at the site. Select all that apply.
 - At least one cultural time period must be selected.
- **Cultural Affiliation:** Specify known cultural complexes, such as well-defined archaeological phases or traditions, and/or ethnographic associations, ethnic affiliations, etc.
 - Entries in this section should be short, one or two word definitions (e.g., McKean, Oxbow, Old Women's, etc.).
 Leave blank in unknown.
- Cultural Remarks: Describe the basis for determining the cultural affiliation and/or age of the site.
 - Include diagnostic materials, radiocarbon dates, stratigraphic context, archival sources, informants, etc.
 Leave blank if unknown.

Current Observations

In a site form update, the Current Observations, Investigation, and Site Significance and Recommendations sections (fields 14-35) must include only the new information gathered from the current assessment/visit.

14. Site Description

- Provide a summary of the spatial and temporal context of the site.
- When possible, include information regarding the depth, spatial extent, density, and variety of cultural deposits, materials, and features.
- Provide an interpretation of the site including origins, functions, and context. Details of historical archaeological sites must include a summary of pertinent historic ownership.
- List all diagnostic materials that are present at the site.
- List all features observed at the site. Refer to the unique feature name (SF_Name) next to the described features. Attach a separate table if needed.
- For site revisits, the description section may include a brief description of past work (1-2 sentences). However, the section must focus on the details from the current revisit.
- If no new cultural evidence is observed during a revisit, this section should describe the nature of the revisit and the condition of the site.
- Field must be completed.

15. Features

The features listed here must be consistent with the features submitted in the Site Features Spatial Dataset and
must be labeled on the site map using the SF_Name, as per the bulletin on <u>Standards for Archaeological</u>
<u>Spatial Data Submissions</u> and the naming conventions described in <u>Appendix 6</u>.

- Provide the number of each feature type observed. A check mark or other indication without a numeric entry will not be accepted.
 - See Appendix 4 for feature descriptions.
- If an appropriate choice is not listed, complete the 'other' field.
- All features observed at the site during the current site visit must be counted. Do not count previously recorded features if they were not also observed under the current permit.
- If no features were observed during the revisit, leave this section blank, even if features were recorded at the site previously.
- Historic Trails:
 - Borden numbers must be assigned to historic trails if they do not already have an associated Borden number.
 - The Archaeological Survey focuses primarily on historic wagon trails. Any other significant historic trails will be considered on a case-by-case basis. Trails associated with Indigenous traditional use sites of a historic resource nature are to be recorded with the Indigenous Heritage Section only.
 - Only the portion of the trail that was assessed in the field during the current permit should be recorded in the site form.
 - Additional features along the trail also must be recorded.
 - Recommendations for portion(s) of the trail assessed under the current permit must be included in Section 33.
 - Comments about other portions of the trail can be included in the Section 33 (Additional Remarks).
- · Features versus Materials:
 - Features are not portable and cannot be moved without being destroyed.
 - Materials (artifacts) can make up the feature (e.g., fire cracked rock observed in a hearth, wood fragments from a collapsed cabin, historic debris from a dump). In these cases, a feature must be counted in Section 15, and the materials must be counted in Section 16.
 - In these cases, the feature and positive investigation location may overlap on the map, but both must be labeled.
 - If the material (artifact) is so large that it cannot be reasonably moved but it is potentially movable (e.g., automobile), it still must be counted as an artifact, rather than a feature.

16. Materials observed/collected

- The materials observed counts in a site form must be consistent with the artifact counts in the Num_Arts field in the Subsurface Inspection Spatial Dataset, as per the bulletin on <u>Standards for Archaeological Spatial Data</u> Submissions.
- Indicate if cultural materials were observed and/or collected.
- Provide the number of materials observed and collected, beside the term that best describes the material. A check mark or other indication without a numeric entry will not be accepted.
- The number of materials observed must be greater than or equal to the number of materials collected. The count of observed materials represents the total number of materials observed, regardless of whether or not they were collected.
- If a type of material was observed but not collected, fill in the # observed beside that type and then enter "0" in the collected column.
- Leave fields blank if a type of material was neither observed nor collected.
- If a type of material was observed but an exact count is not known (e.g., large middens or material at dumps), provide an estimate. The fact that it is an estimate should be indicated with a ~, <, or > symbol (e.g., ~100, <20, >50).
- The total # materials observed and collected will be automatically calculated based on the entries for the specific material types.
- Soil samples are not counted towards the total # observed count in Section 16; only collected soil samples are counted.

17. Collection Remarks

- Include a description of the collected artifacts. Include descriptions of the following:
 - lithic artifacts: formed tools, cores, raw materials, type of lithic debitage (primary, secondary, and tertiary flakes)
 - faunal remains: identification of any taxa or elements
 - other diagnostic materials or artifacts of interest
- Leave field blank if artifacts were not collected.

18. Collection Repository

- Select the term that best describes the material collection repository. In most cases, in keeping with current protocols supported by legislation, the repository will be the Royal Alberta Museum.
- If the repository is not the Royal Alberta Museum, select 'Private Collection' and provide the name, address and telephone number of the institution or individual housing the collection in Section 35 (Additional Remarks). Details regarding repositories other than the Royal Alberta Museum must be discussed in advance with the Archaeological Survey and the Royal Alberta Museum.
- Leave field blank if artifacts were not collected.

19. Photo/Images/Repository

- Indicate whether or not photographs have been taken of the site and where the photo repository will be located. Photographing a site is required, so if none have been taken, an explanation must be provided to the Archaeological Information Coordinator and explained in Section 34 (Additional Remarks). The Royal Alberta Museum is the repository for all photographs taken as part of a project conducted under an Archaeological Research Permit.
- If the repository is not the Royal Alberta Museum, select the 'other' box and specify the location. Details regarding repositories other than the Royal Alberta Museum must be discussed in advance with the Archaeological Information Coordinator.
- Field must be completed.

20. Calendar Date (A.D.)

- If possible, provide a calendar date for historic components of the site (e.g., A.D. 1750). Format in A.D. for consistency.
- · Leave field blank if not applicable.

21. Radiocarbon Dates

- Provide the radiocarbon date(s), if applicable, including the sample laboratory number assigned by the dating laboratory.
- List the conventional radiocarbon date and include the standard deviation.
- Radiocarbon dates must not be converted or calibrated prior to entry in the site form.
- Place the laboratory number in brackets following the radiocarbon date and indicate the material that was dated (e.g., 1203 +/- 120 (GX23456), bone).
- When more than one date is available, list all dates in the above format separated by a period (e.g., 1203 +/- 120 (GX23456), bone. 1545 +/- 30 (GX23457), bone).
- If a technique other than Radiocarbon 14 is used, specify the technique after the laboratory number separated by a comma.
- Leave field blank if not applicable.
- If radiocarbon date(s) are received after the site form has been approved, a new version of the site form must be submitted to the Archaeological Information Coordinator and a new watermarked site form will be issued. If project timelines necessitate submission of a final report prior to receiving lab results, revisions to the report will be required.

22. Estimated Portion Intact

- Select the option that best reflects the estimated percentage of the site that is intact/undisturbed.
- Estimations of disturbance do not include archaeological assessment or excavation activities.
- · Field must be completed.

23. Disturbance Factors

• Types of Existing Disturbance:

- Select the term(s) that best describes the disturbance types currently affecting the site and the immediate vicinity. Select all that apply.
- If the appropriate disturbance factor is not listed, complete the 'other' line.
- If the site is undisturbed, leave blank.

• Will proposed development adversely affect the recorded site area?

- Select the appropriate option.
- If the archaeological assessment is not related to development, select "N/A."

• Types of Anticipated/Potential Disturbance:

- Select the term(s) that best describes the disturbance types that are likely to affect the site and the immediate vicinity. Select all that apply.
- If the appropriate disturbance factor is not listed, use the 'other' line to list the disturbance.
- If there is no anticipated disturbance, leave blank.

• Disturbance Factor Comments:

- Discuss any anticipated threat to the interpretive potential of the site through natural factors (e.g., erosion) or human factors (e.g., cultivation, construction, vandalism).
- Projections concerning potential future human disturbance factors must be based on known plans for development in the site area and must be identified in the comments.
- Field must be completed.

Investigation

24. Investigation Methods

- The numbers entered in these fields must be consistent with the numbers in the final report, the site form map
 and spatial data submitted, as per the <u>Standards for Archaeological Spatial Data Submissions</u>. The
 archaeological spatial data must be prepared and finalized prior to submitting a site form for review. See
 <u>Appendix 6</u> for more details.
- Select all applicable methods of site investigation.
 - See Appendix 5 for investigation method descriptions.
- Negative rodent burrow holes or similar small exposures are not sufficient to evaluate archaeological potential and should not be counted in the investigation method section.
- Indicate the number/quantity of the recorded investigation locations (tests, exposures, positive surface inspections, monitoring point locations) on the whole landform and within the site boundary.
- All tests, exposures, positive surface inspections, and monitoring point locations counted on the landform must also include those that are within the site boundary. This number must always be greater than or equal to the number of tests within the site boundary.
- Only positive surface inspection locations are reported (not negative locations), therefore they are all located with the site boundary.
- Separate the number of locations based on whether they were screened or not screened. Enter the screen mesh size in millimetres. The total number of each investigation method location is automatically calculated based on the entries in the 'screened' and 'not screened' columns.
- If a shovel test is expanded into a 1 x 1 m test unit or a deep evaluative test, the test is identified as a test unit or deep evaluative test only and is no longer a shovel test.

- A note must be added to Section 14 (Description) to describe the variable methodology.
- If a site is formally excavated during a controlled Historic Resources Impact Mitigation (HRIM) phase of an assessment, the total # of excavated square metres is recorded.
- Detailed mapping is to be selected only when specific areas or features of the site are mapped (e.g., component "floor" mapping, profile mapping, feature mapping, stone circle mapping).
- The detailed mapping method must not be checked if only a standard site map is provided.
- Features identified though remote sensing methods must be confirmed by ground survey prior to formal recording.
- Leave fields blank if not applicable.
- *All names in sections 25-31 are to be in the format of last name, first initial (e.g., Smith, J., Jones, S.M.)
- *All dates in sections 27-31 should be in the format of YYYYMMDD (e.g., 20170101). If investigation occurred on multiple days, provide a representative date.

25. Permit Holder/Researcher

- Specify the name of the permit holder.
- In non-permit site forms, name the principal researcher/investigator.
- Field must be completed.

26. Researcher Affiliation

- Formal name of the researcher affiliation (if applicable)
- · Leave field blank if not applicable.

27. Observed by/Date

- The name(s) of the individual(s) who observed the site.
- The date on which the inspection occurred.
- Field must be completed.

28. Collected by/Date

- The name of the individual(s) who collected material from the site.
- The date during which the collection occurred.
- · Leave field blank if artifacts were not collected.

29. Tested by/Date

- The name of the individual(s) who tested the site.
- The date during which the testing occurred.
- Leave field blank if testing was not conducted.

30. Excavated by/Date

- The name of the individual(s) who excavated the site.
- The date during which the excavation occurred.
- Leave field blank if excavation was not conducted.

31. Form completed by/Date

- The name of the individual(s) who completed the site form.
- The date which the information was compiled.
- Field must be completed.

32. Report Title/Project Name

- Provide the report title or the name of the project.
- Field must be completed.

Site Significance and Recommendations

33. Site Significance/Recommendations Remarks

- Provide a discussion of significance of the site and recommendations for site management. Minimally, the evaluation of site significance should consider the relative information potential a site contains and is able to contribute to a scientific understanding of local, regional and provincial historic events and processes.
- Indicate if further work should be carried out and in what portions of the site.
- If further work is recommended, briefly summarize the suggested additional investigation (e.g., detailed mapping, monitoring, testing, excavation).
- Provide project-specific site recommendations relative to the current development and, if appropriate, recommendations relative to the long-term management.
- Give reasons and evidence supporting your opinion.
- Field must be completed.

34. Additional Remarks

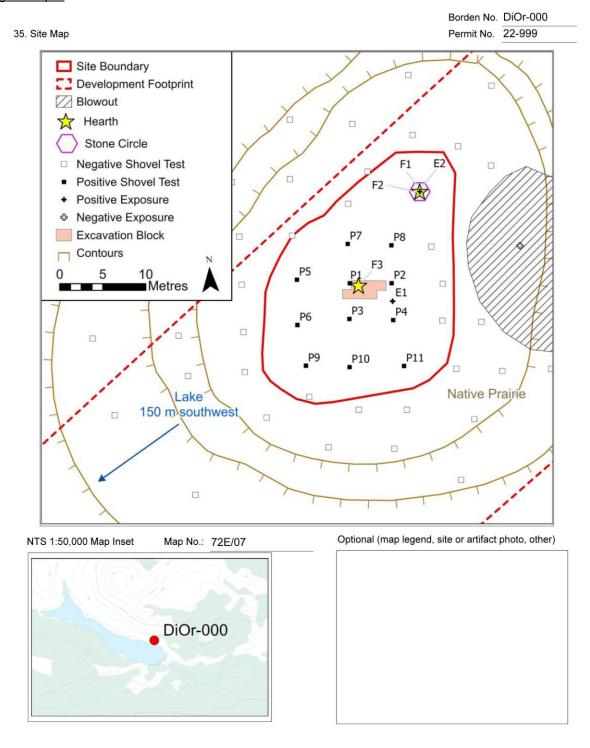
- Provide any relevant additional information, such as comments regarding previous work, recommendations, information about site history, etc.
- Where available, include references to additional documents that may provide information about the site.
- Leave field blank if there is no further information to report.

Maps

35. Site Map/NTS 1:50,000 Map Inset

- In the page provided, include a sketch map of the main site area together with any physical or permanent geographic reference points which would aid in relocating the site.
- The sketch map must illustrate the following:
 - Full site boundary/extent (See site boundary considerations in Appendix 1.)
 - All subsurface tests, exposures, positive surface investigations, and/or excavation locations
 - Positive locations must be labeled with a unique identifier that matches the information in the other parts of the site form, report and spatial data (SI_Name).
 - Feature locations
 - Feature names must be labeled with a unique identifier that matches the information in the other parts of the site form, report and spatial data (SF_Name). See Appendix 6 for naming convention rules.
 - Distance and direction to nearest water source (if not within the map extent)
 - Landforms/Contours (include direction of slope)
 - Permanent landmarks or other features
 - Disturbances
 - Trails, roads, cutlines
 - Development footprint, if applicable
 - Vegetation (drawn or simply indicated with a label)
 - Waterbodies
 - In cases where sites are flagged for avoidance, illustrate this buffer area
 - North arrow
 - Scale

- Legend all symbols used on the map must be shown in the legend
- If aerial imagery is used as a background, everything listed above is still required. If the background imagery
 is not of sufficient quality, the map will be rejected.
- Include an inset map showing a portion of the relevant 1:50,000 NTS map sheet and indicate the location of the site.
 - Label the site with the Borden number.
 - Only NTS 1:50,000 maps will be accepted; do not use an air photo background.
- For excavations and/or complex sites, multiple maps may be required to ensure that all the excavation block(s) locations, feature locations, subsurface inspection locations, labels, and the entire site area are represented at the appropriate scale, along with all the other site characteristics in the list above.
- Additional maps can be submitted on a separate page or illustrated in an additional inset map.
- The site map and NTS map must be completed.
- · Optional box:
 - The open box field on the bottom right hand side of the page can be used for a custom map legend (if not included on the sketch map above), a representative site or artifact photo, an additional map, or any other information that may be relevant to the site.
 - The optional box field may be left blank.



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Appendix 1: Borden Number Reservation Process

- All Borden numbers are assigned by the Archaeological Survey.
- To reserve a Borden number for a new site, the researcher must submit the following materials via email to the Archaeological Information Coordinator:
 - Borden Number Reservation Application form
 - Available in the "Borden Reservation" layout of the FileMaker Pro Archaeological Site Inventory Form (allows for multiple sites recorded under the same permit) or a single site Fillable PDF form
 - ESRI Shapefiles of the archaeological site boundaries
 - Requests for Borden numbers for multiple sites recorded under the same permit must have all site boundaries submitted together in one set of shapefiles. The shapefiles must be a single part polygon, with one record for each site.
- The Archaeological Information Coordinator will provide a Borden number(s) to the researcher.
- Requests for multiple Borden numbers for sites recorded under the same permit should be submitted in batches.

Site Reservation Notes:

- The Borden Number Reservation Application is located in the FileMaker Pro version of the Archaeological Site Inventory Form, in the "Borden Reservation" layout. Summarized instructions are found in this layout.
- Prior to submitting a Borden number reservation request, the researcher is expected to consult all previous site
 forms, archaeological reports, and spatial data that may be relevant to the site. If it is unclear whether a site
 should be recorded as new or as a part of a previously recorded site, the researcher must contact the
 Archaeological Information Coordinator for assistance.
- If a site has been recorded previously, the existing Borden number must be used in all subsequent site forms and other records. If the researcher is unsure if a site has an existing Borden number, they must consult all previous site forms, archaeological reports, and spatial data that may be relevant to the site first, and then contact the Archaeological Information Coordinator if uncertainty remains. A Borden number must be assigned to a site by the Archaeological Survey before the submission of any documentation (e.g., site forms, reports), materials (e.g., artifact collections), or applications (e.g., permit applications, Historic Resources applications).
- Archaeological features or artifacts recorded within 100 metres of each other are usually recorded as a single site. Exceptions may include the following:
 - Features or artifacts located on separate landforms that have pronounced topographic differences (e.g., top and bottom of a cliff or opposite sides of a deep ravine).
 - Features or artifacts located on opposite sides of major water bodies.
 - If in doubt, please contact the Archaeological Information Coordinator to discuss the specific situation for the site(s) prior to the submission of the Borden number reservation.

Site Boundary and Site Point Coordinate Notes:

- Archaeological site locations are reported at the Borden number reservation stage with the following:
 - The submission of archaeological site point coordinates in the Borden Number Reservation Application form
 - The submission of site boundary shapefiles
- Consideration of the site point coordinates must include the following:
 - The location of the site point coordinates must reflect the area of the site with the densest or most representative concentration of materials. The site point is not necessarily the centroid of the site.
 - Site point coordinates must be recorded on the Borden Number Reservation Application in Alberta 10-TM (Forest) (EPSG: 3400)
 - For guidance relating to coordinate conversions, see Appendix 9.
 - The site point coordinates must be located inside of (intersecting) the site boundary. The researcher must ensure that the site point coordinates are located within the site boundary when updating the coordinates and/or the site boundary.

- Considerations of the site boundary must include the following:
 - The archaeological site boundary is defined as the extent of a site based on the locations of observed artifacts and/or features with a 5-15 metre buffer around positive tests, features, and/or find locations to account for GPS error.
 - Additional buffers (e.g., development avoidance buffers) are not included in the site boundary.
 - The site boundary must not be expanded to include areas that exhibit potential for cultural materials but have not yet been confirmed to be positive for archaeological deposits. The only exception is for historic structure sites that exhibit high potential to contain subsurface archaeological components but where testing is precluded by access or development limitations.
 - Areas positive for cultural materials and/or features from a previous site recording must remain included in the site boundary, even if they were not observed during the current site visit or have now been disturbed.
 - Site boundaries must be a minimum of 10 metres in each dimension to account for GPS error and to facilitate long-term data management.
 - Site boundaries larger than 20 m in diameter will not be accepted for isolated find sites.
 - Site boundaries must be submitted in the ESRI shapefile format using Alberta 10-TM (Forest) (EPSG: 3400).
 - The site boundary attribute table must include the following field:
 - Field_No
 - The 'Field_No' is a string (text) field.
 - The value entered in the 'Field_No' must match the 'Field_No' section of the Borden Number Reservation Application form.
 - Other fields may be included at the discretion of the researcher. General standards of field naming must be followed (e.g., unique field names, Unicode characters, no punctuation, maximum of ten characters).
 - Requests for Borden numbers for multiple sites recorded under the same permit must have all site boundaries submitted together in one set of shapefiles. The shapefiles must be a single part polygon, with one record for each site.

Note Regarding Revisited Sites:

• Borden number reservations are not submitted when a site is revisited; however, a researcher may determine that the boundaries of a site must be moved, refined, or expanded. In this case, the researcher must submit a site boundary shapefiles following the instructions above. Updated site point coordinates may be required if the location of the site is moved, or if changes to the site boundary warrant a change to the site point.

Appendix 2a: Environmental Terms: Water Sources

Water source	Description
Lake	a large year round body of deep water
River	a large named body of flowing water
Stream	 a body of flowing water (other than a named river), regardless of size and permanence of flow (Waters 1992)
	• includes drainages, creeks, brooks
Pond	small body of shallow water
Wetland	standing water with a high concentration of plant life
	• includes peatlands, muskeg, bogs, fens, marshes, sloughs, swamps
Spring	 an environment where water emerges from the ground surface in opening in rock or sediment (Waters 1992)
Other	Water sources not described here

Note: Further illustration and definition for the above terms can be found here:

Alberta Environment and Parks

2010 Water for Life: Facts About Water in Alberta. Alberta Environment and Parks. (accessed November 2022)

Waters, Michael R.

1992 Principles of Geoarchaeology: A North American Perspective. The University of Arizona Press.

Appendix 2b: Environmental Terms: Landform Examples

Landform example	Definition
aeolian beach ridge	A low, essentially continuous mound of beach and dune material heaped up by the action of waves, currents and wind beyond the present limit of storm waves, and occurring singly or as one of a series of approximately parallel deposits. The ridges can represent former positions of a shoreline (A.G.I. 1984; Smith 1998).*
alluvial fan	A fan-shaped, gently sloping mass of material, usually sand and gravel, deposited by a stream where it emerges from a narrow mountain valley onto a plain or broad valley. (A.G.I. 1984; Parker 1997). Some of the fans in Alberta are paraglacial (Campbell 1997).*
blowout	A general term for various saucer- or trough-shaped hollows formed by wind erosion on a dune or other sand deposit, especially when the protective vegetation cover has been removed or destroyed (A.G.I. 1984; Whittow 1984).*
coulee	Any steep-sided gulch or water channel (Fairbridge 1968).*
drumlin	A streamlined, oval to elongated hill composed of a variety of constituents (e.g., till, bedrock). Drumlins vary in height from 6 to 60m, commonly 15 to 24m, and in length from a 100m to several kilometres. Drumlins usually occur in groups termed a field or a swarm. (A.G.I. 1984; Bennett and Glasser 1996; Mollard 1972; Whittow 1984).*
dune	A mound, ridge, or hill of wind-blown sand, either bare or covered with vegetation, capable of movement from place to place through the development of a slipface, but always retaining its own characteristic shape for an extended period of time (A.G.I. 1984; David 1977).*
erratic	A transported rock fragment different from the bedrock beneath it. The agent of transport is most commonly glacial ice. Erratics can be deposited at considerable distances from where they were derived. They range in size from a pebble to a house-size block (A.G.I. 1984; Mollard 1972).*
esker	A serpentine ridge of roughly stratified gravel and sand that was deposited by a stream flowing in or beneath the ice of a stagnant or retreating glacier and was left behind when the ice melted (A.G.I. 1984).*
floodplain	That portion of a river valley, adjacent to the channel, which is built of sediments deposited during the present regimen of the stream and is covered with water when the river overflows its banks at flood stages (A.G.I. 1984).*
hill	A distinct landform that rises above the surrounding terrain. It often has a distinct summit and is smaller and less steep than a mountain.*
hoodoo	A column, pinnacle, or pillar of rock or cemented conglomerates produced in a region of sporadic heavy rainfall by differential weathering or erosion of horizontal strata (e.g., undercutting by wind), facilitated by joints and by layers of varying hardness, and occurring in varied and often eccentric or grotesque forms (A.G.I. 1984; Whittow 1984).*
kame	A short, irregular ridge, hill, or mound of mainly stratified drift deposited in contact with glacier ice by meltwater. (Mollard 1972).*
knob and kettle	An undulating landscape in which a disordered assemblage of knolls, mounds, or ridges of glacial drift is interspersed with irregular depressions, pits, or kettles that are commonly undrained and may contain swamps or ponds (A.G.I. 1984).*
knoll	A small mound or rounded hill, generally smaller and less steep than a hill.*
mass slide	The downslope movement of a soil or rock mass occurring dominantly on surfaces of rupture or on relatively thin zones of intense shear strain. The displaced mass may slide beyond the original surface of rupture onto what had been the original ground surface. Slides with a backward rotation are often termed "slumps" (Cruden and Varnes 1993; Spangenberg 1993; Varnes 1978).*

Landform example	Definition
meander scar	A crescentic stream-made cut, usually shallow, in the floodplain bordering a stream, produced by the sideward cutting of a meandering stream and indicating its former route (A.G.I. 1984; Mollard 1972).*
moraine	A mound or ridge of unstratified glacial drift, chiefly till, deposited by direct action of glacial ice (A.G.I. 1984).*
mountain pass	A natural passageway through high, difficult terrain, as between two peaks (A.G.I. 1984).*
outwash delta	A delta composed of outwash materials (Kupsch and Rutter 1982).*
outwash plain	A body of outwash that forms a broad plain at and beyond the margin or former margin of a shrinking glacier and commonly consisting of a number of coalescing outwash fans that may have been crossed by braided streams. Varieties are called outwash terraces, fans, aprons, or trains. (Kupsch and Rutter 1982; Whittow 1984).*
peninsula	A body of land nearly surrounded by water, and connected with a larger body by a neck or isthmus; also, any tract of land jutting out into the water (A.G.I. 1984).*
plain	A level or very gently sloping, unidirectional (planar) surface with gradients up to, and including 3 degrees. The local surface irregularities generally have a relief of less than 1 metre (Howes and Kenk 1997).
raised beach	An ancient beach occurring above the present shoreline, having been elevated either by local uplift of the land or by lowering of the lake level (A.G.I. 1984).*
ridge	Elongate hillock(s) with slopes dominantly between 15 and 35 degrees if composed of unconsolidated materials, but bedrock slopes may be steeper. They are a continuous elevated crest that continues for some distance with local relief is greater than 1 metre (Howes and Kenk 1997).
rock-shelter	A shallow cave or alcove created by the differential erosion of the matrix. The cave may be located beneath an overhanging rock ledge and the cave bottom can be more or less flat (Bogli 1980).*
terrace	A single or assemblage of step-like forms where each step-like form consists of a scarp face and a horizontal or gently inclined surface (tread) above it; includes river terraces (Howes and Kenk 1997)
valley	An elongate, relatively large depression of the earth's surface that is usually traversed by a stream or river which receives the drainage of the surrounding heights. (A.G.I. 1984; Campbell 1997/1998; Driscoll 1984; Rains 1997; Whittow 1984).*

Note: Further illustration and definition for the above terms can be found here:

1998 <u>Classification of Alberta Landforms</u>. Recreation and Protected Areas Division, Alberta Environmental Protection. (accessed November 2022)

Howes, D.E. and E. Kenk (eds.).

1997 <u>Terrain Classification System for British Columbia (Version 2): A system for the classification of surficial materials, landforms and geological processes of British Columbia</u>. Resource Inventory Branch, Ministry of Environment, Lands and Parks, Province of British Columbia. (accessed November 2022)

^{*}Alberta Natural Heritage Information Centre

Appendix 2c: Environmental Terms: Sediment Sizes

Sediment	Size Description (predominant clast size)
Boulder	>300 mm
Cobble	75-300 mm
Gravel	2.0-75 mm
Sand	0.08-2.0 mm
Silt	0.002-0.08 mm
Clay	0.0002-0.002 mm
Loam	relatively equal parts of sand, silt and clay

Appendix 3: Site Type Descriptions

Note: Sites containing only fire cracked rock and/or faunal material with no evidence of cultural modification are not to be recorded as archaeological sites. CMTs are not recorded as archaeological features. Archaeological sites must be at least 50 years old and may include multiple site types.

Site Type	Description
isolated find	consists of one artifact only
	must be definitively cultural
scatter ≤10	 site where 10 or fewer archaeological specimens were observed and is not considered a campsite, killsite, workshop, or quarry
scatter >10	 site where more than 10 archaeological specimens were observed and is not considered a campsite, killsite, workshop, or quarry
campsite	 site contains evidence of fire or a hearth feature (e.g., fire cracked rock, ash, charred and/or calcined bone) and at least one other culturally modified material (such as lithic artifacts, faunal remains, ceramics) or prehistoric stone features
stone feature	 any arrangement of stones or cobbles that has been made by humans, including circles, arcs, lines, alignments, cairns, drive lanes, marker lanes, effigies, medicine wheels, hearths, rock lined depressions or pits, and vision quest features
killsite	 an area where animals were killed and/or subject to primary butchering at the kill location
	 variation includes the killing and processing of a single animal, or multiple animals in the form of a massive deposit of bone and associated artifacts
	includes jumps, processing areas, traps, pounds, etc.
workshop	 an area where substantial lithic reduction has occurred, as indicated by a concentration of lithic debitage and multiple discarded or broken lithic tools or cores, with no other indications of cultural activity or habitations
quarry	a site where lithic raw materials have been extracted
	 can be a bedrock outcrop or glacial till or alluvial source location with an assemblage of cores and/or lithic debitage
rock art	a site with petroglyphs and/or pictographs
	may be located on bedrock valley walls or portable stones or boulders
burial	any interment of complete or partial human remains
	 includes crevice, flexed, extended, single, multiple, primary, secondary, crib, scaffold, and grave burials
settlement	a group of buildings, features, and/or structural remains indicating an assemblage of persons in a locality includes hamlets villages, etc.
	 includes hamlets, villages, etc. must include or have high potential to include an archaeological component
homostoad	
homestead	 site contains evidence of a house and associated buildings on land granted to a settler under the Dominion Lands Act of 1872
	 homestead records must be summarized in the site form with reference to the full records in the report
	must include or have high potential to include an archaeological component
farm	remains of buildings used in land cultivation, or raising crops or animals
	must include or have high potential to include an archaeological component
ranch	• remains of buildings used for raising livestock such as cattle, sheep, horses
	must include or have high potential to include an archaeological component

Site Type	Description
dwelling	 remains of a residence or habitation, such as a house or cabin must include or have high potential to include an archaeological component
trading post	site contains evidence of a complex of historic buildings used in exchanging goods, such as fur and whiskey during the historic period
police post	 site contains evidence of a complex of historic buildings established by police forces operating in Alberta during the historic period includes North West Mounted Police posts and outposts
mine	 site contains evidence of historic period excavations, buildings, features, and/or equipment used for extracting natural resources such as coal or gold may include large industrial operations or smaller individual prospects
trail	a track or path of significant heritage value (wagon trail, Indigenous trails, paths leading to historic features)
mission	 site contains evidence of a historic building(s) established by Christian missionaries must include or have high potential to include an archaeological component
school	 site contains evidence of buildings whose sole purpose was for formalized educational instruction must include or have high potential to include an archaeological component
urban	 remains of buildings and/or features associated with towns or cities, not including dwellings, churches, or schools must include or have high potential to include an archaeological component
ceremonial/religious	 an area where ceremonial features exist or a setting where religious acts or special ceremonies were conducted includes medicine wheels, sundance lodges, sweat lodges, churches, etc. consultation with the Archaeological Inventory Coordinator is required before new sites with this site type are recorded
industrial	 remains from industry or manufacturing (e.g., oil and gas facilities, construction, work camps, clay products industries, and quarries) and is not further defined in this table (i.e., forestry, mining) must include or have high potential to include an archaeological component
transportation	remains of roads, railways, air fields and/or other features associated with transportation
historic feature	• a single, or small grouping of, historic feature(s) that do not have a defined function and do not fit into other historic period site types (e.g., dump, berm or mound, trench, etc.)
military	 remains of prehistoric or historic features or materials associated with armed forces (e.g., battlefields, army barracks, military base)
forestry	remains of features or materials associated with the forestry industry (e.g., mills, logging or fire-fighting camps, individual sawmill sites or mobile sawmills)
collection	 an assemblage of artifacts whose detailed provenience and context cannot be determined because they were collected or recorded by someone other than a trained archaeologist may include a single item or a collection of items

Appendix 4: Feature Descriptions

Archaeological features and structures must be at least 50 years old.

Feature	Description
stone circle	any circular or oval arrangement of stones
	• includes features commonly referred to as "tipi rings" or "ceremonial circles"
	may include conjoined circles or circles bisected by a stone line
cairn	a mound of stones that has been intentionally arranged by humans
	 refers to all sizes of stone piles constructed of various sizes and kinds of rocks (i.e. flat slab, boulders, cobbles)
	 does not include modern fence post cairns or the stone piles created through farmer's removal of stones from a cultivated field
stone arc	any arc or partial circle of stones
	• may represent an intentionally constructed feature (i.e., a hunting blind) or a stone circle from which rocks have been removed
stone line	• a linear or near-linear alignment of stones, not including the alignments of rocks that may be used to define a killsite drive lane
	does not include the linear stone alignments that extend from a stone circle to create a medicine wheel or other ceremonial circle feature
drive lane	• single linear alignment or an alignment of small cairns that define the edges of a gathering system used to direct animals towards a hunting trap, including a jump or surround
medicine wheel	• a feature that consists of a combination at least two of the following components:3
	a prominent, centrally located cairn of varying size
	2. usually one but sometimes several concentric rings of generally circular shape
	multiple (two or more) stone lines radiating outward from a central origin, central cairn, or margins of a stone circle
	 constructed largely of unmodified natural stone, with the possibility of some earth intentionally incorporated in the construction of prominent central cairns
effigy	• an arrangement of stones in the general shape of a figure (stylized animal or human) or a geometric shape
pictograph	painted designs on natural rock surfaces
	red or yellow ochre and charcoal are the most frequently used pigments
	natural, figurative, geometric and abstract motifs may be represented
	may include ochre smears or handprints
petroglyph	 pictures, symbols or other art work pecked, carved, etched, incised, ground, or rubbed into natural rock surfaces
	 includes ribstones and portable stones that may be pecked, carved, or incised with a symbol
	• may sometimes be a combined with a pictograph (e.g., smeared with ochre or charcoal)

³ Brumley, John H. 1988. Medicine Wheels on the Northern Plains: A Summary and Appraisal. Archaeological Survey of Alberta Manuscript Series No. 12. Alberta Culture and Multiculturalism, Edmonton.

Classification: Public

Feature	Description
hearth	a prehistoric or historic feature that represents an area of contained burning created for cooking or warming
	 may be represented by an associated stone, metal, or concrete feature defining its boundaries, or may be solely represented through the presence of sediments that show evidence that burning had occurred in a focused area
	often circular and may be rock or clay lined, rock filled or unlined
	 ash, sediments affected by burning in an oxygen enriched or reduced atmosphere, charred or calcined bone, and/or fire cracked rock may be present
pit	a hole dug in the earth's surface
	pits may be open or filled with soil, stones, artifacts, or residues
	includes boiling and roasting pits, as well as historic refuse pits
mound	 a human-created feature constructed through the banking or heaping earth to create a relatively solid sediment pile
	may have a circular, linear, anthropomorphic, or zoomorphic shape
	includes earthworks such as berms
depression	a low place or hollow resulting from human activity
	 often found as the evidence remaining when the superstructure of a historic building has been removed from a site
	may be any shape, but must be associated with other cultural material or features
	does not include natural features such as cow wallows
cabin	a small, roughly built house or hut, usually constructed of logs or on a wood frame
	 may be fully or partially standing structure or a location where only the lower course of logs or foundation of the building is found
house	any building used for domestic residential purposes
	 may be fully or partially standing or a location where only the lower portion of the structure or the foundation of the building is found
structure	a historic structure of a type not covered by other categories
foundation	the base of a historic structure
cellar	often an underground room or crawlspace that is usually identified below the floor of a building and used for storage
	 cold storage locations built into a side-slope or terrace edge may also be considered a type of cellar, and are usually associated with a constructed wooden frame creating a doorway
dump	a place where collections of unwanted materials or residues are piled or collected together
	sometimes referred to as "middens" or "debris fields"
	 may represent an assemblage of materials from a single temporal period or multiple periods
fence	remains of a constructed barrier used to enclose or demarcate areas of land
	may be constructed of wood, wire, stones, or combinations of these materials
trail	 a track or path of significant heritage value (e.g., wagon trail, Indigenous trails, paths leading to historic features, footpaths, travois tracks)
well	a hole dug to access groundwater for human use
	may have a water pump or structure over top of the hole to gain access to the water

Feature	Description
privy	remains of a toilet located outside a house or other building
	 for consistency on this form, a privy is represented only by a depression and/or subsurface remains
	for toilet locations with an associated structure see "outhouse"
outhouse	remains of a toilet located outside a house or other building but within its own structure
	same as a privy but still has associated standing or partially standing structure
burial	refers to any complete or partial interment of a whole or partial human body
	• if a new site is found to contain human remains, the details must be discussed with the Archaeological Survey prior to reporting the remains in a site form
	 may include situations where the human body was buried shallowly or deeply in the ground or situations where the body was not buried but placed in an natural cave, rock crevice, or a constructed mound or cairn
	 location may or may not be commemorated with an associated marker, plaque, headstone or foot stone
other	site features not described above

Appendix 5: Investigation Method Descriptions

Excavated sediments from tests that have been screened through a hand screen to increase potential for cultural material collection must be identified in the site form and in the permit report.

Investigation Method	Description
surface inspection	ground inspection of visible surfaces
	 positive surface inspection locations are recorded when cultural materials are observed on intact ground surfaces or are slightly buried but are visible on an intact ground surface
	• if the positive surface find locations are in close proximity, they can be recorded as a single central point
exposure inspection	• inspection of erosional areas, where underlying sediments have been exposed due to natural or human disturbance (e.g., river bank cuts, tree-throws, animal burrows, blowouts, trail surfaces, road cuts, vandalized areas, industrial disturbance, etc.)
	 positive exposure locations are recorded when cultural materials are observed in eroded or disturbed sediments
	disturbance caused during an archaeological assessment is not considered to be an exposure
	 both negative and positive exposure inspection locations are recorded; if the positive exposure find locations are in close proximity, they can be recorded as a single central point
	 negative rodent burrow holes or similar small exposures are not considered to provide sufficient area to determine archaeological potential and should not be counted or mapped
shovel test	a hand-excavated test that measures a minimum of 40 x 40 cm in size
	• tests may be placed judgmentally in a landscape or may be excavated according to a systematic grid pattern
	 although no formal vertical control is recorded for the sediments removed from a shovel test, the depth recording of identified cultural materials must be recorded as accurately as possible. Experienced archaeologists excavate shovel tests in such a manner as to be able to provide general depth estimates.
	• if a shovel test is expanded into a 1 x 1 m test unit or a deep evaluative test, the test is identified as a test unit or deep evaluative test only and is not counted as a shovel test
	both negative and positive shovel tests are recorded
backhoe test	 a small trench test excavated using a backhoe, trackhoe, or similar mechanical equipment
	tests are usually about 1 x 3 m, but size may vary
	tests are placed judgmentally by the archaeologist
	 although no formal vertical control is recorded for the sediments removed from the backhoe test, the depth recording of identified cultural materials and sediments must be recorded as accurately as possible. Experienced archaeologists excavate backhoe tests in such a manner as to be able to provide general depth estimates.
	both negative and positive backhoe test locations are recorded

Investigation Method	Description
deep evaluative test	a deep test excavated by hand when terrain conditions do not allow the use of a backhoe
	• used to evaluate the archaeological potential of deep sediments and may or may not be positive for archaeological materials
	• tests are considered to be deep tests when they need to be expanded greater than a shovel test <u>and</u> are greater than 1.25 m in depth below surface
	• excavation by controlled levels is not required, although the depth recording of identified cultural materials and sediments must be recorded as accurately as possible. Experienced archaeologists excavate backhoe tests in such a manner as to be able to provide general depth estimates.
	• if a shovel test is expanded into a deep evaluative test, the test is identified as a deep evaluative test only and is not counted as a shovel test
	both negative and positive deep evaluative test locations are recorded
auger test	• a test excavated with a mechanized or hand auger, probe, or core for the purpose of discovering archaeological deposits and/or evaluating sedimentary context
	 the type and diameter of the device must be documented (including an indication of whether the device employed a screw fitting or a hollow tube fitting)
	the depth of identified cultural materials and sediments must be recorded as accurately as possible
	both negative and positive auger test locations are recorded
test unit	• a 1 x 1 m unit excavated by hand that is used to better evaluate the horizontal context of an identified site during the Historic Resources Impact Assessment (HRIA) phase of an assessment
	depth and horizontal provenience of identified cultural materials and sediments must be recorded as accurately as possible
	the test unit is not part of a formal staged excavation
	• if a shovel test is expanded into a test unit, the test is identified as a test unit only and is not counted as a shovel test
	both negative and positive test unit locations are recorded
monitoring	inspection of development activities by a qualified archaeologist
_	 monitoring locations are determined by the scheduled locations of development activities
	 the depth of identified cultural materials and sediments must be recorded as accurately as possible
	both negative and positive monitoring locations are recorded
excavation unit	 units excavated by hand to evaluate the context and contents of a site during the controlled excavation phase of an assessment
	the total number of square metres excavated in a site are recorded
	 depth and horizontal provenience of identified cultural materials and sediments must be recorded through an established site datum and baseline
	• all excavated sediments are screened, and all cultural materials on the surface of the excavation unit and within the sediments of the unit are collected for further analysis

Investigation Method	Description
detailed mapping	this method is to be checked only when a specialized map(s) has been prepared
	 specific areas or features of the site are mapped in detail (e.g., component "floor" mapping, profile mapping, feature mapping)
	• the formal, detailed map must be included with the site form whenever possible
	if the detailed map is not included with the site form, describe the type of detailed map that will be included in the final permit report
	this method is not to be checked if only a standard site map is provided
other, specify	 example: helicopter reconnaissance, magnetometer, ground penetrating radar (GPR), unmanned aerial vehicle (drone), terrestrial laser scanning

Appendix 6: Coordination with the Standards for Archaeological Spatial Data Submissions

An Archaeological Spatial Data submission is required for all mitigative, research, and student permits, as outlined in <u>Archaeological Survey Information Bulletin: Standards for Archaeological Spatial Data Submissions</u> (spatial data, spatial data submissions). Information provided in archaeological site inventory forms must be consistent with archaeological spatial data submissions. This appendix provides guidance on specific sections of the archaeological site forms and the archaeological spatial data submissions that must be reported consistently. It is not possible to create an exhaustive list of potential issues that may arise in particular situations. Researchers must carefully review their site forms and spatial data together to ensure clarity and consistency of information before submitting data to the Archaeological Survey. This information must also be reported consistently in the permit report(s).

Investigation Method Locations

- The count of records (points) in the Subsurface Inspection Spatial Dataset must correspond to the counts in the Investigation Methods in the site form (Section 24) for each site and must be illustrated in the site map (Section 35). It is understood that minor variation may occur due to GPS error or because the researcher may not use a GIS program to complete the sketch map.
- Subsurface inspection records with a value of 'Positive' in the 'Result' field of the Subsurface Inspection Spatial
 Dataset in the Archaeological Spatial Data must be illustrated as positive in the site map (Section 35). Positive
 inspection locations must be labelled in the site map with the respective values from the SI_Name field from the
 archaeological spatial data.
- References to an investigation location in maps, text, or tables in the site form must use the unique identifier from the SI_Name field in the Subsurface Inspection Spatial Dataset.

Cultural Materials

- The material counts in the Num_Arts field of the Subsurface Inspection Spatial Dataset must be consistent with the total # observed count in Section 16 of the site form for each site.
- Soil samples are not counted towards the total # observed count in Section 16.
- Features recorded in Section 15 are not counted towards the total # observed count in Section 16.

Features

- Each feature recorded at a site must be identified with a unique identifier. In the Site Features Spatial Dataset, this identifier is recorded in the SF_Name field. In the site form, references to a feature in any maps, photos, text, tables, or other materials must use the SF_Name identifier.
- The type used to classify a feature (e.g., stone circle, depression, cabin, etc.) must be consistent between the Site Features dataset and the site form for each feature. Each feature may only be classified with one type.
- Each feature must be recorded consistently in Section 15 of a site form and in the Site Features Spatial
 Dataset. Each feature also must be illustrated in the site map (Section 35) and must be labelled using the
 SF Name.

Feature naming conventions (SF Name):

The following naming conventions must be followed when features are identified at a site:

- Previously identified features:
 - The researcher must consult all available site forms, spatial data submissions, reports, or other report materials to determine if the feature has a previously assigned identifier.
 - If a feature was assigned an identifier in a previous site form, spatial data submission, report, or other report
 material, the same identifier must be used to reference the feature in the current site form and in all related
 submissions.
 - If a feature has more than one previous identifier or if the identifier is otherwise unclear, the researcher must consult with the Archaeological Information Coordinator to determine the appropriate choice.

- New feature(s) identified or previously identified feature(s) that was/were not issued an identifier:
 - Features must start with the letter "F," followed by successive numbers (e.g., F1, F2, F3).
 - The convention "F1," "F2," "F3" and onward must be applied to all feature types.
 - The successive numbering for features at a site will apply only to those features at a single site. Successive feature numbering must not be applied to all sites visited during a single project (i.e., the numbering of features at each site should always start with "F1" at new sites). For new features recorded at a previously recorded site, numbering would begin with the next successive number (i.e., if features F1 and F2 were recorded previously, newly recorded features would be numbered starting at F3). If feature numbering from the previous site visit(s) did not follow the prescribed convention, contact the Archaeological Information Coordinator to determine how to proceed with numbering newly recorded features.
- Archaeological features that have also been recorded under a Heritage Survey form must be given both a
 feature name and an HS key number. In those cases, the SF_Name is a combination of the feature name and
 the HS key, separated by an underscore (e.g., F1_HS 12345) and must be used in any maps, photos, text,
 tables, or other materials.

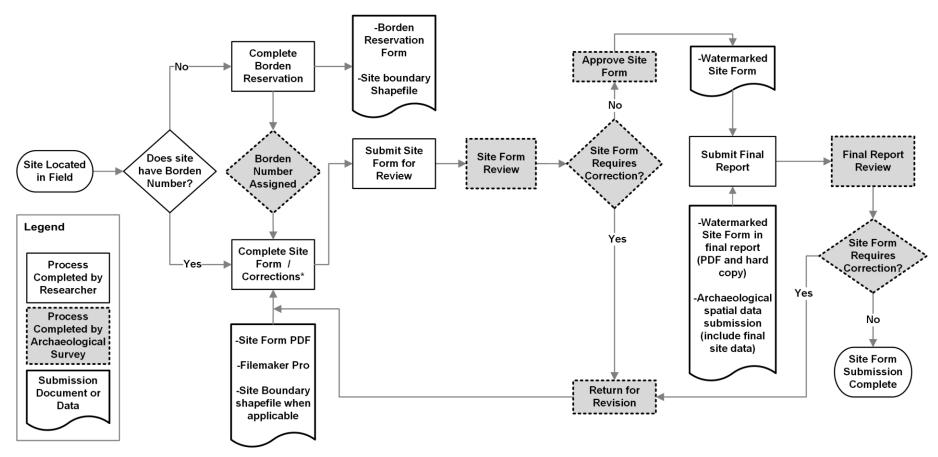
Site Boundaries

- The Archaeological Survey maintains the master record of archaeological site boundaries in Alberta. Site boundaries are submitted by researchers but may be modified by the Archaeological Survey to include additional information (e.g., information from previous revisits).
- The master record of site boundaries can be accessed by approved users through the Archaeological Survey's spatial data service.
- In addition to site locations and extents recorded using modern technology, the Archaeological Survey's spatial data service includes legacy archaeological boundary polygons and site location points (i.e., those recorded before the GIS and GPS technologies were available). Due to these technological limitations, a legacy site location point and/or boundary may not be accurate. As a result, as part of a site revisit, a researcher must review all previous site forms to confirm the likely site location. If the researcher determines that the legacy site boundaries or locations are not accurate, updated site boundary polygons and site location points must be submitted to the Archaeological Survey.
- If, while preparing an archaeological spatial data submission, the researcher determines that a site boundary requires updating, the researcher must provide updated archaeological boundary shapefiles to the Archaeological Information Coordinator following the steps outlined in the Archaeological Site Form Submission Process: Site Boundaries section of this guide.
- Updated site boundary shapefiles must be submitted when a positive inspection point or an archaeological feature is located outside the current site boundary.
- The site boundary is the actual extent of the site and does not include any recommended avoidance buffer or unexplored areas that are assumed to be positive for cultural materials. Only include areas within the site boundary where archaeological evidence has been observed (during the current visit or, if applicable, from previous site records).

Appendix 7: Common Site Form Errors

- Investigation locations, materials observed, and feature counts do not match with the archaeological spatial data submission.
- Incorrect spelling and grammar please use spell check and proofread prior to submission for review.
- Sections of the form are left blank when they could be filled in.
- An incorrect Borden number appears in some of the sections of the form, usually as the result of copying/pasting between a set of related site forms.
- An incorrect location is provided in the legal land description, the point coordinates, or both, usually the result of copying/pasting or duplicating related forms.
- For single component sites, "1" is not filled in beside "# components."
- The number of features is incorrect for revisit site forms. The number filled in must include only those features observed during the current site visit.
- The counts of artifacts are inconsistent between Sections 15, 16, and 17.
- When materials are observed but not collected (Section 16), "0" is not filled in under the collected column for that artifact type. When materials are neither observed nor collected for an artifact type, both fields should be left blank.
- The number of artifacts observed is less than the number collected, or left blank. The number observed must always be greater than or equal to the number collected; it represents the total count of artifacts observed, including those that were that were collected.
- Dimensions the numbers provided are inconsistent with the site extent illustrated on the site map and/or the boundary shapefiles.
- Dimensions Depth Below Surface the unit of measure is incorrect. Be sure to record this in metres, not centimetres.
- The estimated portion intact (Section 22) and disturbance factors (Section 23) do not present consistent estimates of site disturbance. Sections 22 and 23 must be completed together. For example, a site estimated to be 0% intact must have disturbance types selected in Section 23. Alternatively, a site estimated to be close to 100% intact would not have significant disturbance reported in Section 23.
- The number of tests in the Investigation Methods (Section 24) is inconsistent with the number of tests illustrated on the Site Map (Section 35).
- Site Significance or Recommendation Remarks are not provided.
- Legal Description does not include all LSDs overlapped by the complete site boundary.
- The information provided on the site form is not consistent with the information discussed in the project's interim or final report.

Appendix 8: Site Form Review Process



^{*}Archaeological spatial data and artifact catalogues must be finalized before completing site form.

Appendix 9: Converting Coordinates from UTM to 10-TM

The 10-TM Forest (EPSG 3400) coordinate system is projected to Alberta and allows the entire province to be accurately mapped using a single coordinate system. This makes this system more efficient than UTM as it does not require splitting large projects into multiple parts when they cross over the boundary between UTM Zones 11 and 12. Additionally this system facilitates enhanced integration with existing Government of Alberta datasets improving accuracy and searchability of records.

HRMB Tools for Coordinate Conversion:

- Coordinate conversions between UTM and 10-TM can be accomplished using the <u>HRMB Data Export App</u> on the AGSP Portal.
- ***PLEASE REFRAIN FROM USING OTHER ONLINE COORDINATE CONVERTERS***
- site locations are sensitive information that must not be shared with third party websites
- Single coordinate pairs consisting of an Easting, Northing and UTM zone can be converted using the "UTM to 10-TM" tool found in the application tool bar. This tools will return input coordinate locations converted to 10-TM easting and northing.
- Lists of coordinates recorded in a CSV file can be converted using the "UTM to 10-TM bulk" tool. This tool requires that input data be saved in a comma separated value file with the following fields.

Identifier	Х	Υ	Zone
Site-1	665503	6085861	11
Site-2	674176	6041750	11

Where *Identifier* is a unique key value, *x* is an easting value, *y* is a northing value, and *Zone* is the UTM zone. Upon tool completion, a CSV file containing converted values will be available for download.

- Detailed instructions, demo videos, and a template CSV file can be found on the Archaeological Survey <u>SharePoint</u> site.
- Additionally 10TM coordinates can be viewed for a location in the map viewer window by clicking on the map using the coordinate query tool.

Converting to 10-TM in ArcGIS:

- ArcGIS Pro coordinates can be derived using the Calculate Geometry Attributes tool.
- ArcMap coordinates can be derived by using the <u>Project</u> tool.
- Fields can be added to the layers attribute table using <u>Add Fields</u> to hold northing and easting values and values derived using the <u>Calculate Geometry</u> tool.

Converting to 10-TM in QGIS:

 QGIS coordinates can be derived using the <u>Reproject Layer</u> tool. The <u>Field Calculator</u> can be used to create new fields populated with easting and northing values.

Appendix 10: Site Form Submission Checklist

The spatial data and cataloguing must be finalized before completing the site form. All counts on the site form (i.e., features, total # materials observed, screened and not screened investigation locations) must be consistent with the archaeological spatial data submission.

Borden Number Reservation:	Yes	N/A
Have all fields been completed?		
Are the point coordinates in Alberta 10-TM (Forest)?		
Are the centre point coordinates within the site boundary shapefiles?		
Does the "Field_No" field in the site boundary shapefiles match the "Field No" in the application form?		
Site Form Submission:		N/A
Has the revisit date been added, if applicable?		
Are Sections 1-13 reflective of all cumulative site visits?		
Have all relevant fields been completed?		
Are the feature counts in Section 15 consistent with all other datasets?		
Are the observed material counts in Section 16 consistent with all other datasets?		
Are the investigation method counts in Section 24 consistent with all other datasets?		
Does the site map include all required elements?		
Have the spelling and grammar been checked?		
Has the site form gone through an internal/peer review process?		
FileMaker Pro form (and associated printed PDF) or a fillable PDF form submitted to the Archaeological Survey?		
Site form in Final Report Submission:		N/A
Are you including the watermarked version of the site form?		
Is the information provided in the site form consistent with the site discussions in the interim and/or final reports?		