Contents

Purpose ........................................................................................................................................................................ 1
Introduction ................................................................................................................................................................. 1

1 Historical Documentation ........................................................................................................................................... 3

2 Stage 2: Survey .............................................................................................................................................................. 5
  2.1 Limitations of working only with the “20 artifact” standard .................................................................................. 5
  2.2 Alternative strategies for Stage 2 .......................................................................................................................... 5
    2.2.1 Does the site date to before 1830? .................................................................................................................... 5
    2.2.2 Are you using pedestrian survey? .................................................................................................................... 6
    2.2.3 Are you using test pit survey? ........................................................................................................................ 6
    2.2.4 What are the requirements for historical documentation? .............................................................................. 6
    2.2.5 Are you recommending no further CHVI? ......................................................................................................... 7
    2.2.6 Are you recommending further CHVI? ................................................................................................................ 7
    2.2.7 Are you recommending skipping Stage 3 or reducing the amount of fieldwork? ........................................... 7
  2.3 Making recommendations at the end of Stage 2 ...................................................................................................... 7

3 Stage 3: Archaeological Assessment ........................................................................................................................... 8
  3.1 Historical documentation .......................................................................................................................................... 8
  3.2 Controlled surface pick-up (CSP) ........................................................................................................................... 8
  3.3 Test unit excavations and alternative strategies .................................................................................................... 8
    3.3.1 When a historical site is a large and complex combination of components ............................................. 9
    3.3.2 When it is clearly evident that the site will proceed to Stage 4 ................................................................. 9
    3.3.3 When it is not clearly evident that the site will proceed to Stage 4 ........................................................... 10
    3.3.4 Alternative Stage 3 strategies for large sites .................................................................................................. 11
    3.3.5 Where there is potential for a site below recent fill ....................................................................................... 11
    3.3.6 Defining the extent of the site ......................................................................................................................... 12
    3.3.7 Broad diffuse scatters ...................................................................................................................................... 13
    3.3.8 Sampling strategies ........................................................................................................................................... 13

4 Stage 4: Mitigation of Development Impacts ............................................................................................................... 14
  4.1 Avoidance and protection ......................................................................................................................................... 14
  4.2 Excavation ................................................................................................................................................................. 14
    4.2.1 Hand excavations and the Parks Canada system .......................................................................................... 14
    4.2.2 Mechanical topsoil removal .......................................................................................................................... 14

5 Artifact Analysis ............................................................................................................................................................ 15
5.1 Artifact sampling .................................................................................................................. 15

6 Criteria for Determining Cultural Heritage Value or Interest .............................................. 16
   6.1 Characteristics of the assemblage ...................................................................................... 17
   6.2 Quality of the historical documentation ......................................................................... 18
   6.3 Sample size ..................................................................................................................... 18
   6.4 Time span of production and use .................................................................................... 18
   6.5 Mixed vs discrete components ....................................................................................... 19
   6.6 Clustered vs diffuse artifact distributions ....................................................................... 19
   6.7 Length of time of occupation; continuously occupied sites ........................................... 19
   6.8 Geographical context ...................................................................................................... 20
   6.9 Where cultural characteristics have been identified ....................................................... 20
   6.10 Evidence from built heritage ........................................................................................ 20
   6.11 Integrity ....................................................................................................................... 21

7 Reporting Your Decision Making ......................................................................................... 23
   7.1 Clearly communicating decision making ....................................................................... 23
   7.2 Preparing the argument and recommendations ............................................................... 24
      7.2.1 Making recommendations for alternative Stage 3 strategies ................................ 25
      7.2.2 Formulating the strategy for Stage 4 ..................................................................... 26

8 Bibliography .......................................................................................................................... 27
   General historical archaeology of farmsteads ..................................................................... 27
   Fieldwork methods and strategies ....................................................................................... 28
   General artifact analysis ..................................................................................................... 28
   Ceramics ............................................................................................................................... 29
   Glass ..................................................................................................................................... 31
   Architectural ........................................................................................................................ 32
   Faunal and floral ................................................................................................................ 32
   Other specific artifact classes .............................................................................................. 33

9 Sources for Historical Research .......................................................................................... 36
   Land title information ......................................................................................................... 36
   Census documents ............................................................................................................. 36
   Historical aerial photographs ............................................................................................. 36
   Other .................................................................................................................................... 36

10 Glossary .................................................................................................................................. 38
Purpose

This technical bulletin is intended to aid consultant archaeologists in meeting the Standards and Guidelines for Consultant Archaeologists (2011) (the Standards and Guidelines) as they relate to fieldwork and reporting for archaeological sites that can be classified as rural historical farmsteads (farmsteads).

The advice will help you at every stage of the archaeological assessment process. It illustrates how to use the evidence gathered during the background research, fieldwork and artifact analysis to build strong recommendations for this type of archaeological site. This bulletin outlines how to evaluate the cultural heritage value or interest (CHVI) of a farmstead, how to decide whether to recommend further work after each stage of assessment, and how to determine the most appropriate assessment and mitigation strategies.

Cultural Heritage Value or Interest (CHVI)

For the purposes of the Ontario Heritage Act and its regulations, archaeological resources that possess cultural heritage value or interest are protected as archaeological sites under Section 48 of the Act. The criteria for determining CHVI include:

- **Information value**: whether the archaeological site contributes to the local, regional, provincial or national history
- **Value to a community**: the intrinsic value of the site to a particular community, Aboriginal community or group and;
- **Value as a public resource**: how the site contributes to enhancing the public’s understanding and appreciation of Ontario’s past.

For more information on indicators of CHVI see the Standards and Guidelines, Table 3.2 and Section 6 of this bulletin.

Introduction

For the purposes of this bulletin, a rural historical farmstead is defined as a complex of structures and landscape features associated with household-level agriculture dating to the period since Europeans arrived in the province. A farmstead includes a house, outbuildings and land. Outbuildings may include barns, stables, sheds, smokehouses, icehouses, wells and privies. The landscape features of the broader grounds may include orchards, pastures, fields, fences, drains and laneways.

Many of these sites date to the 19th century and thus the standards relevant to that period are applicable. All farmstead sites have some degree of cultural heritage value or interest (CHVI). However, farmsteads are one of the most common types of archaeological sites in Ontario. Given the large number of such sites, the question arises as to which are of a sufficient degree of CHVI to warrant Stage 4 mitigation.
This bulletin presents a range of ways to apply the tools in the Standards and Guidelines to your fieldwork strategies that allow you to make a full and confident assessment of a farmstead site. You will notice that, if applied, the advice given will mean going beyond the minimum requirements of the Standards and Guidelines. The ministry encourages you to go beyond the minimum and use all available information in the assessment process.

While the focus of this document is on farmsteads, some of the guidance may also apply to varying degrees to other classes of sites (e.g., commercial sites such as taverns, hotels or general stores) that were originally located in rural contexts. This bulletin does not address or provide guidance on deeply buried sites or sites located in urban settings (e.g., the ‘downtowns’ of larger municipalities). Regionally specific guidance for sites located in northern Ontario is found elsewhere.

Finally, this bulletin is general guidance. Seek advice from the ministry through Archaeology@ontario.ca if there is any doubt about the strategies planned for a given site.
1 Historical Documentation

Thorough historical background research is an important and cost-effective means of improving your archaeological assessment. It is also essential to the interpretation and evaluation of farmstead sites. Good background research can help to define the period during which the farmstead site was occupied and provides invaluable context for the archaeological site within the historical development of the area or region within which it is located. It is also an important part of the evaluation of the cultural heritage value or interest (CHVI) of the site and of formulating recommendations.

**Historical Documentation**

When completing historical research for farmstead archaeological sites, the following sources may contain relevant information:

- Personal Census Records
- Land Title Abstracts
- Church Records
- Municipal assessment rolls
- Historical maps
- Newspapers
- Local Histories

**Need Help?**

Local chapters of the Ontario Genealogical Society or Ontario Historical Society are invaluable sources. Some also provide research services.

The *Standards and Guidelines* set the minimum standards for background research and provide guidelines for more thorough historical research. The ministry encourages you to go beyond the minimum standards for Stage 1 and research the sources suggested by the guidelines for Stage 1 and the standards for Stage 3.

A great deal of historical documentation is now available online, at the Archives of Ontario, ServiceOntario (land registry), municipal archives, universities, local museums and libraries.

**Historical Documentation**

Other sources:

- Built heritage or cultural landscapes studies.
- Individuals including local residents and landowners, avocational archaeologists
- Organizations including local museums, genealogical, historical or archaeological societies.
Aerial photographs will be available from early in the 20th century onward and can provide valuable insights into the land use history of the property (see Section 9). Those early photos can show standing structures or ruins that will help you to verify that the site was at a specific location and may further assist with verifying whether the farmstead was a long-term occupation that extended into the 20th century. Recent aerial photos may also help you to verify the extent and intensity of disturbances and therefore the degree of integrity for the site.

Providing summary information from the land titles abstracts in archaeological reports has become common. Abstracts show a range of transactions including changes in ownership and mortgages. Abstracts do not include tenants or show the relationships between various listed owners or which part of the property an individual owned. There may be considerably more detail in instruments such as deeds, mortgages, covenants and wills, much of which are still available in the land registry offices. When presenting this information in the report, the ministry recommends a table format since descriptions in text can be difficult for the reader to follow.

An absence of historical information about land use history may also provide valuable clues. For example, if historical records document the earliest occupation of the property to the 1850s, but you find an artifact assemblage on the property that dates to the 1830s–1840s, the assemblage has the potential to fill a gap in the land use history of the property and provide valuable insights into the earliest occupations of the area.

Farmstead sites are commonly in proximity to built heritage, whether standing structures or ruins. Clues provided by architectural style, method of construction, etc., aid in the dating of sites associated with such features. If there is built heritage in proximity to a farmstead site, these buildings may be on municipal or provincial lists or designated under the Ontario Heritage Act. The municipal clerk can provide information about the historical activity on the property.

Built heritage or cultural heritage landscape assessments can provide valuable insights into the property’s land use history. They can also support the interpretation of archaeological sites found within that property. If available, present a brief summary of any information gained from these documents in the project context section of your report.
2 Stage 2: Survey

The primary purpose of Stage 2 is the discovery of archaeological sites. The relevant standards are designed to achieve this purpose. However, they also provide direction for evaluating the cultural heritage value or interest of an archaeological site. The Stage 2 framework provides opportunities to gather additional information for more informed evaluation and recommendations. Applying the Standards and Guidelines to their full extent in combination with the guidance in this bulletin can reduce or eliminate the need for later stages of assessment.

2.1 Limitations of working only with the “20 artifact” standard

You may choose to do the minimum fieldwork required for Stage 2. However, this will only allow you to argue the degree of CHVI in terms of Section 2.2, Standard 1 c, sometimes referred to as the “20 artifact” standard. It requires Stage 3 archaeological assessment for “post-contact archaeological sites containing at least 20 artifacts that date the period of use to before 1900.”

The standard means at least 20 artifacts were recovered that when analyzed as an assemblage can date the period of occupation of the site at least in part to before 1900. This does not mean 20 artifacts each of which date to before 1900. Nor should it be taken to mean that an artifact produced or available before 1900, but having a long period of availability or use into the 20th century, could on its own be used to date the site’s use to before 1900.

You are encouraged to collect the entire artifact assemblage so that you can draw upon a large enough sample to provide strong support for a conclusion as to whether the site does or does not date to before 1900. Collecting the entire sample means completing a controlled surface pick-up (CSP) in Stage 2 or taking full advantage of the intensified-test-pit options available under Section 2.1.3.

2.2 Alternative strategies for Stage 2

You are encouraged to make full use of the provisions of the Standards and Guidelines to collect all evidence available under the Stage 1 and 2 processes to make a comprehensive argument for or against Stage 3. Doing so may allow you to recommend no further concerns for a site which meets the minimum criteria set out in the 20 artifact standard in Section 2.2, Standard 1 c.

2.2.1 Does the site date to before 1830?

As a first step in analyzing your artifact assemblage, you should always determine whether there is evidence that supports the site dating to before 1830. If so, the site must proceed to Stage 3 as Stage 4 is required (Section 3.4, Standard 1 f). Your recommendation must be to carry out Stage 3 archaeological assessment with test units according to the requirements of Section 3.2.3, Table 1, numbers 3 and 4.
2.2.2 Are you using pedestrian survey?

For sites found by pedestrian survey, Section 2.1.1, Standard 7 requires intensified pedestrian survey. This will produce a larger sample of artifacts to support an argument as to whether a site should go to Stage 4. However, better quality evidence (i.e., spatially controlled) can be acquired through a CSP, which requires recovering all artifacts. When completing a CSP in Stage 2, the processes and requirements for fieldwork (Section 3.2) and reporting (Section 7.9) must be met.

2.2.3 Are you using test pit survey?

Apply the provisions of Section 2.1.3 to sites found during test pit survey to obtain as much additional information as possible. Usually it will be most beneficial to excavate test units (as opposed to intensified test pitting) since this will allow a better comparison with other sites in terms of artifact yield per one metre square test unit and will provide better information about site integrity.

Section 2.1.3 does not put an upper limit on the number of test units that you may excavate in Stage 2. You should excavate enough test units to obtain a sufficiently large artifact sample to support your argument and to obtain a basic understanding of the integrity of the site.

Section 2.1.3, Standard 2 does not explicitly address archaeological sites with multiple positive test pits. The discovery of a farmstead typically results in numerous positive test pits. Where there are multiple positive test pits it is not necessary to excavate units over or adjacent to all the positive test pits. Test unit placement should be determined by:

- the distribution of artifacts including concentrations of earlier dating artifacts or activity areas
- test pits that provide information about site integrity
- the most productive test pits

If you reach a point where it is either clearly evident that the site should proceed to Stage 4 or that a small number of test units will not be enough to support an argument one way or the other, any further assessment should be conducted as part of Stage 3.

2.2.4 What are the requirements for historical documentation?

If you are recommending that the site has no further CHVI, the expectation is that you will present thorough historical documentation to support your argument (see Section 1). Thorough historical research will include sources listed in Section 1.1, Guideline 1 and Section 3.1. The sources researched and results need to be documented in the report.
2.2.5  Are you recommending no further CHVI?

The ministry expects the available evidence to be incorporated into the report to make a recommendation of no further CHVI. This includes:

- an analysis of the complete artifact assemblage
- all available historical documentation
- any information from extant built heritage
- the local and regional context
- any information regarding site integrity

2.2.6  Are you recommending further CHVI?

The ministry expects, when the evidence demonstrates that a site is of further CHVI and should eventually go to Stage 4, that a recommendation for a Stage 3 archaeological assessment will be made. The report should include a clear explanation of the CHVI based on the characteristics discussed in Section 6 of this bulletin. The recommendation should specify what the Stage 3 assessment would consist of (e.g., only test excavation).

2.2.7  Are you recommending skipping Stage 3 or reducing the amount of fieldwork?

It may be clear at the conclusion of Stage 2 that a site has CHVI and should proceed to Stage 4 mitigation of development impacts. However, the ministry takes a conservative approach in requiring that the objectives of a Stage 3 assessment are addressed before Stage 4 is recommended (see below for more detail). This is important to ensure that:

- all information is available to allow for a meaningful consideration of long-term protection as an option
- the avoidance and protection strategy is well informed
- all necessary information is obtained to inform the Stage 4 excavation strategy

2.3  Making recommendations at the end of Stage 2

If a site meets Section 2.2, Standard 1c at the completion of a Stage 2 assessment, but a recommendation for no further concerns is being contemplated, the recommendation must be supported by:

- a CSP according to Section 3.2.1, or both intensified test pitting and test units according to Section 2.1.3
- complete historical documentation according to Section 1.1, Standard 1 and Guideline 1 (as further interpreted and reinforced by Section 3.1)
- an analysis of the total artifact assemblage
- incorporation of any other factors (e.g., associated built heritage, context, integrity)
- a thorough and detailed argument addressing all evidence
3 Stage 3: Archaeological Assessment

As the Stage 3 assessment proceeds, the ministry expects that the information obtained from the site will be continuously evaluated against the criteria for CHVI in Section 3.4 of the Standards and Guidelines and as found in this bulletin. If you determine that you have clear and sufficient evidence to make a recommendation, you must have completed at least the detailed background research required by Section 3.1 and the CSP (for plough-disturbed sites) required by Section 3.2.1.

3.1 Historical documentation

As noted in Section 1, thorough and complete historical documentation is essential to support well-informed recommendations about a farmstead site. The historical research should examine all available historical sources to the degree that is reasonable. That information should be analyzed and presented in relation to the site and inform the understanding of the site.

Section 7.8.4, Standard 2 does require that recommendations regarding built heritage and cultural heritage landscape must not be included in an archaeological assessment report. However, it is acceptable to include information from available built heritage reporting in the body of the report and to include full built heritage reports (Cultural Heritage Evaluation Reports or Heritage Impact Assessments) in the supplementary documentation.

3.2 Controlled surface pick-up (CSP)

The CSP may play an important role in expanding the artifact assemblage and determining whether it is evident that the site should go to Stage 4. The CSP will also inform the strategy for Stage 3 test unit excavations on identifiable components or areas of interest for the site. The CSP results CSP should be reviewed to determine if there are patterns in the artifact distribution, such as clustering of classes of artifacts, temporal diagnostic artifacts, or groups of artifacts characteristic of a particular activity or use.

3.3 Test unit excavations and alternative strategies

The strategy for test unit placement must achieve the objectives stated in the introduction to Section 3.2.3:

§3.2.3 Determining the location and number of test units

The objectives of a test unit placement strategy are to:

- Provide a uniform level of data collection from across the site
- Focus testing on key areas (e.g., site core, site periphery, areas of lower artifact concentration, isolated concentrations of diagnostics or classes of artifacts), as deemed appropriate based on professional judgment
- Gather a representative artifact sample from across the site
- Determine the nature of subsurface deposits
- Determine the extent of the archaeological site
- Support the recommendations for Stage 4 mitigation strategies.

Table 3.1 in the *Standards and Guidelines* outlines strategies for determining the number and placement of test units depending on the characteristics of the site. There are also alternative strategies within the *Standards and Guidelines* that apply. For many sites, careful consideration of the options that are available and their appropriate application may allow for an effective and efficient test unit strategy that complies with the *Standards and Guidelines* and does not require use of the guidance in this bulletin.

There are several possible approaches to the strategy for Stage 3 test unit excavations for farmstead sites:

- Meet the criteria in Table 3.1, numbers 1 and 2
- Meet the criteria in Table 3.1, numbers 3 and 4
- Meet the criteria in Table 3.1, number 15
- Meet the criteria in Table 3.1 as modified by Section 3.3.3
- Pursue a well-argued alternative strategy of a reduced number of Stage 3 test units

Note also that nothing specifically prevents the excavation of 1 m square test units in blocks or as continuous lines of test units (that in effect form a trench). However, in your report provide the rationale for the unit placement based on the characteristics of the site.

### 3.3.1 When a historical site is a large and complex combination of components

It is important to consider carefully whether the site is in fact solely a farmstead site. If the site is part of a village, an industrial complex, or other similar contexts, the Stage 3 test unit strategy is expected to conform to Table 3.1, number 15, which states “Place and excavate 1 m square test units according to a strategy that balances systematic and focused test excavation across the site.” The requirements for this strategy are flexible but it must be demonstrated that the strategy meets all the Section 3.2.3 objectives.

### 3.3.2 When it is clearly evident that the site will proceed to Stage 4

For any farmstead, the first decision in developing the Stage 3 test unit strategy is to determine whether it is evident that the site will proceed to Stage 4. Where it is evident, excavate 1 m square units on a 10 metre interval grid over the full extent of the site. Additional units must be excavated to a minimum of 40 percent of the units excavated along the grid, “focusing on areas of interest within the site extent (such as distinct areas of higher concentrations within a broader artifact concentration, or adjacent to high-yield units”). Any modified Stage 3 test unit strategy must work from the basis of this required strategy.
3.3.3 When it is not clearly evident that the site will proceed to Stage 4

If it is not evident that the site will proceed to Stage 4, Table 3.1 numbers 1 and 2 apply. A more intensive test unit strategy is necessary in order to gather the information on which to base a determination that a site should or should not proceed to Stage 4.

If it does become evident during the excavation of Stage 3 test units that the site should go to Stage 4, test unit excavation may be discontinued when the requirements of Table 3.1, numbers 3 and 4 (the ‘clearly evident’ requirements) have been met. It may only be necessary to complete the 10 m grid required by Table 3.1, number 3 without the infill units if it can be demonstrated that the sample size is sufficient and Section 3.2.3 objectives are met. It is also acceptable to not complete the 10 m grid if it is evident that the site should not proceed to Stage 4 mitigation.

Therefore, as a best practice, test unit excavation should begin with the objective of meeting the requirements of Table 3.1 numbers 3 and 4, with further test units being excavated (according to Table 3.1, numbers 1 and 2) only if necessary to support the argument that the site should not proceed to Stage 4.

<table>
<thead>
<tr>
<th>Evidence level</th>
<th>Follow this part of the Standards and Guidelines</th>
<th>Fieldwork</th>
</tr>
</thead>
<tbody>
<tr>
<td>At start of Stage 3, it is not clearly evident that the site will proceed to Stage 4</td>
<td>Table 3.1, numbers 1 and 2</td>
<td>As appropriate to the suspected size of the site, plan a minimum number units at 5 m intervals and add 20% extra units.</td>
</tr>
<tr>
<td>During Stage 3, it becomes clearly evident that the site will proceed to Stage 4</td>
<td>Table 3.1, numbers 3 and 4</td>
<td>Finish the grid at 10 m intervals and complete 40% infill units focusing on areas of interest within the site extent</td>
</tr>
</tbody>
</table>

Where it is not yet evident that the site should go to Stage 4, consider the following when developing your test unit excavation strategy:

- A grid should overlay the full extent of the site to ensure a uniform level of data collection and a representative artifact sample from across the site. For example, lay out the full 5 m interval grid but begin by excavating test units at broader 10 m intervals in the beginning, narrowing the intervals as necessary until it does become evident whether to proceed to Stage 4.
- Any obvious areas of artifact concentration should be tested.
- Investigate any spatial variability in the assemblage. For example, if the artifact assemblage displays a different character in one area than in another, both areas should be tested.
- Test units should be excavated around the extent of the site such that the limits of the site are evident.
3.3.4 **Alternative Stage 3 strategies for large sites**

An evaluation of CHVI should not be based on the site’s area or artifact productivity. However, whether a site is large or small may form part of the basis for the fieldwork strategy.

For large sites, apply Section 3.3.1, Standard 1. If this standard is applied, you should present an analysis of the site in relation to other sites of that period and within that region such that it is clear that the site is larger than other sites of a comparable type. “Large” may be expressed in terms of simple area (i.e., square metres of site area), or in terms of the relative quantity of artifacts and other remains present at the site. See the discussion below of geographical context for factors to consider in making the comparison.

§3.3.1 Large Sites

**Standard 1:**

Test unit excavations may be discontinued if all information required to fully inform recommendations for Stage 4 mitigation of impacts has been collected and the following minimum level of work has been completed:

a. at least 50% of the units that should be excavated based on Table 3.1 have been excavated

b. grid units have been excavated around the entire site extent, confirming the limits of the site

c. at least 50% of the additional “infill” units have been excavated

d. test units have been excavated within all concentrations of artifacts identified through test pit survey

Consider submitting a request for advice through Archaeology@ontario.ca if proposing an alternative strategy for a ‘large’ site where it is not completely clear that the site is in fact ‘large’, or where the degree of CHVI of the site is not completely evident.

3.3.5 **Where there is potential for a site below recent fill**

Occasionally, a site with a sufficient degree of CHVI to proceed to Stage 4 potentially exists below fill or later-dating deposits. If fieldwork (CSP, test units) does not identify the site, it may be acceptable to proceed to mechanical topsoil removal as part of Stage 3. This is acceptable where:

- Historical documentation has been thorough
- Best efforts have been made to acquire a substantial artifact sample
- Test unit results have informed an understanding of stratigraphy and site formation processes that suggest a site may be present below fill or other ‘non-site’ layers

You must be able to demonstrate that the layers that will be removed mechanically are either recent deposits, such as fill, or contain later-dating artifacts that make those layers clearly not of
Further CHVI. In that case, remove those layers according to the applicable requirements stated in Section 3.3.3: Assessment of sites in deeply buried conditions.

3.3.6 Defining the extent of the site

A key objective in Section 3.2.3 is determining the extent of the archaeological site. The Standards and Guidelines do not state a unit yield cut-off number. The guidance for determining the limits of any site during Stage 3 is in Guideline 1:

§3.2.3, Determining the location and number of test units

Guideline 1

The limits of the area of the archaeological site may be established through the achievement of sterile test units (yielding no artifacts or cultural features) or may be established at an earlier point using professional judgment based on:

1. permanent physical constraints of a natural form (e.g., river edge, cliff edge) or cultural form (e.g., road, building)
2. repetitive low yields on the periphery of the site
3. typical characteristics of sites within the same region
4. typical characteristics of sites of a similar type as documented through the archaeological literature

Sterile test units will always provide clear evidence of site extent. Permanent physical constraints may also sometimes define the extent. However, many farmstead sites consist of widely dispersed artifact scatters that often extend beyond the interpreted site area. Thus, Guideline 1 often becomes the focus of the argument for the extent of the site.

Interpreting yields as ‘low’ and ‘repetitive’ must be supported through a well-articulated and evidence-based argument. This argument should be based on a clear ‘drop-off’ in overall density, or in the density of specific classes of artifacts. For example, a clear drop-off in the frequencies of architectural artifacts could be evidence of the extent of the area formerly covered by the farmstead buildings. As well, a clear drop-off in earlier-dating artifacts could demonstrate that the extent of the area covered by an earlier occupation has been reached.

For drop-offs, no specific number marks a threshold after which no further work needs to be done. However, if the artifact density at the limits of the site is much lower than the density at its core, then an argument could be made that the limits have been determined. For example, if the average artifact count from multiple core units is approximately 200 artifacts per square metre, and the average count from units outside the interpreted limit is 20 artifacts (i.e., 10 percent of the core average), then it should be possible to argue that the limits of the site have been reached. The argument must take into account whether a substantial sample size has been acquired (for a farmstead, usually thousands of artifacts), and whether all characteristics of the artifact distribution have been accounted for (e.g., clusters of particular classes of artifacts, clusters of...
earlier-dating artifacts). If there is any doubt whether the argument will be clear to the reader, then it may be worthwhile obtaining ministry advice as to whether Stage 3 excavation is complete.

### 3.3.7 Broad diffuse scatters

These sites cover large areas but have low densities of artifacts. Sites of low density (even where the broad extent produces a large quantity of artifacts overall) that otherwise do not demonstrate further CHVI can be documented and then recommended as of no further CHVI.

To demonstrate that this type of site is of no further CHVI, the analysis must address questions such as:

- Is there any early (in context) presence?
- Are there any higher density concentrations within the overall scatter?
- What is the evidence from historical documentation?
- What is the density of artifacts compared to similar sites within the same region?

When recommending no further CHVI, it is important to demonstrate consideration for any possible higher density or earlier-dating concentrations, that no such concentrations are present, or that they possess no characteristics that make it worthwhile to pursue further assessment.

### 3.3.8 Sampling strategies

Apply Section 4.2.1, Guideline 1 if the reason for a reduced number of Stage 3 test units is a sampling strategy. Despite that guideline being written for application in Stage 4, the ministry considers Section 4.2.1 to establish the principles that should be applied to support a Stage 3 sampling strategy where being proposed.

---

**§4.2.1 General requirements for the excavation of archaeological sites**

**Guideline 1:**

Sampling may be used as a means to reduce the degree or intensity of the archaeological fieldwork while still accomplishing the objectives for Stage 4 excavation. Sampling strategies may vary by site and assemblage and may be determined based on professional judgment. Sampling may be acceptable, provided that the following conditions are met:

1. The sampling strategy was recommended in the Stage 3 project report and accepted by the ministry. Cite references and provide supporting information for the proposed strategy.

   Sampling will be applied to sites or assemblages such that there will be no risk that the minimum levels of expected information will not be acquired. In general, this means that sampling should only be applied to large sites or sites where very large numbers of a class of artifact or feature are present (e.g., large quantities of lithic debitage).

   Sampling must ensure representation from all meaningful contexts across a site (e.g., cultural features, individual spatial or functional areas such as within a longhouse or across a block of excavation units).
4 Stage 4: Mitigation of Development Impacts

Once it is determined Stage 4 mitigation of development impacts is required for a farmstead site, there are two options: avoidance and protection, or excavation.

4.1 Avoidance and protection

As with all sites, avoidance and protection is the preferred option.

While it may not be feasible to protect the entire site, it may be possible to protect a portion of the site or a particular element such as the foundation of a structure. In these instances, the mitigation strategy will combine elements of both the avoidance and protection requirements, and excavation. It is important to consider the long-term management needs of the site including potential risks or threats, the longer-term context or environment for the site, and the capacities and needs of the owner and manager of the property.

4.2 Excavation

4.2.1 Hand excavations and the Parks Canada system

The Standards and Guidelines accommodate the use of Parks Canada fieldwork methodologies (2005a, 2005b, 2007). Examples include:

<table>
<thead>
<tr>
<th>Section of the Standards and Guidelines</th>
<th>Description of standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>§4.2.8</td>
<td>Deeply buried or complex stratified archaeological sites</td>
</tr>
<tr>
<td>§4.2.7</td>
<td>Strategy for Stage 4 mitigation by excavation of a 19th century domestic site</td>
</tr>
<tr>
<td>§4.2.2</td>
<td>Hand excavations on 19th century domestic sites</td>
</tr>
</tbody>
</table>

4.2.2 Mechanical topsoil removal

Once hand excavations are complete, the mitigation of impacts for a farmstead site typically proceeds to mechanical topsoil removal. Also known as topsoil stripping, it is designed to uncover the underlying subsurface cultural features such as cellars, privies, wells and the footprint of outbuildings. It will also expose refuse pits and deposits associated with the occupation of the site. The relevant standards are in Section 4.2.3 Topsoil stripping.
5 Artifact Analysis

No specific approaches to artifact identification or analysis are required or recommended. You may choose to follow your preferred approach as long as you provide clear documentation of that approach. The bibliography in Section 7 of this bulletin provides a selection of references that may assist in developing an approach to artifact analysis for farmstead sites. Numerous classification systems can be used including the Parks Canada system (1992).

Follow certain principles in the artifact analysis in order to make the best argument in support of your recommendation:

- Analysis must be of the complete artifact assemblage, not just one or a few artifact classes
- Artifact analysis should address all site characteristics (e.g., distribution of classes across the site, evidence for differently dated loci)
- All diagnostic artifact classes should be well illustrated by photographs
- The strategy used for artifact analysis must be described in detail and supported by reference to the literature
- The results of the artifact analysis should be documented in detail through both the catalogue and through tables in the text of the report
- The distribution and patterning of artifacts must be clearly mapped by dating/classes/types in order to identify areas of interest that will be further investigated or to demonstrate that such areas are not present

5.1 Artifact sampling

Do not discard artifacts in the field. All artifacts should be collected and returned to the lab except for those classes listed in Table 6.2. Bring the entire artifact assemblage back to the lab and analyze the artifacts as a complete assemblage. There are certain types of artifacts (e.g., creamware) that may be difficult to identify in the field even for an expert. It is much better to have a specialist in historical material culture carefully and thoroughly analyze the artifacts in the lab.

If large numbers of artifacts are recovered that are of low diagnostic value and the information available from their analysis is redundant (e.g., window glass, corroded and unidentifiable metal), it may be possible to propose that part of the collection can be discarded. Note Section 6, Standard 8 and the relevant parts of Table 6.2 when sampling certain classes of artifacts.

Any discard strategy must address the level of documentation that will take place prior to discard. You may submit the proposed strategy to the ministry for advice.
6 Criteria for Determining Cultural Heritage Value or Interest

If you find a rural historical farmstead site, your two main goals are to determine whether Stage 4 mitigation should be recommended and to obtain the necessary information to formulate an appropriate mitigation strategy. Whether Stage 4 mitigation should be recommended depends on the evaluation of the site’s CHVI. CHVI is based on:

- how the archaeological site contributes to the local, regional, provincial or national history
- the intrinsic value to a particular community, Aboriginal community or group
- how the site contributes to enhancing the public’s understanding and appreciation of Ontario’s past

The Standards and Guidelines provide criteria for evaluating CHVI at several points. For example, the following criteria require that further assessment be done:

- when the site dates to before 1830, Section 3.4, Standard 1 f
- when the site dates to after 1830, Sections 3.4.2 and 3.4.3
- whether a site identified in Stage 2 must proceed to Stage 3, Section 2.2, Standard 1 c

Criteria in Section 3.4 of the Standards and Guidelines, if met, would support a determination that a site should go to Stage 4. The assessment should then focus on acquiring the information to inform the Stage 4 strategy. However, if at any point accumulated evidence shows that the site will not meet the criteria, it will be necessary to articulate a well-supported argument that there is no further CHVI for the site. Some examples include:

- Section 3.4, Standard 1 b, “rare (unique, unusual) archaeological sites”
- Section 3.4, Standard 1 f, “post-contact archaeological sites dating to before 1830”
- Section 3.4, Standard 1 g, “late 19th and 20th century archaeological sites where background research (from any stage) or archaeological features clearly document cultural heritage value or interest”

Section 3.4.2 lists the site-specific criteria for domestic archaeological sites dating after 1830. Table 3.2 lists more generalized criteria for CHVI. If the site meets one or more of the criteria then Stage 4 will be required.

The archaeological standards provide a framework against which you should determine CHVI, formulate strategies, and base recommendations. Only rarely will the basis for the recommendations be evident from a simple presentation of data. It is therefore essential to
develop a detailed argument through the analysis of the data and clearly articulate it in the conclusions, as to whether the site is or is not of further concern.

6.1 Characteristics of the assemblage

The standards for determining CHVI are primarily built around the dating of the site. The underlying assumption is that a meaningful number of artifacts will be recovered during the Stage 2 and 3 assessments from which a soundly based decision on CHVI can be made. It is therefore important to carry out sufficient fieldwork to ensure that the information available from the analysis of the artifact assemblage makes it possible to support the conclusions and recommendations.

During the Stage 2 assessment, you may believe you have recovered a large enough sample of artifacts to support an argument that the site is of no further CHVI and therefore you do not recommend a Stage 3 assessment. Base your argument on a combination of the characteristics of various artifacts or artifact classes and of the assemblage as a whole. Some examples include:

- Many of the artifacts in the assemblage could be dated to either the 19th or 20th century, but there are only a few artifacts which can be clearly attributed to only the early to mid-19th century
- The artifacts are all or mostly from one item (e.g., 20 fragments from one vessel)
- The artifacts datable to the early to mid-19th century are widely spatially dispersed within a larger distribution of later-dated artifacts without evidence of a cluster of the earlier-dated 19th century artifacts within the overall distribution
- The earlier-dated 19th century artifacts form a very small proportion of the total assemblage

When analyzing the artifact assemblage, be sure to address the following:

- All conclusions (including dating) should be based on analysis of the complete artifact assemblage (not just ceramics)
- Artifact analysis should address all characteristics of the site (e.g., socio-economic status, ethnic group)
- Attention should be paid to any evidence that suggests occupation dating to the first generation of settlement
- Consider whether the combined characteristics of the site make it atypical of the region and/or poorly historically documented

Ensure that the sample is large enough to support the conclusions. If you base the argument on a small assemblage or one lacking a class or classes of artifacts, you must demonstrate that you
carried out sufficient fieldwork. Show that you thoroughly sampled the site but minimal possibilities existed to acquire a larger or better-quality artifact assemblage.

As a best practice, if you recognize during fieldwork that the site may be marginal in its characteristics, then apply additional efforts to collect a sufficiently large sample of diagnostic artifacts to form the basis for a sound argument in the report. Make careful notes and take photographs of any features or artifacts left in the field that may add to the argument, such as the probable dating and date ranges of building materials, etc.

6.2 Quality of the historical documentation

The quantity and quality of the historical documentation can form part of the argument for the degree of CHVI. You could argue that there is enough documentation to be useful for interpretation and to support your determined degree of CHVI. Alternatively, you may argue that your determination of CHVI is supported even though historical documentation is poor, and that only archaeological work can yield enough information to allow a meaningful interpretation of the site. In either case, a detailed argument would be necessary. This argument must be made in the site-specific context.

Where there is a lack of historical documentation and of artifacts and features, so any analysis and interpretation would be difficult, there should be a recommendation of no further CHVI.

6.3 Sample size

Any argument for dating, and therefore for the degree of CHVI of a site, must be supported by a substantial artifact assemblage. The quantity of artifacts that is sufficient may vary by circumstance. For example, earlier-dating sites will produce much lower artifact yields than later sites, yet such early sites will nevertheless be recommended to be of further CHVI regardless of artifact productivity.

Later-dating sites could be of no further CHVI based on low artifact yields at the conclusion of Stage 2. This will only be acceptable where a CSP and/or the full application of Section 2.1.3 have been undertaken, with all artifacts collected and analyzed in the lab.

6.4 Time span of production and use

The time span of production and use of some artifact types may extend over decades. However, despite a broad overall date range, many artifact types date predominantly to a much narrower period. Focus an argument regarding the dating of a site on the dominant period of production and use in the region within which the site is located as opposed to production and use to lesser degrees during other periods. For example, the presence of Blue Willow does not detract from the rationale for dating a site to the 19th century. On the other hand, an overwhelming predominance
of gilt-edged and decalcomania decoration within a Stage 2 artifact assemblage may form a sound basis for arguing that a site will not go to Stage 4.

6.5 Mixed vs discrete components

This plays an important role in evaluating whether to recommend a site should proceed to Stage 4. There may be sufficient evidence recovered in Stage 2 (e.g., evidence of a discrete and early deposit) to support a recommendation that it is evident that the site should or should not proceed to Stage 4. However, for sites where early and late-dating artifacts are mixed, it is generally not likely that sufficient evidence will be recovered to make it clear that there is no further CHVI. For this reason, it is usually necessary to carry out Stage 3.

6.6 Clustered vs diffuse artifact distributions

There is no density associated with Section 2.2, Standard 1 c, the ‘20 artifact’ criterion. The possibility of a component possessing CHVI being present within a broader distribution of more recent date means that an analysis that focuses on only the overall density of the distribution could be misleading.

You should carefully consider any clustering of pre-1900 artifacts that may be present and the possibility that this cluster may represent a 19th century component. Use the evidence of clustering to focus the Stage 3 assessment on only a smaller area within the overall distribution.

If earlier artifacts are widely distributed at low frequencies within a large area, and with no evidence of clustering, there may be a case that there is no basis for a Stage 3 assessment (see the discussion for broad diffuse scatters). It will often not be possible to make a sound argument regarding clustering versus dispersion without the evidence from a Stage 3 CSP or from completing the majority of required or recommended Stage 3 test units.

6.7 Length of time of occupation; continuously occupied sites

The length of time the site was occupied is not the only factor in determining CHVI. However, evidence from the artifact assemblage regarding the date range of occupation may support an overall argument that less than 80 percent of the site occupation dates to before 1870 (Section 3.4.2).

Length of occupation may also relate to the length of time over which the site was continuously occupied, in particular whether it was occupied into the 20th century or even up to the present. The positive aspect of a continuously occupied site is that it may offer the potential to study change through time. The negative aspect is the likelihood of mixed deposits from many and varied occupants which cannot be separated in the analysis; for example: a recommendation of no further CHVI where a continuous occupation extends well into the 20th century and no other
evidence supports the site being of further CHVI. Any alternative fieldwork strategy that is recommended should address the challenges of continuously occupied sites, including focusing on loci of interest and evaluating the potential for occupation-specific features, strata or middens.

6.8 **Geographical context**

While sites that date earlier are generally going to possess a greater degree of CHVI, relative dating within a given geographical region will be an important consideration. Two sites dating to 1870, one in Bath and one in Hearst, will have different degrees of CHVI. A site must be interpreted within the context of its region.

Evaluate the CHVI of a farmstead site within the historical context of the farm, community and region. This will require examining the history of those different levels of context and comparing them to similar sites (i.e., similar dates and classes of site) at each level of context. There may be limitations to the information available about the surrounding region and about similar sites within that region, but factor the limitations into any analysis. For example, the absence of such information may support an argument that the site is of greater CHVI since information about such sites is lacking within a given context.

Geographical context is important to determine whether “the archaeological site is associated with the first generation of settlement of a pioneer or cultural group, even when the settlement was after 1870” (Section 3.4.2, Standard 1b). It is also important to a consideration of whether further archaeology will contribute to an understanding of a landscape (e.g., surviving farm) or a complex of sites (e.g., several sites from one related family or ethnic group).

6.9 **Where cultural characteristics have been identified**

In some cases, the historical background research for the property, the location of the property, or the history of the area will indicate that members of an identifiable group of a particular origin, ancestry, social class, or ethnic or cultural group occupied the site. Such sites will vary in their characteristics and it may be possible to argue that the site is rarer or that it is more common within a given region. Take into account that the characteristics of the artifact assemblage may also vary because of the nature of the group. If there is evidence of occupation by members of an Aboriginal community, this will almost certainly make it necessary to proceed to Stage 4.

6.10 **Evidence from built heritage**

Incorporate evidence from built heritage present on the property (including ruins or depressions) into the analysis and conclusions for the site, for both the direct evidence regarding CHVI and for the evaluation of integrity. It is important to maintain the distinction between using this information for the purposes of the archaeological assessment and for making conclusions or
recommendations regarding the features themselves. The archaeological report is a requirement flowing out of archaeological licensing and must not include any recommendations regarding built heritage (Section 7.8.4, Standard 2). Furthermore, the analysis and conclusions regarding the built heritage that may support the archaeological assessment should remain focused on archaeological concerns. A report on built heritage may be included in the supplementary documentation, but only for reference purposes.

6.11 Integrity

Describing a site as lacking integrity usually relates to the degree of modern disturbance it has undergone, but may also relate to the degree of mixing of various components or periods of occupation of the site that has taken place during site formation and over time. On the other hand, a site having integrity relates to how undisturbed the site remains since the deposition of the materials of interest or the period of occupation.

Consider all aspects of integrity when evaluating the CHVI for a site. If at any point the accumulated evidence convincingly demonstrates a complete or almost complete lack of integrity, you should stop working and recommend no further concerns.

Considerations in evaluating integrity include:

- Do the artifacts and features remain in their original context and association from the time of site formation?
- What is the degree of integrity relative to other similar sites within the same area or region?
- Will the state of integrity allow further work to reach useful conclusions?
- Is any stratigraphy clearly understood and interpreted?
- Are site formation processes understood?
- Ploughing may reduce integrity but does not eliminate it. A ploughed site is still of value (though consider it relative to other similar sites).

Table 3.1, numbers 13 and 14 prescribe certain minimum amounts of Stage 3 fieldwork for sites characterized as ‘undisturbed’. However, you may propose alternative strategies using the approaches outlined in this bulletin or by considering the relative degree of rarity of undisturbed sites within the local and regional context.

Part of the basis for setting a higher standard for the Stage 4 excavation of undisturbed sites is the relative rarity of undisturbed sites within most classes of sites. The one notable exception is the relatively large number of undisturbed 19th century domestic sites in eastern Ontario.

For undisturbed sites, the ministry has the same expectations for the analysis and the articulation of the argument as for any other site. For such sites, it may be possible to apply the process
described in this bulletin to develop an argument for or against there being further CHVI, or in support of a recommendation for an alternative or non-conforming recommendation for the work in a succeeding stage. For undisturbed sites, base the argument on the relative lack of or rarity of sites with a comparable set of characteristics within that given regional context. This may be within the context of the overall number of such sites, or in terms of the number of such sites that have been excavated and well documented, or possibly simply in terms of the relative lack of disturbance of the land within the region and thus the likelihood that all sites of that class will be undisturbed. Statements about the characteristics of the region will however require a certain degree of in-depth historical background information; for example, demonstrating that the region as a whole has not been affected by modern disturbance, including little or no agricultural activity at any time.

If the Stage 3 work has determined that the site is undisturbed, there may be a basis for an argument that the site can be sampled, partially excavated or otherwise excavated to less than the requirements. This can be true even if another undisturbed site of this type went to Stage 4 and had been excavated to the standards of Section 4.2.9.
7 Reporting Your Decision Making

The archaeological assessment report provides information that demonstrates that the relevant standards have been met, but also becomes part of the archaeological record. The clear articulation of the rationale for decisions has several purposes:

- To create a record of the archaeological assessment that will have value to others and to future generations
- To allow ministry staff to determine what standards have been applied and the reason for the application of a particular set of standards in a given instance
- To explain to consumers of the reports (i.e. proponents, approval authorities, First Nations and the general public) the process that led to the recommendations

The following section discusses how to communicate the decision making on the methods and strategies applied during the assessment of a 19th century archaeological site.

7.1 Clearly communicating decision making

A common example of a lack of clarity is with respect to the strategy applied in the excavation of Stage 3 test units. In the methods section of many reports, the strategy for Stage 3 test unit excavation is simply stated as excavation of units on a five metre or ten metre grid. This only describes the method, not the strategy for the placement of the Stage 3 test units. Often the description of the methods and results will be limited, as seen in this example:

4.0 Methods

4.3 Test Unit Excavation

A five by five metre grid was established across the site. One metre units were excavated on the grid by hand to test the nature and extent of the artifact distribution. Units were placed at five metre intervals according to the Standards and Guidelines for Consultant Archaeologists (Table 3.1, 2011).

The initial grid was composed of 78 1x1 metre units. According to the Standards, additional units were excavated to meet the required 20% infill resulting in 94 units being excavated. Each unit was excavated five centimetres into the subsoil and all soil was screened through six millimetre hardware cloth. The base of each unit was cleaned and examined for subsurface features. The units were backfilled upon completion of the test excavations.

While some of the standards for the methods used are included in this description, it does not outline the strategy that was used to determine the placement of the test units. In describing the strategy, you should include a complete description of the methods and provide the basis for the strategy being applied. For example:

4.0 Methods
4.3 Test Unit Excavation

Stage 3 test excavations were completed following the Stage 3 controlled surface pick-up. Based on the controlled surface pick-up, the site consisted of 207 primarily post-contact artifacts dating to the mid to late 19th century and extended over an area of 60 metres by 65 metres. Within the overall site area, three distinct concentrations of artifacts were observed. Two of the concentrations consisted of a high density of artifacts, the third was a small concentration (2 pearlware, 1 green shell edged and a wrought nail) of artifacts characteristic of early 19th century post-contact domestic archaeological sites.

The strategy for the excavation of test units was based on the following:

1. The site is a post-contact domestic site dating to the mid to late 19th century
2. After the Stage 3 controlled surface pick-up it was unclear whether the site would proceed to Stage 4 mitigation.
3. The large size of the site and significant sample of artifacts from the controlled surface pick-up.
4. The observations from the controlled surface pick-up of two concentrations of artifacts and a small concentration of artifacts that may represent an early component of the site.

As a result, Standards 1 and 2 in Table 3.1 were applied. However the large size of the site would require that 156 units be excavated on the initial grid with an additional 31 units resulting in 187 units. Given the large size of the site, an alternative strategy based on the one described in Section 3.3.1 was also applied. As a result, 94 units were excavated including 78 units on the initial five metre grid including units that confirm the limits of the site. The additional 16 units were excavated in the three areas of artifact concentration including 5 units in the area from which the early-dating materials were observed in the controlled surface pick-up.

The five metre grid for the Stage 3 assessment was established by total station and oriented to magnetic north with the site datum identified as 500N500E (see Figure 3). The test units are identified by the southwest corner of the unit in relation to the overall five metre grid. The test excavations were completed between May 24, 2013 and June 5, 2013. The weather was sunny and warm with no rain.

During the Stage 3 assessment of the site, all units were excavated by hand in accordance with the standards in Section 3.2.2 and 3.2.3. The 1x1 metre units were excavated in 10 cm levels and extended 5 cm into the subsoil. The soils were screened through 6 mm mesh and all artifacts were retained. The units had an average depth of 21 cm and the floor of each was cleaned and examined for subsurface features. The units were backfilled upon completion of the test excavations. Subsurface features were identified in two units N250E250 and N240E220. The cultural features were not fully exposed in these units. The partial plan of the features was recorded prior to the unit floor being covered by geotextile and the unit being backfilled.

The above example includes information on both the strategy and the methods applied during the Stage 3 test unit excavations. The first paragraph provides a general description of the observations from the Stage 3 controlled surface pick-up. The second paragraph provides the criteria used in the decision making and the third paragraph states how this was applied.

7.2 Preparing the argument and recommendations

It is of critical importance to make a well-articulated, clear and easily followed argument such that any reader can understand the basis for the conclusions about the site. For example, if the overall assemblage is large, mostly dates to the 20th century, and background study has clearly
demonstrated that there is no evidence of 19th century use or occupation at that location, you could make an argument at the completion of Stage 2 (as discussed above) that Stage 3 assessment is not necessary.

The argument should incorporate all available information and address any possible questions relating to the CHVI of the site. You should demonstrate that you have considered both the evidence for and the evidence against your recommendation. For example, if you are intending to recommend that there is no further CHVI, you must provide not only the evidence in support of your recommendation but also demonstrate that you have considered any evidence that may support a recommendation of further CHVI and how that negative evidence is outweighed by the evidence that supports your recommendation.

In any situation where the existing standards will not be met, the ministry expects that the argument will be highly detailed. The fieldwork must be sufficient to support any argument that is made.

Please ensure that you summarize all the relevant information to support the argument in your Analysis and Conclusions section rather than reference information scattered throughout the report.

If you present an argument for a non-conforming Stage 3 assessment, ensure that it is a detailed and complete discussion, with a clear rationale for the proposed strategy (e.g., what was the sampling strategy based on? How will fewer test units achieve the required outcomes?). It is at the discretion of the ministry whether to accept an argument that a Stage 3 assessment is not necessary.

7.2.1 Making recommendations for alternative Stage 3 strategies

As discussed above, it may be possible to provide recommendations and follow strategies that may not conform to the Standards and Guidelines. Such conclusions will require building a reasoned and well-articulated argument. There are a number of points in the assessment at which you may decide that you have acquired enough evidence to support a recommendation that the site is of no further CHVI. Typical points include:

- The minimum standards for a Stage 1 and 2 archaeological assessments have been met and neither of Section 2.2, Standard 1 c or 1 d has been met. A recommendation of no further CHVI is acceptable at this point.
- Section 2.2, Standard 1 c would normally require Stage 3 archaeological assessment but the combination of the results from the initial Stage 2 survey, any results from applying the Section 2.1.3 option and/or completing a CSP, and complete background research results in evidence for a sound argument against the site being of further CHVI.
• A partial (reduced) Stage 3 archaeological assessment produces evidence for a sound argument against the site being of further CHVI.
• A complete Stage 3 archaeological assessment has failed to provide evidence on which to base a recommendation that the site is of further CHVI.

7.2.2 Formulating the strategy for Stage 4

The final step in the Stage 3 assessment is the formulation of Stage 4 mitigation strategies. For many 19th century sites, the test units excavated in Stage 3 will often be the only excavation of the ploughzone. Unless middens are identified, no further hand excavation will be required in Stage 4 (Section 4.2.7, Standard 2).

Long-term protection is the preferred option for the Stage 4 mitigation of impacts. The test units excavated during Stage 3 will be the primary means of establishing the extent of the area that will be protected, and will be the most accurate source of information for the long-term management of the site. This should be kept in mind during the design of the Stage 3 test unit excavation strategy. Not only will the information derived from excavating test units be of use in a Stage 3 context but may also be of use in the further long-term management of the site.
8 Bibliography

The following bibliography is meant to assist you by providing common references used in the development of fieldwork methods and analysis of archaeological collections from historical archaeological sites, and particularly rural historical farmsteads.

General historical archaeology of farmsteads

Ferris, Neal
2007  “From Crap to Archaeology,” The CRM Shaping of Nineteenth-Century Domestic Site Archaeology. Ontario Archaeology 83/84: 3-29.

Ferris, Neal and Ian Kenyon

Groover, Mark D.

Hart, John P. and Charles L. Fisher

Kenyon, Ian

Landon, David B., Sherene Baugher and Terry H. Klein
2001  Special Issue: Historic Preservation and the Archaeology of Nineteenth-Century Farmsteads in the Northeast. Northeast Historical Archaeology 30-31. (available at http://digitalcommons.buffalostate.edu/neha/vol31/iss1/)

MacDonald, Eva
2004  Towards an Historical Archaeology of the German-Canadians of Markham’s Berczy Settlement. Northeast Historical Archaeology No. 33: 13-38.

Mcllwraith, Thomas F.
Terrell, Michelle
(available at http://www.dot.state.mn.us/culturalresources/docs/crunit/vol4.pdf)

South, Stanley

Fieldwork methods and strategies

Cary, Henry C. and Joseph H. Last

Doroszenko, Dena

Harris, Edward

Hume, Ivor Noël

Parks Canada
2005b *Parks Canada Guidelines for the Management of Archaeological Resources*. Queen’s Printer, Ottawa.

Poulton, Dana R. and Christine F. Dodd

General artifact analysis

http://www.sha.org/index.php/view/page/research resources (Society for Historical Archaeology Research Resources) Contains a range of resources, including information on how to process, date, catalogue and curate historical artifacts, identify bottles and more.

http://www.sha.org/index.php/view/page/parks_canada_resources (SHA has Parks Canada PDF database for references)

http://www.sha.org/index.php/view/page/artifact_cataloging_system (SHARD)

Brauner, David R. (compiler)

Kenyon, Ian and Dena Doroszenko
Miller, George, with contributions by P. Samford, E. Shlasko and A. Madsen
2000  

Parks Canada
1992  
*Canadian Parks Service Classification System for Historical Collections.* Queen’s Printer, Ottawa.

Ceramics

http://www.thepotteries.org/index.html
http://www.smu.ca/academic/arts/anthropology/ceramics.html
http://www.flmnh.ufl.edu/histarch/gallery_types/type_list.asp

Atterbury, Paul, ed.
n.d.  

Barber, Edwin Atlee
1907  

Burke, Charles
1982  

Charleston, Robert J.
1965  

Collard, Elizabeth
1983  

1984  

Coysh, A. and R. Henrywood
1982  
*The Dictionary of Blue and White Printed Pottery, 1780-1880.* Antique Collectors Club, Woodbridge, United Kingdom.

Godden, Geoffrey A.
1974  

1991  

Hull, Katherine L.
2007  
Beyond the Mean Ceramic Date: The Interpretive Potential of Historic Ceramics in Cultural Resource Management. *Ontario Archaeology* 83/84: 80-92.

Jouppien, Jon K.
1980  
The Application of South’s Mean Ceramic Formula to Ontario Historic Sites. *Arch Notes* 80: 24-28.

Kenyon, Ian
1980a  

1980b  

1982  
A Note on the Decline and Fall of Blue and Green Edged Ceramics. *Kewa* 82-5: 7.


**Kenyon, Ian and Susan Kenyon**


**Kenyon, Ian and Thomas Kenyon**


**Kovel, Ralph and Terry Kovel**


**Majewski, T. and M.J. O’Brien**


**Miller, George**


1988 *Date Ranges for the Periods of Highest Popularity and Production for the Different Types of Shell Edge Decorated Pearl and Whitewares*. Handout at ceramics workshop at the Conference for Historical Archaeology, Tucson, Arizona.


1991 *Introduction to English Ceramics for Archaeologists*. A workshop seminar sponsored by the Association of Professional Archaeologists, Toronto.

**Miller, George and Robert Hunter, Jr.**


**Miller, J.J.**


**Mountford, Arnold R.**


**Newlands, David L.**

Noel Hume, Ivor


Pitman, William

Quimby, Ian M.
1974 *Ceramics in America*, The University of Virginia Press, Charlottesville.

Samford, Patricia M.

Sussman, Lynne


1997 Mocha, Banded, Cat’s Eye and Other Factory-Made Slipware. *Studies in Northeast Historical Archaeology No. 1.*

Webster, Donald B.

Glass


Fikes, Richard

Jones, Olive

Jones, Olive and Catherine Sullivan

Kenyon, Ian


Karklins, Karlis

Kidd, K.E. and M.A. Kidd

Pacey, Antony

Stevens, Gerald
1965 Early Ontario Glass. Royal Ontario Museum/University of Toronto, Toronto.

Weiland, Jonathan

Architectural
Adams, William Hampton

Gravin, James L.

Gurcke, K.

Nelson, Lee H.

Rempel, John

Wells, Tom

Faunal and floral
Gifford-Gonzalez, Diane
Gilbert, B. Miles
1990 *Mammalian Osteology*. Missouri Archaeological Society, Special Publication No. 3.

Gilbert, B. Miles, Larry Martin and Howard Savage

Grayson, Donald

Lennstrom, Heidi and Christine Hastorf

Montgomery, F.H.

Reitz, Elizabeth and Elizabeth Wing

Stewart, Francis

Other specific artifact classes
Buttons: http://www.ukdfd.co.uk/pages/button-makers.html
English and Colonial Silver Hallmarks: http://www.silvercollection.it/ENGLISHSILVERMARKSXBR.html
Canadian Clay Tobacco Pipe Industries: http://www.virtlogic.ca/pipe/pipes.html

Beaudry, Mary
2006 Findings: The Material Culture of Needlework and Sewing. Yale University Press, New Haven CT

Bradley, Charles

Busch, Jane

Charlton, J.E.
Charlton, J.E.  

Dunning, Phil  

Ferris, Neal  

Kelmotsu, Nancy  

Kenyon, T.  
1980a Wire Fencing. Kewa 80-5.  
1982b Fancy TD Clay Tobacco Pipes/Part One. Kewa 82-3  
1982c Plain TD Clay Tobacco Pipes/Part Two. Kewa 82-4.  
1982d Metal Sewing Thimbles. Kewa 82-5.  
1983a Table Knives and Forks. Kewa 83-2.  
1984a Jewellery. Kewa 84-1.  
1984c Horse Harness Hardware. Kewa 84-3.  
1984d Horse Bits. Kewa 84-4.  
1984g Clay Tobacco Pipes with Marked Stems. Kewa 84-8.  

**Walker, Iain**

**Woodhead, E.I., C. Sullivan and G. Gusset**
9 Sources for Historical Research

Land title information

Title Searchers.ca
  http://www.titlesearchers.ca/registries/
  Has listings of Land Registry offices across Canada with locations, contact information and the geographical locations for which they hold records.

Service Ontario, Land Registry Offices
  http://www.ontario.ca/home-and-community/land-registry-offices
  Listings of Ontario Land Registry offices with locations and contact information.

Census documents

The Library and Archives of Canada
  http://www.bac-lac.gc.ca/eng/census/Pages/census.aspx
  Note: the searchable databases only provide online access to the nominal census. Further schedules that include census information regarding agricultural or industrial activities are scanned on the site but are not in a searchable database. This data however should not be ignored as a lot of historical land use information can be found in the extra schedules. The Library and Archives of Canada also has various databases for directories, maps, and military records.

Historical aerial photographs

National Air Photo Library
  http://www.nrcan.gc.ca/earth-sciences/geomatics/satellite-imagery-air-photos/9265

Other

Archives of Ontario
  The Archives of Ontario has a large number of research guides and resources to help with archival research.

Archeion: Archives Association of Ontario
  http://www.archeion.ca/
  A searchable database that brings together information about holdings for various archival organizations across Ontario.

The Canadian County Atlas Digital Project, McGill University
  This is a useful site for access to historical atlas township maps, however it is no substitute for the complete atlas.

Our Roots
http://ourroots.ca/index.aspx
Township and county histories available online.

Ontario Genealogical Society
http://www.ogs.on.ca/

Ontario’s GenWeb Project
http://www.geneofun.on.ca/ongenweb/

United Empire Loyalists
http://www.uelac.org/

Ancestry
www.Ancestry.ca/Ontario
10 Glossary

archaeological project
All aspects of the archaeological assessment (Stages 1-4), including background study, property survey, archaeological site assessment, mitigation and reporting.

archaeological site
Ontario Regulation 170/04 under the Ontario Heritage Act defines an archaeological site as “any property that contains an artifact or any other physical evidence of past human use or activity that is of cultural heritage value or interest”.

built heritage
The Provincial Policy Statement (2014) defines built heritage as a building, structure, monument, installation or any manufactured remnant that contributes to a property’s cultural heritage value or interest as identified by a community, including an Aboriginal community. Built heritage resources are generally located on property that has been designated under Parts IV or V of the Ontario Heritage Act, or included on local, provincial and/or federal registers.

consultant archaeologist
An archaeologist who enters into an agreement with a client to carry out or supervise archaeological fieldwork on behalf of the client, produce reports for or on behalf of the client and provide technical advice to the client. A consultant archaeologist must hold a Professional licence issued by the Ministry of Tourism, Culture and Sport. (O.Reg. 8/06).

cultural Feature
The physical remains of human alteration at a given location that cannot be removed intact and are not portable in the way that artifacts can be removed and are portable. Typically, a cultural feature must be documented in the field, although samples can be taken. Examples include post moulds, pits, living floors, middens, earthworks, and various historical structural remains and ruins.

cultural heritage landscape
The Provincial Policy Statement (2014) defines a cultural heritage landscape as a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Aboriginal community. The area may involve features such as structures, spaces, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Examples may include, but are not limited to, heritage conservation districts designated under the Ontario Heritage Act; villages, parks, gardens, battlefields, main streets and neighbourhoods, cemeteries, trailways, viewsheds, natural areas and industrial complexes of heritage significance; and areas recognized by federal or international designation authorities (e.g. a National Historic Site or District designation, or a UNESCO World Heritage Site).

cultural heritage value or interest (CHVI)
For the purposes of the Ontario Heritage Act and its regulations, archaeological resources that possess cultural heritage value or interest are protected as archaeological sites under Section 48 of the act. Where analysis of documented artifacts and physical features at a given location meets the criteria stated in the Standards and Guidelines, that location is protected as an archaeological site and further archaeological assessment may be required.

diagnostic artifact
An artifact that aids in providing the date range of an assemblage or site. For a historical artifact, the key considerations are the production range, median date and the date of maximum popularity. For example,
edged ware with a scalloped rim with impressed curved lines has an overall production range of 1795–1845, was most common/popular between 1802–1832, and has a median date of 1817.

farm
The land being farmed. For the purposes of this bulletin, the land owned or rented (or sometimes ‘squatted’ on) by a family and on which they were pursuing agricultural activities.

farmstead
The part of a farm comprising its main buildings (especially the farmer’s house) and broader grounds, including barns, stables, sheds, wells, privies, fences, drains, etc., which comprise the location at which the farmer lived and from which they based their activities.

midden
An area of an archaeological site that has a concentration of artifacts and other remains that are usually interpreted as being the result of intentional discard focused at that location. Can include organic matter, tools, ceramics, building debris or anything discarded by the original inhabitants.

Ontario Public Register of Archaeology Reports
The register of reports established by the revisions to the Ontario Heritage Act enacted in 2005. The report register is maintained by the Ministry of Tourism, Culture and Sport and includes all archaeological reports accepted by the ministry. Information relating to the locations of archaeological sites is excluded from the register. The register and reports are accessible to the public during regular business hours at the ministry’s Toronto office.

Contact us: If you have any questions or concerns about the information in this document, email us Archaeology@Ontario.ca.