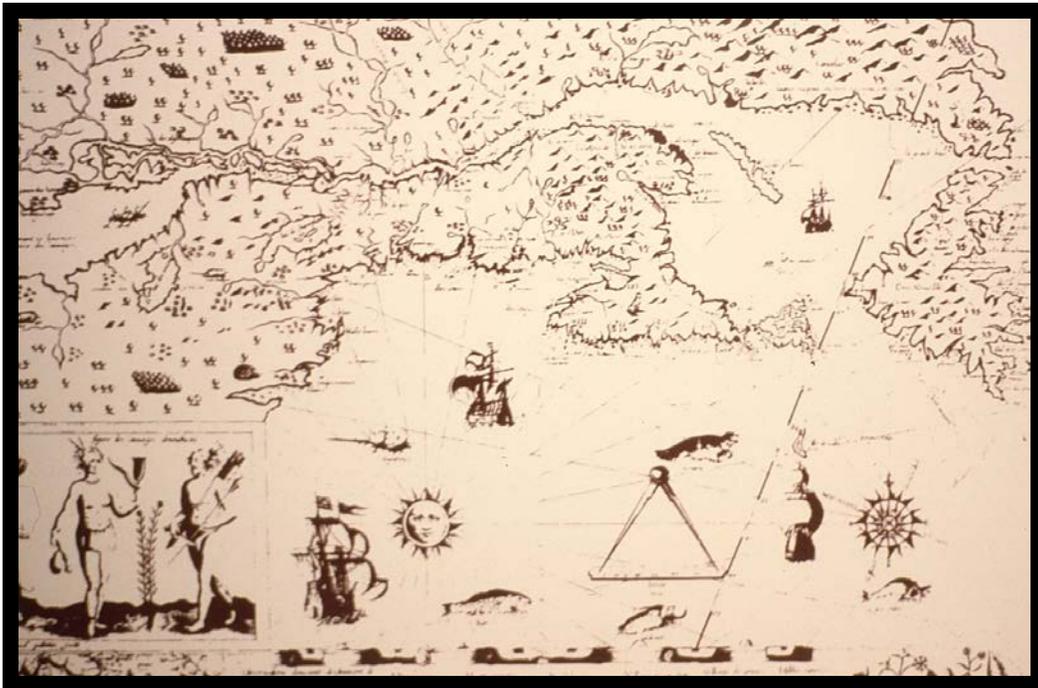


**THE VERMONT STATE HISTORIC
PRESERVATION OFFICE'S**

**GUIDELINES FOR
CONDUCTING ARCHEOLOGY
IN VERMONT
&
APPENDICES**



Acknowledgements

These Guidelines were developed by State Archeologist Giovanna Peebles under the direction of State Historic Preservation Officer Emily Wadhams. An advisory committee to the VTSHPO, consisting of Vermont government and academic archeologists, discussed many ideas and topics and developed a preliminary list of priority research questions important to understanding the precontact and post-contact history of Vermont. Dr. Peter Thomas, formerly with the University of Vermont's Consulting Archaeology Program, now with the Federal Emergency Management Agency, developed the site evaluation matrix in Section **4.4.1**. The members of the Vermont Advisory Council on Historic Preservation provided insightful comments and lively discussion of an early draft. SHPO archeologists in other states, in particular Scott Anfinson of Minnesota, shared their experience and their own state guidelines for archeology.

The Division sincerely thanks the following for their significant contributions to the Guidelines, as well as their sustained help and thoughtful guidance throughout this process: Sheila Charles, John Crock, Scott Dillon, Prudence Doherty, Eric Gilbertson, David Lacy, Jim Petersen, Jeannine Russell-Pinkham, David Skinas, Peter Thomas, and Duncan Wilkie. SHPO Emily Wadhams, State Architectural Historian Nancy Boone, and Department Commissioner Greg Brown contributed important organizational and editorial assistance throughout various drafts.

Prepared July 2002

**Final Adoption by VT Advisory Council on Historic Preservation
June 2007**

TABLE OF CONTENTS

- 1.0. Introduction
 - 1.1. Relevant Statutory Authorities
- 2.0. Criteria for Qualified Professional Archeologists
- 3.0. Establishing Archeological Sensitivity
 - 3.1. Archeological Resource Assessment (ARA)
 - 3.1.1. Predictive models for precontact settlement sites
 - 3.1.2. Background research
 - 3.1.3. Field inspection or site visit
 - 3.1.3.1. Map documentation
 - 3.1.4. ARA summary Letter
 - 3.1.4.1. Visible, potentially significant archeological sites in the project area
 - 3.2. Area of Potential Effects (APE)
- 4.0. Evaluating Site Significance
 - 4.1. National Register Criteria
 - 4.2. Historic Contexts
 - 4.3. Integrity
 - 4.4. Establishing Precontact Site Significance
 - 4.4.1. Site must contain multiple categories of data
 - 4.4.2. Site must be able to answer specific, detailed questions important to understanding Vermont precontact and contact period history
 - 4.5. Establishing Historic Period Site Significance
 - 4.5.1. What does the VTSHPO consider a “site” in the context of historic period archeology?
 - 4.5.2. Priority research topics to help evaluate significance of historic period sites
 - 4.5.3. Identifying important research questions and necessary data sets
 - 4.5.4. Quality of site evidence
 - 4.5.5. Summary of information needed by VTSHPO to determine if site assessment process should continue
- 5.0. Standard Archeological Practices and Some Definitions
 - 5.1. Field Methods
 - 5.1.1. Surface survey
 - 5.1.1.2. Ground sensing methods for historic period sites
 - 5.1.1.3. Ground sensing methods for precontact sites
 - 5.1.2. Sub-surface testing
 - 5.1.2.1. Shovel test pit methodology
 - 5.1.2.2. Test units

- 5.1.2.3. Deep testing
 - 5.1.3. Recording measurements
 - 5.1.4. Establishing a permanent site datum
 - 5.1.5. Isolated finds
 - 5.1.5.1. Treating isolated, or limited, surface artifacts
 - 5.1.5.2. Treating isolated, or limited, sub-surface artifacts
 - 5.2. Defining Previous “Significant” Ground Disturbance
 - 5.3. Winter Limitations
 - 5.4. Permits for Archeological Investigations on State Lands, State Landmarks, or Under State Waters
 - 5.5. Considering Standing Structures in the Project Area
 - 5.6. “Precontact” and “Prehistoric”
 - 5.7. Protection of Sensitive Archeological Site Locational Information
 - 5.8. Defining Site Boundaries
- 6.0. Involving the Public
- 7.0. Archeological Field Investigations
- 7.1. Research Design: All Phases
 - 7.1.1. Standards for preparing research designs: all phases
 - 7.2. Scopes of Work: All Phases
 - 7.2.1. Preparing a scope of work
 - 7.2.2. VTSHPO review of scopes of work
 - 7.2.3. Collections care and management issues in scopes of work
 - 7.3. Phase I Investigation: Identification Study
 - 7.3.1. Performing identification
 - 7.3.1.1. Research design requirements for Phase I
 - 7.3.1.2. Conducting background research
 - 7.3.1.3. Consulting the community and knowledgeable individuals
 - 7.3.1.4. Phase I field investigations
 - 7.3.1.5. Data analyses
 - 7.3.2. Reporting identification results
 - 7.3.2.1. Phase I “End of Field” letter
 - 7.3.2.2. Short report format
 - 7.3.2.3. Phase I investigation report
 - 7.3.3. Public education and outreach
 - 7.3.4. Collections care and management
 - 7.4. Phase IA Investigation: Reconnaissance Study
 - 7.5. Phase II Investigation: Evaluation Study
 - 7.5.1. Public education and outreach
 - 7.5.2. Collections care and management
 - 7.5.3. Research design requirements for Phase II
 - 7.5.4. Background research

- 7.5.5. Historic contexts
- 7.5.6. Field investigations and data analyses
- 7.5.7. Documenting results
 - 7.5.7.1. Special considerations for Phase II End of Field letter
 - 7.5.7.2. Phase II investigation report
- 7.5.8. National Register nominations
- 7.5.9. Long term site preservation through easements or fee simple purchase
- 7.5.10. Site monitoring
- 7.6. Phase III Investigation: Data Recovery Study
 - 7.6.1. Public education and outreach
 - 7.6.2. Collections care and management
 - 7.6.3. Research design requirements for Phase III
 - 7.6.4. Phase III scope of work
 - 7.6.5. Documenting results
 - 7.6.5.1. Special considerations for Phase III End of Field letter
 - 7.6.5.2. Quarterly reports
 - 7.6.5.3. Phase III investigation reports
 - 7.6.5.3.1. Standards for Phase III reports
 - 7.6.5.3.2. Special considerations for Phase III reports
 - 7.7. Long term site preservation through easements or fee simple purchase
 - 7.8. Site monitoring
- 8.0. Additional Documentation
 - 8.1. Report Database Form
 - 8.2. Vermont Archeological Inventory Form
 - 8.2.1. Completing Vermont Archeological Inventory forms
 - 8.2.2. Naming potentially significant sites
- 9.0. Public Education and Outreach
 - 9.1. Standards for Public Education and Outreach
 - 9.2. Education and Outreach for Landowners
 - 9.3. Education and Outreach for the Town
 - 9.4. Recommended Projects and Programs
- 10.0. Care and Management of Collections
 - 10.1. If a Site is Located on Private Land
 - 10.2. If a Site is Located on Public Land
 - 10.3. Standards for Care and Management of Collections
 - 10.4. Costs of Care and Management of Collections
- 11.0. Accidental Discovery of Archeological Sites After Project Review and/or During Project Construction
- 12.0. Treatment of Human Remains

13.0. Capping Sites with Fill

APPENDICES

- A. Relevant Federal and State Laws, Regulations, Rules, and Guidelines
- B. Procedures and Criteria for Listing on the State of Vermont's Archeological Consultant's List
- C. Environmental Predictive Model for Locating Precontact Settlement Sites (revised 4/01 and 5/02)
- D. Vermont Division for Historic Preservation Resource Center: Selected List of Available Information
- E. Sources of Historic Context Information
- F. Application and Instructions for Field Investigation Permits under 22 VSA 14
- G. Advisory Council on Historic Preservation *Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites*
<http://www.achp.gov/archguide.html>
- H. Detailed Supplementary Guidance for Phase I Investigations
 - 1. Phase I research design checklist
 - 2. Supplementary guidance for background research
 - 3. Detailed guidance for completing the End of Field letter
 - 4. Detailed guidance for short report format
 - 5. Detailed guidance for Phase I investigation reports
 - 6. Detailed guidance for Phase II investigation reports
- I. Vermont Archeological Inventory Form (2002 form)
- J. Historic Map Reference Information on the Web
- K. DHP Report Database Documentation Form and Instructions for Use
- L. Advisory Council on Historic Preservation Policy Statements on *Treatment of Human Remains and Grave Goods* (1988)
- M. Sample Letter of Transfer and Deed of Gift.

1.0. INTRODUCTION

People have lived in Vermont for over 12,000 years. The vast majority of that history is unwritten and becomes known only through the archeological record. Most often, archeological investigations in Vermont occur in response to federal and state laws that protect archeological resources. The Vermont Division for Historic Preservation, serving as the Vermont State Historic Preservation Office (VTSHPO), developed these Guidelines to provide a framework for those activities, as well as guidance for non-regulatory archeological studies. These Guidelines replace the ones established in 1989. Since that date, more than a decade of archeological studies throughout the state has provided an important perspective for refining and improving the current practice of archeology in Vermont.

The Guidelines reflect various goals for Vermont archeology:

- Ensure that archeological studies meet high professional research standards.
- Identify important archeological sites that contribute to our understanding of Vermont's precontact and post contact history.
- Protect important archeological sites or, when appropriate, gain information.
- Provide significant public benefits.
- Develop sound and reasoned public policy on regulatory archeology.
- Keep archeological studies as cost effective as possible.
- Increase creativity and flexibility in the conduct of archeological studies.

Archeology in Vermont must result in significant public benefits. As the stories of Vermont's prehistory and history unfold through archeological studies, we must share them widely. The revised Guidelines emphasize public education and communication with clients, landowners, local governments, community members, and interested constituencies. The Guidelines also stress the need for clear and improved communication about archeological expectations, methods, findings, and their value and relevance.

The VTSHPO seeks reasonable approaches to conducting regulatory archeology in Vermont. These Guidelines are meant to allow for flexibility to ensure that the scope and cost of recommended archeological actions are commensurate with a project's scale, level of anticipated impacts, the project area's characteristics, and the significance of sites that may be effected by the project. Archeologists are encouraged to suggest alternative approaches to the VTSHPO, whenever appropriate.

The Guidelines emphasize the importance of prioritizing archeological investigations in an effort to focus on the discovery and consideration of significant archeological sites. The Guidelines also emphasize the importance of evaluating the significance of a site as early as possible in the archeological assessment process.

These Guidelines provide technical guidance for archeological professionals, federal and state agencies, private developers, researchers, and anyone else involved in Vermont archeology. We recommend that they be followed by all archeologists working within the regulatory review process in Vermont, with the exceptions noted below, to ensure that the State's goals for Vermont archeology are met and to help ensure appropriate compliance with federal and state laws.

The VTSHPO is involved in two major categories of project reviews:

1. Reviews in accordance with federal laws, primarily under Section 106 of the *National Historic Preservation Act*, referred to as "Section 106," and sometimes under Section 110 of the *Act*. Under Section 106, federally funded, licensed, permitted, and assisted projects are subject to review.
2. Reviews under state laws, primarily under Title 10 of *Vermont Statutes Annotated*, Chapter 151, known as *Act 250*, and under Title 22 of *Vermont Statutes Annotated*, Chapter 14, referred to as 22 VSA 14, but other statutes as well.

In complying with Section 106 and Section 110, some federal agencies may have different requirements and procedures based on the nature of their programs and statutory authorities. Sometimes, alternative practices and requirements to these Guidelines are established in Programmatic Agreements in accordance with either Section 106 or 22 VSA 14 (current examples include the USDA Natural Resources Conservation Service, USDA United States Forest Service, Federal Emergency Management Agency, Vermont Agency of Transportation, and individual departments in the Vermont Agency of Natural Resources). Various portions of these Guidelines remain applicable to the conduct of archeological assessments under any Programmatic Agreement. In particular, Section **4.0.** relating to "*Evaluating Site Significance*" is intended to guide federal agencies doing archeological project reviews in Vermont.

Archeological investigations on federal and state lands have additional requirements that supplement these Guidelines, for example, permit provisions, that are established in statute (specifically the federal *Archeological Resources Protection Act* and Vermont's 22 VSA 14). The VTSHPO as well as federal and state land managers will advise consulting archeologists when additional or different provisions apply on public lands or to Programmatic Agreements.

These Guidelines incorporate the *Secretary of the Interior's Standards and Guidelines for Identification, Evaluation, and Archeological Documentation*. Professionals must ensure that all archeological studies meet the relevant *Secretary of the Interior's Standards and Guidelines* (available at http://www.cr.nps.gov/local-law/arch_stnds_0.htm).

1.1. RELEVANT STATUTORY AUTHORITIES

There are a number of state and federal laws that require identification, consideration, and possible protection of archeological sites. Archeological studies in Vermont will generally result from compliance with one or more of the following laws, regulations, and rules. Other federal and state laws and regulations may occasionally be involved in an undertaking requiring an archeological investigation. See relevant web sites for full citations and texts in **Appendix A**.

Some examples of relevant statutes, rules, and regulations include:

- 1 VSA Chapter 5, Section 317 (20) (exempts archeological site locations from the “right-to-know” law).
- 10 VSA Chapter 151 (*Act 250*).
- 13 VSA Chapter 81, Sections 3761, 3764, and 3765 (protect burial sites).
- 18 VSA Chapter 107, Sections 5201 and 5212 (protect burial sites).
- 22 VSA Chapter 14 (*Vermont Historic Preservation Act*).
- 30 VSA Chapter 5, Section 248 (Public Service Board’s *Certificate of Public Good*).
- *Vermont Historic Preservation Act Rules* (Rules 1,2,3,4,9,10).
- *National Historic Preservation Act* (Sections 106 and 110)
- 36 CFR 800 (Advisory Council’s regulations implementing Section 106).
- *National Environmental Policy Act*.

2.0. CRITERIA FOR QUALIFIED PROFESSIONAL ARCHEOLOGISTS

Any archeological investigation in Vermont should be conducted by qualified archeological professionals who meet the *Secretary of the Interior's Professional Qualification Standards (Standards)*. Archeological investigations conducted pursuant to federal and state laws must be conducted by qualified professionals. For additional information on the *Standards*, see <http://www2.cr.nps.gov/laws/ProfQual83.htm>.

As a courtesy to agencies, developers, communities, and other users, the VTSHPO maintains a *List of Archeological Consultants*. The qualified professionals on this list meet the *Secretary of the Interior's Professional Qualification Standards* and have demonstrated ability to meet the *Secretary of the Interior's Standards and Guidelines for Identification, Evaluation, and Archeological Documentation* (see http://www.cr.nps.gov/local-law/arch_stnds_0.htm). There may be other qualified consultants with whom the Division has not had contact that do not appear on this list. The VTSHPO has established procedures for listing organizations or individuals on the consultant's list (see **Appendix B**). Qualified professionals do not need to be on the list to conduct investigations in Vermont although the VTSHPO encourages its use.

Placement on the archeological consultants' list does not imply that the VTSHPO certifies personal or corporate qualifications nor that the VTSHPO recommends or endorses these individuals or organizations. Work by individuals or organizations appearing on this list does not receive any special consideration by the VTSHPO.

The VTSHPO considers a thorough knowledge of the Vermont and regional precontact and historic period archeological, historic, and ethnographic literature a key requirement for performing good archeology in this state. Thus, for example, understanding the Paleo-Indian period in Vermont is impossible without knowing the Paleo-Indian literature for northern New England, specifically that of New Hampshire and Maine. Knowing the environmental contexts of the Israel River and Vail sites are necessary as basis for understanding where Vermont's important and earliest Paleo-Indian sites may be found as well as for anticipating their structural and data characteristics.

3.0. ESTABLISHING ARCHEOLOGICAL SENSITIVITY

3.1. ARCHEOLOGICAL RESOURCE ASSESSMENT (ARA)

The archeological sensitivity of a project area is established through application of the VTSHPO's predictive model and some combination of background research, site visit, and consultation with knowledgeable individuals and organizations. Altogether, the process is known as an Archeological Resources Assessment (ARA). This process is flexible: not all components will be necessary in every instance. Sometimes an area identified as sensitive through the predictive model can be avoided without the need for a full ARA.

The guidance below should reflect the scope and needs of the project. It should not be treated as a "checklist" that is automatically followed on every ARA. In particular, the extent of background research should reflect project scale and scope, potential impacts to significant resources, project cost, characteristics of the project area, types of resources expected or known to exist on the property, and other project factors. The site visit is sometimes the most important step for small projects with anticipated modest impacts.

ARA goals:

- Identify areas of archeological sensitivity.
 - Archeological sensitivity considers the project area's potential to contain:
 - **Significant precontact Native American sites** based on the environmental predictive model, background research, and other available information.
 - **Significant historic period archeological sites** (on land or underwater) based on background research, community knowledge, landscape features, or other empirical observations.
- Identify any visible archeological sites or other indicators of the presence or absence of sites.
- Identify and document extent of prior significant disturbance.
- Research, to the extent needed, **relevant** precontact and/or postcontact history or contexts only as they may relate to expected (or visible) significant sites in the project area.
- Identify potential archeological issues that must be considered during project planning.
- Produce a detailed, annotated map(s) that documents the above areas (and sites, if any are visible).
- Complete a summary Letter Report.

"Significant site" means a site that meets the criteria for inclusion in the State or National Registers and applies the considerations in Section **4.0**.

In urban contexts or in floodplain environments, the ARA may involve mechanical deep testing to gather needed information.

3.1.1. PREDICTIVE MODELS FOR PRE-CONTACT SETTLEMENT SITES

The VTSHPO uses one, broad predictive model approved by the Vermont Advisory Council on Historic Preservation (Council) on May 23, 2002. The VTSHPO's predictive model is intended to identify areas with a high potential for containing significant precontact Native American residential sites. The model may offer some guidance in locating Euro-american early settlement sites and some types of historic period Native American sites since these types of sites had similar environmental requirements to precontact settlement. The locations of individual Native American burials, cemeteries, and special use areas during any time period are not readily predictable and the model is unlikely to help in their identification.

The predictive model is an initial desk review tool; it is only a coarse filter that may highlight potential site areas. A project area that indicates a high potential for containing a significant site on the predictive model may trigger a site visit. The site visit results in a recommendation for further archeological investigation, or, results in a "sign off."

The VTSHPO applies the predictive model during desk review of development projects subject to state laws, although developers and state agencies may choose to hire archeological consultants to apply the predictive model which will then be reviewed by the VTSHPO. The VTSHPO usually conducts site visits triggered by the predictive model for Act 250 and state reviews.

Typically, federal agencies (or their delegates) responsible for funding, licensing, or permitting a project hire a qualified archeological consultant to apply the predictive model as part of Section 106 compliance at the beginning of their project assessment. Archeological consultants conduct site visits after applying the predictive model.

The Council must review and approve all predictive models used in the regulatory review process in accordance with the Vermont Historic Preservation Act Rule 2. Specific models may be developed for large scale projects, individual watersheds, or other large units of study. (See **Appendix C: Environmental Predictive Model for Locating Precontact Archeological Sites.**)

3.1.2. BACKGROUND RESEARCH

Background research is increasingly important at the ARA step to establish the potential significance of a site (an expected site or visible site) as early as possible in the archeological assessment process. Background research establishes what types of potentially significant sites exist in the project area and the likelihood (or not) of such sites existing in this locale; helps define the character of such sites; and provides the justification for their potential significance. Thorough knowledge of local, watershed, Vermont, and regional archeological, historical, and ethnographic literature is fundamental to efficient and appropriate background research on individual projects.

The extent of background research, or whether any is even needed, must be evaluated on the basis of the project area's potential archeological sensitivity, project location, project scope, scale of impacts, and other factors.

Background research may be done before or after applying the predictive model. Review of relevant information may include, for example, historic maps, Vermont Archeological Inventory, relevant past archeological study reports, Vermont Historic Sites and Structures Survey, National Register files, relevant historic contexts, and other publications, documents, records, and files. Some of this information is available at the VTSHPO Resource Center (see **Appendix D** for listing of information available at the VTSHPO Resource Center). Oral history can also be an important source of information. Interviews with knowledgeable local individuals, landowners, and Native Americans may be appropriate.

3.1.3. FIELD INSPECTION OR SITE VISIT

A field inspection or site visit, if triggered by the predictive model, should confirm that some, all, or none, of the project area has a high potential for containing a significant site. The site visit identifies highly disturbed, exceedingly wet, or steep areas; clarifies whether or not archeologically sensitive areas lie within areas of potential impact; and recommends ways for avoiding sensitive areas.

A site visit begins with a complete walkover of the project area to assess landforms and major or minor environmental features (for example, level land, relict watercourses, slope, rock outcrops, springs, etc.) that may have influenced land use. If the project is underwater, an appropriate visual investigation may also be necessary.

The archeologist may put in a limited number of soil cores to confirm disturbance or soil integrity and to determine presence of buried intact soil layers. (**Note:** no soil coring should be carried out if it is likely to disturb burial sites.) Past disturbance that may have seriously affected the preservation of significant archeological sites must be sufficiently documented to allow for verification. Documentation of disturbance can include photographs, maps, representative core samples, and/or construction records.

If the project's area of potential effects contains a visible historic period archeological site or historic feature, additional information should be provided (see below). If a visible site is observed, obtain a Vermont Archeological Inventory (VAI) site number from the VTSHPO. Vermont State Plane Coordinates NAD 27 must be provided for each archeological site.

3.1.3.1. MAP DOCUMENTATION

A site plan(s), if available, should be used as the base documentation map to document the result of the field inspection. If not available, the archeological consultant should use the best, scaled project map available in conjunction with a hand drawn sketch or other appropriate format. The map(s) should be keyed and hand annotated to identify sensitive areas, disturbed areas, newly recorded sites, or previously documented sites (identified by site number), relevant landscape or cultural features, and any other relevant information that can assist the client and reviewers in their respective planning, design, and review tasks.

Additional documentation may include past site plans showing previous construction zones and areas of previous disturbance. All maps should be dated. As appropriate, relevant information should be recorded with GPS. Clients may request map information in different formats such as CAD or GIS.

3.1.4. ARA SUMMARY LETTER

An ARA results in a Letter that summarizes its findings and recommendations. The ARA Letter should generally include the information below. If the ARA concludes that the project area has no, or low, potential for containing significant archeological sites, the Letter should address only the relevant items on this list.

The VTSHPO Report Documentation database form shall be completed and submitted electronically upon completion of the ARA Letter.
(see **Appendix K**).

- a. Project name, town, county, **specific** legal jurisdiction (Act 250, Section 106, 22 V.S.A. 14, 30 V.S.A. 5, Section 248, or a combination of several). Identify the document as an “**ARA Letter**.”
- b. Project description as known at the time of writing, including date of plans used, if any, in the course of the ARA; and a description of the Area of Potential Effect APE).
- c. Scoring on the VTSHPO’s predictive model.
- d. Copy of topographic map with project area and APE delineated.
- e. Annotated map(s) as described in Section **3.1.3.1**.
- f. Brief description of site visit methods and type of ground cover, vegetation, and other land use that influenced or affected observations.
- g. Brief description of areas that are significantly disturbed and need no further consideration.
- h. Detailed information for any visible historic period archeological sites or features or visible evidence of precontact sites (see Section **3.1.4.1**.)
- i. Statement and supporting information for why the project area is **not** likely to contain significant sites.
- j. Brief description of the confirmed archeological sensitivity of the project area and expected significant site types.
- k. Summary of background research describing types of significant sites that may exist in the project area and supporting the likelihood, or not, of identifying significant sites (see Section **4.0**.)
 - l. If the APE contains, or is likely to contain, a historic period site, to the extent possible, provide a statement of preliminary site significance or lack of it by addressing the VTSHPO information requirements outlined in Section **4.5.5**. and using the guidance provided in Section **4.5**.
- m. Recommendations, including a description of potential archeological issues that need to be considered during project planning (this section may include conditions for avoiding and preserving the sensitive areas during and after construction; additional background research; Phase I archeological investigation; erecting fencing during construction; etc.; or a combination of recommendations).

- n. Predictive model checklist.
- o. Soil core profiles, if useful in documenting conclusions and recommendations.

3.1.4.1. VISIBLE, POTENTIALLY SIGNIFICANT ARCHEOLOGICAL SITES IN THE PROJECT AREA

Additional information should be submitted if archeological resources are observed during the ARA (often historic archeological sites):

- More specific map of the site or feature in relation to potential project impact.
- More detailed description.
- Brief discussion about the site or feature's potential significance or lack of it using the tools in Section **4.0**.
- VAI site number and completed VAI site form, if appropriate (see Section **8.2**).
- Optional photographs if useful to explain text.

3.2. AREA OF POTENTIAL EFFECTS (APE)

The VTSHPO uses the federal definition of "Area of Potential Effects" (APE) to describe the maximum area that may be affected by a project. Both direct and indirect effects to archeological sites must be considered when determining the APE.

A few examples of project related impacts in an APE beyond the actual construction limits of the project include:

- Borrow areas and other sources of fill material.
- Disposal sites or waste areas.
- New or upgraded access or haul roads.
- Staging, storage, and stockpile areas.
- Drainage diversions.

Federal definition of the APE:

"The geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." [36 CFR 800.16(d)].

4.0. EVALUATING SITE SIGNIFICANCE

4.1. NATIONAL REGISTER CRITERIA

Archeological investigations conducted under federal and regulatory requirements seek to identify “significant” archeological sites. A significant site meets the criteria for inclusion in the State or National Registers of Historic Places. Both registers use the National Register criteria for evaluating significance. The National Register criteria are:

Criterion A: Sites that are associated with events that have made a significant contribution to the broad patterns of our history.

Criterion B: Sites that are associated with the lives of persons significant in our past.

Criterion C: Sites that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Criterion D: Sites that have yielded, or may be likely to yield, information important in prehistory or history

Page 21 of the Bulletin *How to Apply the National Register Criteria for Evaluation* sets out two requirements for Criterion D of the National Register that are especially relevant to the Guidelines:

1. The site must have, or have had, information to contribute to our understanding of human history or prehistory, and
2. The information must be considered important.

The United States Department of the Interior’s National Register program has published several Bulletins as tools to help guide archeologists, agencies, managers, and others in evaluating archeological site significance:

- *How to Apply the National Register Criteria for Evaluation*
- *National Register Guidelines for Evaluating and Registering Archeological Properties (2000)*
- *National Register Guidelines for Evaluating and Registering Historic Archeological Sites and Districts (1993)*
- *National Register Guidelines for Identifying, Evaluating and Registering Historic Mining (1992)*
- *National Register Guidelines for Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places (no date)*
- *National Register Guidelines for Evaluating and Documenting Traditional Cultural Properties (rev. 1998)*

These Bulletins and others can be downloaded from the National Park Service web site at <http://www.cr.nps.gov/NR/publications/>.

Assessing site significance is often a cumulative process in which more and more data are collected to reach the point where significance can be established. Although that point can sometimes only be reached after Phase II investigation, at other times significance can be established sooner, perhaps after the ARA. This section of the Guidelines provides guidance in how to assess site significance and how to assess it as soon as possible. Thus, sites that are not likely to yield important information are eliminated from consideration early.

4.2. HISTORIC CONTEXTS

Historic contexts provide a necessary framework for discovering, investigating, evaluating, and managing all kinds of archeological sites. They are a cornerstone of the *Secretary of the Interior's Standards and Guidelines* by:

- Providing the framework for the current state of knowledge about a type of resource or related categories of resources.
- Providing the basis for understanding expected site types, their location, age, size, and their expected data classes within a given geographic area.
- Providing the basis for evaluating the relative significance of sites of the same or similar type.
- Describing the relationship of individual historic resources to other similar resources or to related resources.
- Telling the unifying story about a category of resources.

“*Keeping Vermont A Special World: The Vermont Historic Preservation Plan*” (1997) presents a very general overview on the topic of historic contexts and associated property types. “*Vermont's Prehistoric Cultural Heritage*” (1991) and “*Vermont's Historic Contexts*” (1989) serve as the current, basic historic contexts that should be used in evaluating significance.

A site is not necessarily significant just because it fits into and can be described within an historic context. The site still must also meet the considerations described below. In addition to the above documents, the VTSHPO's historic context files and the State Archeologist's subject files may contain supplemental context information.

The VTSHPO seeks to accelerate the development of detailed historic contexts, property type descriptions, and registration requirements to assist in site identification and evaluation. National Register “registration” requirements, in particular, will expedite the process of evaluating the significance of some property types. See **Appendix E** for current information about existing historic contexts and Multiple Property Documentation Forms for Vermont. Archeological sites relating to a detailed historic context that meet the property type's registration requirements may

be considered significant by the SHPO even though they are not associated with the priority topics listed in Section **4.5.2**.

4.3. INTEGRITY

A site must, at minimum, possess integrity to be significant. The National Register criteria require that a site possess integrity of location, design, setting, materials, workmanship, feeling, and association. The National Register Bulletin “*How to Apply the National Register Criteria for Evaluation*” provides detailed guidance on the complex topic of integrity. In addition, National Register Bulletin Number 36, “*Guidelines for Evaluating and Registering Historical Archeological Sites and Districts*,” provides a detailed discussion of the various aspects of integrity, specific integrity requirements for the four individual significance criteria (A, B, C, and D) and many useful examples. Accordingly to *National Register Bulletin 36*, integrity of association is especially relevant under Criterion D, “integrity of association is measured in terms of the strength of the relationship between the site’s data or information and the important research questions (*National Register Bulletin # 36*, Page 21).

Some examples of excellent site integrity include:

- Likely or known to have intact features/deposits that are temporally and spatially distinct.
- Likely or known discreet deposits and/or assemblages that are not feature deposits.
- Likely or known catastrophic destruction resulting in encapsulation of site.

4.4. ESTABLISHING PRECONTACT SITE SIGNIFICANCE

While precontact archeological sites may be eligible for inclusion in the National Register under Criteria A, B, and C, their significance is most often established under Criterion D. Extensive site investigations in Vermont lead us to conclude that a precontact site will meet Criterion D if it has the following characteristics:

- a. The site has integrity; and
- b. The site is tied to one or more historic contexts identified as important in the Vermont Historic Preservation Plan or other relevant document; and
- c. The site contains multiple categories of data; and
- d. The site can help answer specific, detailed questions that are important to understanding Vermont precontact or contact period and can be justified as having value to the public.

Categories (a) and (b) have been addressed in Sections **4.2.** and **4.3.** above. The following addresses expected site characteristics related to (c) and (d) above.

4.4.1. THE SITE MUST CONTAIN MULTIPLE CATEGORIES OF DATA

A site must contain - - - or be likely to contain - - - sufficient categories of data to address important research questions. The University of Vermont’s Consulting Archeology Program developed the following matrix of data requirements to guide precontact evaluations of site significance. Applying this matrix as early as possible in the course of field investigations is one

useful tool to begin to assess site significance. This matrix may be applicable to some types of historic period sites as well.

The general Research Topics in the left column of the matrix refer to specific research questions described in “*Vermont’s Prehistoric Cultural Heritage.*” To address a particular Research Topic, sites must at minimum contain the types of data shown in the right hand columns.

RESEARCH TOPICS	DATA REQUIREMENTS (see details below)							
	1	2	3	4	5	6	7	8
Adaptation	X	X	X	-	-	-	-	-
Chronology	X	X	X	-	-	-	-	-
Technology	X	X	-	-	-	-	-	-
Exchange/trade	X	X	-	-	X	-	-	-
Settlement system	X	X	X	X	X	-	-	-
Subsistence system	X	X	X	X	-	-	-	-
Socio-political organization	X	X	X	X	-	-	-	-
Human biology	X	X	X	-	-	X	-	-
Belief system	X	X	X	-	-	-	X	-
Environmental change	-	X	-	-	-	-	-	X

Data requirements for a site to address the respective research topics:

1. Site contains items, deposits, and/or surfaces that can provide inferences about relevant past activities.
2. Site contains items or deposits that can identify the site’s time period.
3. Site possesses spatial relationships among items, deposits and/or surfaces which can be reconstructed.
4. Site contains deposits with floral, pollen, faunal or other botanical and zoological data.
5. Site contains items whose potential source area(s) can be identified.
6. Site contains the remains of at least one inhumation sufficiently preserved to permit analysis of diet, health, pathologies, or demographic data; or contains evidence of at least one cremation.

7. Site contains non-utilitarian items or deposits that can provide inferences about past beliefs.
8. Site contains natural or cultural deposits or surfaces with data pertinent to paleo-environmental reconstruction (including past vegetation, fauna, landscape, water sources, or climate) of the locale or larger region.

4.4.2. THE SITE MUST BE ABLE TO ANSWER SPECIFIC, DETAILED QUESTIONS IMPORTANT TO UNDERSTANDING VERMONT PRECONTACT AND CONTACT PERIOD HISTORY

The research questions in “*Vermont’s Prehistoric Cultural Heritage*” and the broader questions below provide a baseline for examining a precontact site’s potential significance. The research questions below are organized by research topic listed in the matrix on the previous page.

To answer these research questions, at a minimum sites must contain certain categories of data and characteristics. Evaluations of site significance must be as specific as possible in relating a research question to available or presumed site data. Significant sites contain categories of data that have a high likelihood of providing important information that will respond to one or more of these questions.

Settlement System (including Human Populations):

- How many people lived in Vermont during the precontact period? 5000? Or 50,000?

Adaptation:

- How did Native people successfully survive Vermont winters? How did changes in climate affect the people? How did people successfully adapt to colder-warmer climates?
- How and why did lifeways and technologies change or not change in Vermont over time? What caused changes? How long did changes take? How did changes in one aspect of life affect other aspects of life? Did different parts of Vermont see different changes? Where and why?
- How and when did contact with Europeans effect the original Vermonters?

Environmental Change:

- Did lifeways change during the Little Ice Age (ca. 1400-1500 AD)? How?
- Did Vermont’s earliest inhabitants co-exist with extinct mammals?
- How did Vermont’s environments and climate change through time and how did native people adapt to these changing conditions?
- What was the distribution of native flora and fauna (including native fish species) over time?

Exchange/Trade:

- How did Vermont’s native people fit into the tremendous northeastern and broader regional trading networks that began in the earliest period of Vermont prehistory? What did the people receive and what did they trade out? Why?

Subsistence System:

- How did farming develop in Vermont? When? Where? Did the introduction of farming change the quality of life for Vermont's native people?

Socio-political Organization:

- From where and when did the Abenaki originate?
- Were there different, and separate, Native American cultural communities in Vermont during precontact and contact? If yes, where were these communities located? How did they interact? What did they have in common? What were their differences? How do we recognize them in the archeological record?
- Was there ethnic continuity in Vermont's native people over the entire pre-contact period? If yes, were there breaks/gaps in that continuity? If no, what ethnic differences, changes existed?

Belief System:

- Where are the Native American burial sites? Why did burial practices change over time? How can we better predict, and thus better protect, the locations of Native American cemeteries and burial sites from different periods of history?

4.5. ESTABLISHING HISTORIC PERIOD SITE SIGNIFICANCE

In Vermont the "historic period" begins in 1609, when Champlain "discovered" the lake he named after himself. Historic period archeological sites, even those with good integrity, do not automatically have historic significance. The VTSHPO will only support archeological investigations of historic period archeological sites during the regulatory process if they have a very high likelihood of providing important information that cannot be obtained from other sources.

In contrast to precontact sites that can only be discovered and studied through archeological investigation, many kinds of historic period sites can be understood through historic maps, photos, drawings, written records and, sometimes, oral histories. For these kinds of historic sites, it is critical to ask at the earliest time possible whether they might have archeological significance and how archeological methods at that site can significantly and measurably improve our understanding of Vermont's history. The Minnesota State Historic Preservation Office's Archeological Manual pointedly states:

The question of "importance" [of historic period sites] needs to be addressed carefully and should also be phrased "Important to whom?" If the site is important to just one historical archeologist or to just a few members of a community, its [significance] will be difficult to justify (Scott Anfinson, SHPO Manual for Archeological Projects in Minnesota, Minnesota SHPO, St. Paul, MN, September 2000).

Some types of historic period sites do not have the potential to provide information important to a broad public. Some sites, for example, many types of mills, are well documented in written and other records and many exist as standings structures; archeological investigations may not

provide useful or outstanding complementary information. In such a case, historic research may be far more informative than an archeological investigation.

The VTSHPO has developed several new policies about historic period archeological sites. A site shall be studied archeologically in the regulatory process if:

- 1) It addresses or is likely to address in a significant way the priority research topics listed in these guidelines.
- 2) It has the potential to add important information to the written and archival record.
- 3) It addresses research questions significant to a broad audience.

4.5.1. WHAT DOES THE VTSHPO CONSIDER A “SITE” IN THE CONTEXT OF HISTORIC PERIOD ARCHEOLOGY?

For purposes of this discussion, a “site” must involve an assemblage or cluster of data sets that usually includes foundations, ruins, or some type of structural remains, features, deposits, and other man-made alterations to the landscape that can be investigated using a combination of historic research and archeological investigations to varying degrees. Some kinds of important sites were temporary occupations or encompassed traditions or activities that did not produce foundations, ruins, or other structural remains. In such cases, features and deposits are the core site components.

A second category of “site” are the archeological deposits associated with a National Register eligible or listed property that (1) relates to one of the priority research topics, and (2) can contribute important archeological information about the property that is not available through records or that significantly supplements records.

4.5.2. PRIORITY RESEARCH TOPICS TO HELP EVALUATE SIGNIFICANCE OF HISTORIC PERIOD SITES

In the context of historic archeology, there are as many research topics and questions as there are scholars asking them. They need to be pared down to what’s most important to a broad public. The following research topics were identified by the SHPO as priorities since they may only be addressed through archeological study. If a potential or identified historic period site can address these topics and related, important research questions, the site will be further considered by VTSHPO and may be recommended for further investigation through the regulatory process.

Furthermore, archeological sites relating to a detailed historic context that meet the property type’s registration requirements may be considered significant by the SHPO even though they are not associated with the priority topics below.

The research topics listed below are general. They are intended to be used as a guide to assist in determining site significance. Compelling sites that don’t fall into these categories may still be considered by the VTSHPO if they demonstrate the likelihood of providing important information to a community or to the state.

Priority research topics important to Vermont history that may be addressed through archeology at individual sites:

- Native people and their communities after European contact.
- 17th and 18th century military history.
- War of 1812 and Civil War in Vermont.
- Abandoned communities (Vermont's "ghost towns").
- 18th Century French in Vermont.
- Early Euro-american settlement (ca. 1760 – 1800, although may be later in northern Vermont), including farmstead economy and technology, industry and commerce, health and nutrition, and transportation.
- Pre-1870 industries and commercial enterprises.
- Unanswered questions about Vermont's ethnic and minority groups.
- Vermont's maritime history.
- Unwritten stories of important Vermonters (pre-1900).
- Unique, rare, highly unusual, and exceptional federal, state, and local public works.
- Unique, rare, highly unusual, and exceptional sites.

4.5.3. IDENTIFYING IMPORTANT RESEARCH QUESTIONS AND NECESSARY DATA SETS

The consulting archeologist must first identify specific, important research questions that can be addressed at the site through archeology that have not already been answered by historic documents or that are not likely to be answered by the historic record. Second, it's necessary to identify specific data sets that must be present at, as well as recoverable from, the site to answer the research questions.

4.5.4. QUALITY OF SITE EVIDENCE

Archeology is ultimately about site discovery; hence, the expression "seek and ye shall find" applies strongly to our discipline. However, regulatory archeology requires a greater degree of focus in this quest to ensure that public and private funds are spent with the reasonable chance of discovering and researching sites that are important to the state and to individual communities.

Accordingly, the quality of the evidence about a site's existence in a particular location is an important consideration for the VTSHPO in determining whether or not to proceed with assessing an historic period site.

Some examples of strong evidence for the existence of a site(s) in a given location include:

- A recorded site.
- Specific documentary reference to a site in that location from historic research.
- Specific reference to a site in that location from knowledgeable local individuals.
- Visible ruins and features on the ground surface.

- Geographic or historic context that suggests the existence of a site or particular category of site (for example: the presence of an early road --often associated with early homesteads; known French “seigniories” along Lake Champlain; etc.)
- The standing structure itself is listed on or eligible for the National Register and is associated with a priority research topic: it may have archeological components that contribute important archeological information.

4.5.5. SUMMARY OF INFORMATION NEEDED BY VTSHPO TO DETERMINE IF SITE ASSESSMENT PROCESS SHOULD CONTINUE

As early as possible in the historic period archeological assessment process (ARA or Phase I), the consulting archeologist should determine and demonstrate to the VTSHPO that:

- 1) The site has the potential of addressing one or more of the priority topics in **4.5.2.**
- 2) There is strong evidence for the site’s existence in that location.
- 3) The site has the potential to answer -- through excavation – specific, important research questions.
- 4) The research questions being asked are of interest to a broad audience.
- 5) The site is likely to contain specific and recoverable categories of data that answer the research questions.
- 6) The site exhibits integrity or the likelihood of integrity.

5.0. STANDARD ARCHEOLOGICAL PRACTICES and SOME DEFINITIONS

5.1. FIELD METHODS

The following guidelines outline standard field practices for archeological investigations in Vermont. The VTSHPO is seeking a common sense approach to archeological investigations and is open to discussion of alternative techniques and strategies on a case-by-case basis. Alternative approaches should be determined in consultation with the VTSHPO and the project sponsor prior to development of the Research Design, or during Scope of Work review.

5.1.1. SURFACE SURVEY

Surface survey on recently plowed agricultural fields may be an appropriate method for efficiently identifying the presence of a site. Walking transects of 1 –2 meters apart is recommended to find evidence of small sites. To allow for artifact recognition, the plowed surface must have recently received a minimum of ½” of rain to wash dust and soil off of artifacts.

Plowing should only be used as an archeological field method if a plowzone already exists. If plowing the ground surface is being considered as a field investigation method and the surface is not now an open plowed field, it is necessary to first verify the existence of a plowzone through preliminary sub-surface testing prior to plowing. The importance of this has been demonstrated repeatedly: plowing a field that has never been plowed, or plowed generations ago to a shallow depth, can destroy a site. Harrowing a recently plowed field is appropriate; harrowing an old hay field or fallow field may not be appropriate.

In floodplains, stratigraphic assessment is necessary to confirm suitability of surface collection as an appropriate method because in such cases plowing may not reach the depth of the precontact deposits. At a minimum, subsurface test pits are necessary to verify depth of plowzone, existence of buried plowzones or cultural levels, and stratigraphic context. In complex floodplains, deep backhoe testing may be necessary to obtain this information.

Once it has been confirmed that a field has been plowed and if plowing is selected as the preferred investigative method, the next step is to determine the depth of past plowing so that plowing conducted to facilitate site discovery goes no deeper.

5.1.1.2. GROUND SENSING METHODS FOR HISTORIC PERIOD SITES

Historic period archeological sites may be more readily discovered using modern technology such as metal detectors, ground penetrating radar (GPR), and electro-magnetic induction. These methods may be beneficial to guide the locations and configurations of subsurface testing. Typically, these technologies would be applied during Phase I investigations but can be used in all assessment steps, including as a step in the ARA.

5.1.1.2. GROUND SENSING METHODS FOR PRECONTACT SITES

If large cultural features are anticipated at a precontact site, GPR and electro-magnetic induction may be useful guides to help focus subsurface investigations.

5.1.2. SUB-SURFACE TESTING

5.1.2.1. SHOVEL TEST PIT METHODOLOGY

The standard test pit interval for subsurface shovel testing is 10 meters. However, expected site size, landscape features, or the research design may require intervals of more or less than 10 meters. For example 2 meter to 8 meter intervals may be appropriate depending on expected site type, micro-topography, results of initial test pits, and other factors.

Shovel test pits should be square and at least 50 centimeters on a side. All pits should be excavated into the C-horizon (that is, through the full A/Ap and B horizons), and the soil should be sifted through a maximum mesh size ¼." Use of 1/8" mesh is appropriate in special site areas, such as features or lithic workshops, if the Research Design requires this level of investigation and data collection, and generally in Phase III investigations. Depth provenience should be recorded by soil level if possible.

Small test pit methodology may be inappropriate for identifying and investigating historic period archeological sites and is usually inadequate for locating deeply buried sites in floodplains.

5.1.2.2. TEST UNITS

Larger test pits, or test units, are generally excavated during Phase II and III investigations when parts of the site need to be intensively studied. In special cases, test units may be appropriate during Phase I investigations to examine stratigraphy, accelerate assessment of site character and site significance, and identify historic period archeological sites, for example.

Test units can be of varying sizes, shapes, and depths depending on the objectives of the investigation, type of site, stratigraphy, soils, etc., but will be excavated by hand using trowels and/or shovel skimming; features should always be trowelled. Arbitrary levels within soil horizons should be no thicker than 10 centimeters. The plowzone may be removed as one unit if reliable stratigraphic data over an area determines that this is an appropriate strategy.

5.1.2.3. DEEP TESTING

Hand excavation of deeper test units and/or mechanical excavation may be necessary to identify buried cultural deposits in floodplains and other depositional settings. Mechanical excavations (typically backhoe) have the advantage of being quick, but unless they encounter some obvious cultural deposits, such as a feature, they may not be sufficient to determine whether or not buried cultural deposits exist. Hand excavation of larger test units (for example, 2.0m x 1.0 m or 2.0 m x 0.5m) has the advantage of identifying cultural deposits, where present, through excavation and

sifting of all sediments. In cases where deep testing is warranted, VTSHPO recommends that it be consulted during preparation of the Research Design.

5.1.3. RECORDING MEASUREMENTS

In general, all measurements will be recorded in the metric system. In cases of historic sites, including shipwrecks, and after consultation with the VTSHPO, English measurements can be reported with metrics in parenthesis.

5.1.4. ESTABLISHING A PERMANENT SITE DATUM

A permanent site datum must be established with GPS on a potentially significant site at the conclusion of the Phase I investigation so a site or sites can be relocated. If such a permanent datum is not possible (for example, due to landowner concerns, etc.), then additional GPS positions should be taken and recorded for several nearby pre-existing, permanent reference points to help in site relocation.

5.1.5. ISOLATED FINDS

A true *isolated find* is an artifact lost or discarded in use; there is no associated site that would provide important information about some past human activity. A single Native American projectile point lost in use comprises a typical isolated find. Underwater, a bottle tossed off a boat is a common isolated find. However, most seemingly “single” precontact artifacts -- such as a flake or scraping tool -- found in a shovel test pit or on the ground surface are not isolated finds. Rather, they provide a clue that a site exists in the area around that artifact.

5.1.5.1. TREATING ISOLATED, OR LIMITED, SURFACE ARTIFACTS

Precontact and contact period sites identified through systematic surface survey in cultivated fields require excavation of at minimum 2-4 shovel test pits in the area of each surface concentration. The number of additional test pits should be based on the size of the surface concentrations. The purpose of these additional test pits is to document soil profiles within these concentrations and provide preliminary information on the potential for sub-plowzone site components or deposits. This additional information will improve planning for any Phase II field investigation that may be necessary. Some types of potentially significant historic period sites, for example, those pertaining to military encampments, French settlements, or early Euro-american settlement, may also need this type of treatment.

5.1.5.2. TREATING ISOLATED, OR LIMITED, SUB-SURFACE ARTIFACTS

Positive test pits containing precontact cultural materials are considered “isolated” if they are separated by at least 24 meters **and** if they only contain a single artifact. In these instances, it is possible to eliminate the need for any subsequent testing by excavating twelve additional test pits at reduced intervals around the original test pit. No further testing is needed provided all additional test pits are negative and a larger unit contiguous with the first test pit produces no new information. If any of the additional test pits are positive, or if other types of artifacts or

cultural deposits are identified around the initial find spot, more comprehensive Phase II testing may be needed to evaluate the site and assess potential project impacts. Positive Phase I test pits that contain multiple precontact artifacts or are less than 24 meters apart confirm the existence of a site and thus do not need additional sampling during Phase I. Some types of potentially significant historic period sites, for example, those pertaining to military encampments, French settlements, or early Euro-american settlement, may also need this type of treatment.

5.2. DEFINING PREVIOUS “SIGNIFICANT” GROUND DISTURBANCE

Significant ground disturbance means that any potentially important archeological site was heavily disturbed or destroyed by some action prior to the proposed project. Past plowing, cultivation, and logging do not necessarily constitute "significant" ground disturbance since studies have shown that important cultural information can be retrieved from plowzones and logged surfaces. Deeper deposits such as fire hearths and garbage pits may also exist intact under the plowzone. In many cases, filling (on land or underwater) may not constitute "significant" ground disturbance since intact, important precontact and historic period sites may lie buried beneath the fill layer.

5.3. WINTER LIMITATIONS

The “field” season runs from late spring - - following snow melt, ground thaw, and dryer soil conditions - - until mid-November when snow begins to obscure the ground surface and/or the ground freezes. Site visits in winter when topographic features are buried in snow are not usually productive. Investigations during cold and wet weather are generally also unproductive unless special provisions for shelter and heat are made in the area being investigated. The VTSHPO discourages both site visits and field investigations in winter conditions.

5.4. PERMITS FOR ARCHEOLOGICAL INVESTIGATIONS ON STATE LANDS, STATE ARCHEOLOGICAL LANDMARKS, UNDER STATE WATERS, OR ON FEDERAL LANDS

The *Vermont Historic Preservation Act* (22 VSA 14, sections 764 and 782) requires that all field investigations conducted on state lands, within the boundaries of a designated State Archeological Landmark, or under state waters be conducted under permit to the VTSHPO (see <http://www.leg.state.vt.us/statutes/title22/title22.htm>).

State lands include all lands owned by any state agency, including, for example, the VTSHPO; the Departments of Forests, Parks and Recreation and Fish and Wildlife; and the Vermont Agency of Transportation. Such lands may include state owned historic sites, state parks, wildlife management areas, state forests, lands purchased for Right of Way, or lands purchased to allow for construction of state projects such as highway improvements or new construction.

Permits are required for any field investigation that has the potential of disturbing, destroying, or otherwise altering a site or sensitive area or cultural materials and other data that may be contained within the site or sensitive area. Permits are not required for desk reviews, walkovers, photographic documentation, and other non-disturbing research and activities. Permit applications and information about the application process is described in **Appendix F**.

Archeological consultants generally apply for permits on behalf of the applicable state agency or other client. The relevant state agency must also sign the permit application.

In accordance with the federal *Archeological Resources Protection Act of 1979 (ARPA)*, it is illegal to excavate or remove archeological resources from any federal land without a permit from the federal land manager (<http://www2.cr.nps.gov/laws/archprotect.htm>). Examples of federal land managers in Vermont include the U. S. Forest Service and the U.S. Fish and Wildlife Service, among others. Individual land managers should be contacted for ARPA permit application information.

5.5. CONSIDERING STANDING STRUCTURES IN THE PROJECT AREA

Project areas may contain standing buildings or structures. Any building or structure older than 50 years may be eligible for inclusion on, or may already be listed in, the State or National Registers of Historic Places (that is, it may be historically significant). In the course of routine background research, consulting archeologists should establish whether any building, structure, complex or district within the project area is currently listed on the State and/or National Registers of Historic Places. These documents are on file at the VTSHPO's Resource Center in Montpelier. If listed on the State or National Registers, the form (or relevant portion of the form) should be copied and appended to the ARA or archeological investigation report. Relevant historic information available on the State or National Register forms should be incorporated into the background research.

Consulting archeologists are not responsible for evaluating the architectural or historic significance of a structure or district or for assessing project impacts to standing structures. However, depending on the project circumstances, if no other documentation exists in the VTSHPO State or National Register files, it may nonetheless be useful to document buildings and structures within the project area at a minimum level of documentation. The consulting archeologist should discuss with the project sponsor the desirability of compiling minimum documentation on buildings or structures within the project's APE. While judgements about a structure's architectural integrity and historic significance will be made by qualified professional architectural historians, the archeologist, on the other hand, may be able to contribute useful and important information on the structure's history and historic context (s).

Depending on the Scope of Work and project circumstances, it may be necessary or desirable for the consulting archeologist to complete the locational and descriptive sections of the Vermont Historic Sites and Structures Survey form and photograph each building or structure if no State or National Register documentation exists. This documentation should be appended to the ARA or investigation report. Both descriptive and historic information should be summarized in, or fully incorporated into, as appropriate, relevant sections of the study report.

When appropriate, the Research Design for the archeological investigation may require subsurface testing in the perimeter of the standing structure to identify and evaluate potentially significant archeological resources associated with the structure. Archeological investigations around a structure should only be undertaken if they have a high likelihood of providing

important new information on the structure or complex. If appropriate, recommendations should be made in the investigation report for amending the existing State or National Register forms.

5.6. “PRECONTACT” AND “PREHISTORIC”

“Precontact” and “prehistoric” describe the approximately 12,000 years of Native American history prior to contact with Europeans. The VTSHPO has, in the past, generally used the term “prehistoric” to refer to the very long span of human history before written records were kept.

However, “precontact” recognizes that history is not always written. Vermont’s Abenaki community as well as archeologists and historians who work in Vermont overwhelmingly support the use of “precontact.” Thus, the VTSHPO uses “precontact” throughout these Guidelines to describe the thousands of years of rich Native American culture before European contact. The terms “prehistoric” and “precontact” are interchangeable and using one or the other is a personal preference.

5.7. PROTECTION OF SENSITIVE ARCHEOLOGICAL SITE LOCATIONAL INFORMATION

In the VTSHPO’s experience, more sites are destroyed by lack of knowledge than by looting. Public education about archeological sites is an important goal for Vermont archeology. Generally, disseminating results of field investigations to local governments and other community organizations, landowners, libraries, and interested citizens is the preferred practice. However, to protect especially fragile, vulnerable, or threatened sites, the *Vermont Historic Preservation Act*, as amended (22 VSA 14, section 761), establishes that the location of archeological sites, both on land and underwater, shall be confidential. Under law, the State Archeologist may provide locational information to appropriate individuals and organizations for research and planning purposes (see **Appendix A**). See related Title 1 of *Vermont Statutes Annotated*, Chapter 5, Section 317 (20) that exempts archeological site locations from the “right-to-know” law. Specific project or site concerns with publishing or distributing site locations in reports or electronically should be discussed with the VTSHPO as they arise.

5.8. DEFINING SITE BOUNDARIES

Understanding the boundaries of a significant, or potentially significant, site is fundamental to designing appropriate treatment for the site and not accidentally destroying part of it. Generally, establishing a site’s boundaries should occur independently of any other arbitrary sampling boundary if there are ambiguities between the project’s impact area and the site’s boundaries. Sometimes, a site is suspected to extend into part of the APE that had not been previously identified as sensitive. When this occurs, the consulting archeologist should inform the project sponsor and VTSHPO. The VTSHPO will request that additional site boundary testing be conducted in the area not originally identified as sensitive.

6.0. INVOLVING THE PUBLIC

The regulations that implement Section 106 of the National Historic Preservation Act, 36 CFR 800, require enhanced public participation as early as possible in project planning (see various at <http://www.achp.gov/work106.html>). Section 800.2 (d) of the regulations requires that the federal agency or its delegate (sometimes the archeological consultant) seek and consider the views of the public. The following list identifies some of the individuals, organizations, and groups who may have an interest in the proposed undertaking and in potentially affected historic and archeological resources. This list is not exhaustive.

In accordance with 800.2 (d) (1), the extent and nature of the “publics” should reflect the scale and complexity of the project and its effects; the relationship of the federal government to the project; and likely public interest or controversy, among other considerations. The VTSHPO can assist in identifying potential “publics” that may have an interest in the project.

- ***Certified Local Governments.*** Contact information and a current list of Vermont towns with a CLG can be found at: http://grants.cr.nps.gov/CLGs/CLG_Search.cfm
- ***Historical societies.*** The Vermont Historical Society maintains a list at their web page: <http://www.state.vt.us/vhs> Go to “**Local Societies.**”
- ***Non-Profit Organizations.*** Examples include the Preservation Trust of Vermont, local land trusts, The Nature Conservancy, etc. Also see Special Interest Organizations, below, many of whom are non-profits.
- ***Special Interest Organizations.*** Examples include the Crown Point Road Association, Vermont Chapter of the Civilian Conservation Corps, Vermont Old Cemetery Association, Lake Champlain Basin Program, Lake Champlain Maritime Museum, etc. Most of these organizations maintain web sites that can be consulted for contact and other information.
- ***Abenaki and Other Native American communities.***
 - ◆ Governor’s Advisory Commission on Native American Affairs
c/o Jeff Benay
Indian Education Office
49 Church St.
Swanton, VT 05488
 - ◆ Abenaki Self Help Association
PO Box 276
100 Grand Ave.
Swanton, VT. 05488
(802) 868-2559
FAX: (802) 868-5118
<http://www.abenakination.org/history.html>

- ◆ Stockbridge-Munsee band of the Mohican Nation
Sherry Firgens
Stockbridge-Munsee Cultural Preservation Officer
N8476 MohHeConNuck Road
Bowler, WI 54416

- ***Town Clerks.*** Town Clerks may be able to identify individuals and organizations in their community that may have an interest in the project and in affected historic properties.

7.0. ARCHEOLOGICAL FIELD INVESTIGATIONS

7.1. RESEARCH DESIGN: ALL PHASES

The Research Design is the core of any archeological investigation. It explains the need for an archeological study in a given place. The archeological research design describes the research questions being asked, the kinds of data that can be used to answer the questions, the kinds of sampling and field methods that will best locate and recover the data, the most relevant techniques of data collection and analyses, and how the results will be evaluated in reference to the expectations.

7.1.1. STANDARDS FOR PREPARING RESEARCH DESIGNS: ALL PHASES

All Research Designs should meet the following standards.

1. Research designs must reflect the nature and scope of the project, the types of sites expected or known, potential impacts to significant sites, and other relevant factors.
2. Proposals should focus on the project area; on background research relevant to understanding the project area and sites it may contain; and on expected, or known, significant sites that may exist within that project area.
3. An appropriate level of research should be completed prior to developing the Research Design for any phase of investigation as a foundation for the task.
4. Research designs must meet *The Secretary of the Interior's Standards and Guidelines for Identification, Evaluation, and Archeological Documentation (Standards and Guidelines)* (see http://www.cr.nps.gov/local-law/arch_stnds_0.htm). The basic expectation for any Research Design is modeled from the *Standards and Guidelines*. These VTSHPO Guidelines describe the federal expectations and set forth additional requirements.
5. Phase III Research Designs must be guided by the Advisory Council on Historic Preservation's *Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites* (see **Appendix G**).
6. Investigation methods must be selected that are most appropriate to expected site types and their potential significance. The following questions can help guide choices of methods:
 - What don't we know?
 - What is worth learning?
 - Can we learn from this site?
 - What are the best methods to achieve that learning?
 - Is digging necessary to learn?
 - For historic period archeological sites, can we learn without digging?

7.2. SCOPES OF WORK: ALL PHASES

All phases of archeological investigation require a Scope of Work (SOW). The SOW informs the project sponsor about the work to be performed, sets forth expectations, provides a schedule and a cost estimate and budget for the task at hand, and provides the justification for the work.

The VTSHPO recommends that the SOW be incorporated in full into any project contract between the archeological consultant and the project sponsor. This will help ensure that all parts of the archeological study will be completed and are the joint responsibility, under contract, of the project sponsor and his/her consulting archeologist.

7.2.1. PREPARING A SCOPE OF WORK

The Scope of Work sets forth the project's research design and includes, at minimum, a detailed discussion of:

- Specific legal jurisdiction under which study is being undertaken (see Section **1.1.** and **Appendix A**).
- Sources of public funding, if any.
- Client for whom study is being conducted and if project sponsor is different than client.
- The proposed development and the project's area of potential effect, including number of acres/hectares involved in project.
- Research design.
- Potential project impacts.
- Content and format of study report (and draft report, if appropriate).
- Public education and outreach efforts, as appropriate (see Section **9.0.**).
- Care and management of archeological collections, data, and records (see Section **10.0.**).
- Estimated schedule in calendar days of all study tasks, including background research, beginning and ending date of field work, analyses and interpretation, report, public education and outreach activities, and any other major task.
- Names of key personnel responsible for different study tasks and level of personnel effort to be utilized.
- Budget (this information is provided to clients and is not generally provided to the VTSHPO).

Cost estimates and budgets for an archeological study should clearly identify all costs and special "add-on" costs, if any.

7.2.2. VTSHPO REVIEW OF SCOPES OF WORK

The VTSHPO recommends that Scopes of Work be submitted to it for review and comment. VTSHPO review of a draft SOW may reduce the need for later revisions that may involve requests for additional work. The VTSHPO may request revisions in the Scope of Work that require more field work or background research, or, the VTSHPO may recommend less work. From the VTSHPO's point of view, the most important aspect of the SOW is the Research Design. The VTSHPO will review Scopes of Work for Phase I studies within 15 days. Phase II and III scopes are viewed as collaborative efforts requiring more time and interaction among the VTSHPO, archeological consultant, and project sponsor. VTSHPO review of a Phase II or III SOW shall be completed within 30 days following a formal request. The SOW can be submitted to VTSHPO by the project sponsor or consulting archeologist.

7.2.3. COLLECTIONS CARE AND MANAGEMENT ISSUES IN SCOPES OF WORK

The Scope of Work must indicate how and where all field notes, records, artifacts, other data sets, and report that may be assembled will be cared for and managed. If the land is privately owned, it will be necessary to discuss several options since the landowner may choose to retain all, part, or none of the collection. In the SOW, consulting archeologists must inform project

sponsors about the various complex issues relating to collections care and management as described in these Guidelines. Responsibilities for collections gathered during the investigation will differ depending on whether the land is privately or publicly owned, whether the project is privately or publicly funded, relevant statutory jurisdictions, existence of a 22 VSA Chapter 14 permit, and other factors such as the existence of Programmatic Agreements or Historic Property Management Plans (formerly called Cultural Resource Management Plans). Phase II and III scopes of work must describe in detail how all classes of data will be cared for and managed after recovery.

7.3. PHASE I INVESTIGATION: IDENTIFICATION STUDY

Federal regulations that implement Section 106 of the National Historic Preservation Act refer to “identification of historic properties.” The federal, legal definition of “historic property” is “any precontact or historic district, site, building, structure, or object included, or eligible for inclusion, in the National Register of Historic Places.” Thus, the goal of “identification” studies under the federal process is to locate National Register eligible (i.e. “significant” or “important”) sites.

Practical considerations generally necessitate that archeological investigations be divided into separate, sequential phases. The intent of the phased approach is to provide a practical framework for estimating the cost of finding a site and, then as a second step, for gathering additional detailed information for evaluating a site’s significance. If a site can be determined significant at the completion of Phase I, it should be. If identifying and evaluating a site’s significance is practical as a single step for a particular situation, then that should occur. The Guidelines emphasize the VTSHPO’s goal of determining site significance as soon as is possible, based on available evidence, using the considerations discussed in Section **4.0**. Accordingly, the Research Design requirements for Phase I require definition of what is potentially significant.

Goals for Phase I Investigation are:

- Locate archeological sites potentially eligible for the State or National Registers that may exist within the proposed project area, or, terminate assessment.
- Meet the objectives of the Research Design.

Although an Archeological Resources Assessment (ARA) is generally conducted before beginning a Phase I field investigation, sometimes an ARA may not have been undertaken. In this case, minimal levels of research like those done in an ARA must be completed prior to

beginning the field investigation. The sequence for conducting detailed background research and field investigation depends on the research design and expected site types. For example,

completing background research prior to field study is recommended if the ARA showed evidence of an historic period archeological site or if historic period archeological sites are expected. Supplemental background research is often important after completing field work to better understand what was found and why it may be potentially significant.

7.3.1. PERFORMING IDENTIFICATION

7.3.1.1. RESEARCH DESIGN REQUIREMENTS FOR PHASE I

The goal of the Phase I Research Design is to find sites that are likely to meet the National Register criteria and describe appropriate methods to find such sites. The Research Design describes the types of significant sites that are likely to be found, kinds of specific data likely to be found in such sites, the research questions addressed by this data, known comparable types of sites and their data, why finding such sites can contribute to our knowledge of Vermont prehistory and/or history, and appropriate methods needed to find the site. Research designs are part of a Scope of Work.

The Phase I Research Design shall meet the Standards set out in Section **7.1.1.** and should, where applicable, include the information outlined as a checklist in **Appendix H.**

7.3.1.2. CONDUCTING BACKGROUND RESEARCH

The extent of background research must reflect the research design, scope and potential impacts of the project, characteristics of the project area, and types of resources expected. For example, detailed information about physiographic region, climatic change, past and present fauna and flora, and other environmental topics should be presented **only if it has direct relevance to the project area's potential precontact or historic site values and the expected site types.**

Archeological research must relate to and refine Vermont's Historic Contexts by addressing and refining relevant research questions. Where appropriate, research can also relate to other local, regional, or national historic contexts, research questions, and issues. The *Secretary of the Interior's Standards and Guidelines for Identification* discuss the role of identification in planning and should be used for guidance (<http://www.achp.gov/secstnd.html#SID>). The VTSHPO has developed additional guidance that should be used, where appropriate: see **Appendix H.**

7.3.1.3. CONSULTING THE COMMUNITY AND KNOWLEDGEABLE INDIVIDUALS

Background research may include interviews with community members and other knowledgeable individuals. Important information on potential site locations, land use patterns,

and historic disturbances may be provided by local artifact collectors, historical society members, landowners, Native Americans, and other community members, as appropriate to the research design, extent of the project, the characteristics of the project area, and other relevant factors (see Section **6.0.**).

7.3.1.4. PHASE I FIELD INVESTIGATIONS

Conduct the appropriate field investigations described in the Research Design. Field investigations may include, but are not limited to, surface survey, sub-surface testing, remote sensing studies, and combinations of these or other field techniques (see Section **5.0.**).

1. Preliminary field investigations may sometimes be required specifically to identify stratigraphic or other conditions within the project area. For example, backhoe trenching is often necessary in floodplains to identify the depositional history and relative age of the landform and expose possible buried cultural layers (see Section **5.1.2.3.**).
2. Depending on factors such as the scope of the study, known or expected site types, environmental characteristics of the project area, and so forth, interdisciplinary field investigations using soil scientists, geologists, biologists, architectural historians, historians, etc., may be required. The Research Design should anticipate and include such interdisciplinary expertise.
3. VTSHPO expects that considerations of site significance, to whatever extent possible based on existing data, are integral in all aspects of archeological assessment, from the ARA, through Research Design development, and during the Phase I investigation (see Section **4.0**)
4. Determination of site "presence" or "absence" is **not** a satisfactory result of Phase I investigation. Phase I site documentation should provide enough information to recommend: treatment (for example, site avoidance); additional background research; recovery of additional information to gain a preliminary evaluation of site size, character, and significance; or, if there is sufficient evidence, a determination that the project will not effect a significant site.
5. In cases of limited artifacts or site evidence, it is difficult to understand the site type, extent, and its potential significance or to make any kind of recommendations in the absence of additional information. Thus, isolated or limited surface or sub-surface artifacts must be evaluated further at this phase (see Section **5.1.5.**).
6. If identified potentially significant sites will be avoided by project re-design after this phase of study, site documentation at the conclusion of Phase I must, at minimum, provide clear, mapped delineation of the site's spatial boundaries **in relation to the locations of proposed project impacts**. If this is not possible, Phase II investigation will most likely be necessary.
7. As sites are found in the field, the archeological consultant must request Vermont Archeological Inventory (VAI) site survey numbers from VTSHPO. The VAI survey

numbers should be incorporated into field notes and used on cataloging forms, in data bases, on photo identification sheets, project maps and illustrations, in all project reports and other documents, and in the course of collections care and management (see Section **8.2**).

7.3.1.5. DATA ANALYSES

The project sponsor is responsible for ensuring that the data analyses are completed once the artifacts, other cultural materials, and other types of data are removed from the ground regardless of whether or not the project is pursued. The consulting archeologist is responsible for conducting appropriate analyses and interpreting the data that tell the story of the site. The anticipated data analyses described in the Research Design are the basic analytical tasks that will be conducted subsequent to the field investigation. The tasks set forth in the Research Design are obviously based on the types of sites that are expected to be discovered. However, once a site is identified, there may be a change in the expected analyses. For example, if a Late Archaic site is expected, no provision will have been made for analyzing and reconstructing pottery fragments. Thus, the archeological consultant needs to immediately inform the client if unexpected type and/or volume of data categories are discovered that require additional or markedly different analyses. Sometimes sufficient charcoal is unexpectedly found in a feature to merit obtaining a carbon 14 date during this phase of study.

7.3.2. REPORTING IDENTIFICATION RESULTS

7.3.2.1. PHASE I “END-OF-FIELD” LETTER

The End of Field Letter summarizes results of any phase of investigation, provides interpretations of the findings, describes anticipated project impacts to sites and sensitive areas, and offers recommendations for site treatment, additional investigations, and recommendations of no effect, among various possibilities. In many cases, determinations of project effect are made by the VTSHPO or a federal or state agency based on the End of Field Letter.

Any information or inferences about the site’s potential or apparent significance should be presented in the End of Field Letter using the considerations described in Section **4.0**. If the site is an historic period site, the End of Field Letter needs to include the information outlined in Section **4.5.5**. Specific recommendations for site avoidance, additional research, additional field investigation, construction redesign, and so forth are also discussed in the End of Field Letter.

A completed Vermont Archeological Inventory site form and topographic map with the site marked on it as a point (or shape) must be attached to the End of Field Letter (see Section **8.2**).

See **Appendix H** for detailed guidance for completing the End of Field Letter. The End of Field Letter must be submitted to the VTSHPO and project sponsor **within 30 days of completing the field work**.

If the Phase I investigation determines that there is **no** site, or, that there is a site but the site is not significant using the evaluation tools in Section **4.0.**, the Short Report format is substituted for the End of Field Letter (see Section **7.3.2.2.**).

7.3.2.2. SHORT REPORT FORMAT

Phase I investigations sometimes result in no site being found or, a site is found but determined not to be significant. In this circumstance, the Short Report format substitutes for the End of Field Letter. The Short Report is due to the VTSHPO and project sponsor within 30 days of completing the field work. The Short Report format is not appropriate for large, complex projects even if no sites are found.

Detailed guidance for the Short Report is found in **Appendix H**.

The VTSHPO Report Documentation database form shall be completed and submitted electronically upon completion of the Short Report (see **Appendix K**).

7.3.2.3. PHASE I INVESTIGATION REPORT

Completion of the End of Field Letter does not conclude the archeological investigation if a potentially significant site is identified. A final study report must be completed. Reports are a mandatory, concluding step of an archeological investigation unless otherwise exempted. Report writing is integrated into all Scopes of Work and made part of contractual obligations for any archeological investigation.

While basic requirements for documenting Phase I investigations follow the *Secretary of the Interior's Standards and Guidelines for Identification* (see <http://www.achp.gov/secstnd.html#SID>), more than 20 years of practice have led the VTSHPO to develop more detailed guidance provided in **Appendix H**.

An outline and schedule for report writing must be presented in the Scope of Work and should be adhered to unless there are justifiable reasons why that schedule cannot be met. In general, the VTSHPO expects that the project report will be completed within one (1) calendar year of the field work. Any changes in anticipated schedule should be submitted to the project sponsor and VTSHPO at least 30 days before the report is due.

All Tables, Figures, maps (at all scales), photographs, and any other illustrative material that is necessary to the understanding of the text must appear in the report alongside the explanatory text. These illustrative materials may **not** be appended at the end of the report. Exceptions to this are: 1) oversized maps or other materials; 2) illustrative materials that are supplementary to the text and the primary illustrations; and 3) confidential maps, figures, etc., that may need to be incorporated into a confidential appendix at the end of the report.

General, generic, “boilerplate” information about Vermont’s precontact and historic contexts, physiographic zones, bedrock or surficial geology, flora and fauna and other environmental background should not be used in reports.

Sites discussed in the report, as appropriate, must be identified in the text as well as in all accompanying illustrative material by their Vermont Archeological Inventory site survey number (see Section **8.2.**).

The VTSHPO Report Documentation database form shall be completed and submitted electronically upon completion of the Phase I report (see **Appendix K**).

7.3.3. PUBLIC EDUCATION AND OUTREACH

The expected level of education and outreach at Phase I depends on the results of the investigation, project scale, extent of interested publics, and other relevant factors. See Section **9.0.**

7.3.4. COLLECTIONS CARE AND MANAGEMENT

See Section **10.0.**

7.4. PHASE IA INVESTIGATION: RECONNAISSANCE INVESTIGATION

Phase IA reconnaissance investigations are intended only for special types of projects and circumstances. Phase IA investigations are intended for large projects with multiple alignments, projects with single, wide planning corridors, projects in complex contexts, master plans, and other special circumstances. Some examples include:

- Projects with multiple alignments that require Environmental Assessments or Environmental Impact Statements (such as new highways)
- Master plans
- Management plans
- Overviews of large land holdings in which no specific developments are immediately proposed
- New pipelines and transmission lines
- Hydro-relicensing

Goals of the Phase IA investigation are:

- Conduct intensive background research.
- Identify and rank areas of archeological sensitivity.
- Identify visible archeological sites or other indicators of the presence or absence of sites.
- Identify and document extent of prior significant ground disturbance.
- Identify potential archeological issues that must be considered during project planning.

- Establish, if possible, whether or not any evident sites have a high likelihood of being eligible for the State and National Registers.

The Phase IA investigation involves a great deal more background research and more intensive field assessment than an ARA. It may require more initial consultation with the community, knowledgeable local informants, Native Americans, and other interested parties.

Other special circumstances which may require a Phase IA investigation are projects in which archeological sites are likely to exist within complex contexts. Examples include projects involving deep floodplains, or urban settings in which pavement covers potentially sensitive areas. In these cases, intensive background research, backhoe testing, remote sensing, or other methods may be necessary steps prior to developing an appropriate Research Design, Scope of Work, and budget estimates for the Phase I study. Under these special circumstances, the results of the Phase IA study can be integrated into the Phase I study report and shall **not** be prepared as a separate document unless otherwise needed.

Depending on the project size, scope, and research design, an environmental predictive model specific to the scale and scope of the project and the project area may need to be developed during the Phase IA investigation. The model is then tested during the Phase I field investigation. In some cases, for example, when the model is developed as part of a Phase IA management plan, it serves as the framework for planning future developments to minimize disturbing sensitive lands. Model development is based on intensive background research accompanied by detailed understanding of the project's varied landforms, environmental characteristics, and relevant precontact historic contexts. New predictive models used in state and federal reviews must be approved by the Vermont Advisory Council on Historic Preservation in accordance with the *Vermont Historic Preservation Act Rule 2* (see **Appendix A** and Section **3.1.1.**).

The Phase IA investigation results in a "stand alone" report at the study's conclusion that meets the requirements of a Phase I investigation report. The VTSHPO Report Documentation database form shall be completed and submitted electronically upon completion of a Phase IA report (see **Appendix K**).

7.5. PHASE II INVESTIGATION: EVALUATION STUDY

Goals for Phase II Investigation are:

- Conclusively establish whether or not a site meets the criteria for inclusion in the National Register, if not known at the conclusion of Phase I.
- Meet the objectives of the Research Design.

The Phase I core requirements described in Section **7.3.** serve as the core requirements for the Phase II investigation. The following are supplementary requirements for Phase II.

7.5.1. PUBLIC EDUCATION AND OUTREACH

The VTSHPO expects significant public education and outreach efforts after Phase II if the site is determined to be important. Depending on the results of the study, scale of the project, the character of the site, extent of interested publics, project sponsor, and other considerations, public education may also be appropriate during the field investigation, and not only afterwards. See extensive discussion under Section **9.0**.

7.5.2. COLLECTIONS CARE AND MANAGEMENT

This phase of investigation is expected to collect more cultural materials, data, and records than Phase I. Accordingly, provisions should be made early on for the various decisions that must be made about collections care and disposition during investigations and analyses. See extensive discussion under Section **10.0**.

7.5.3. RESEARCH DESIGN REQUIREMENTS FOR PHASE II

Phase II investigation may be necessary to gather additional information about a site's characteristics, site significance, and the project's potential impacts to the site. The goals of the Phase II investigation are to gather additional, more detailed, information on a site's character, integrity, condition, size and boundaries, stratigraphy, structure, function, and context(s) sufficient to evaluate its significance, or to establish its lack of significance. If not previously determined, this phase of investigation will conclusively determine whether or not the site meets the National Register criteria.

Field investigations at an historic period archeological site should not be conducted until thorough background research from traditional historic sources, including oral history, has been completed. In fact, the VTSHPO encourages thorough background research prior to developing the final Research Design for the field investigation component of the study. Historic research is essential for framing important research questions, understanding data categories that may be present, designing appropriate methodologies to recover those data, and understanding potential site significance. If appropriate, the background research and the field investigation can be developed as two separate Research Designs, the latter depending on the results of the background research.

The Phase II Research Design should:

- a. Meet the Research Design Standards (see Section **7.1.1**).
- b. Include the Phase I Research Design requirements (see Section **7.3.1**).
- c. Include the following:
 - Provide a detailed discussion of project objectives, research topics and research questions, and expected results. Research topics and questions must address and refine priority research topics and associated historic contexts in the Vermont Historic Preservation Plan or other relevant source of information.
 - Provide a detailed discussion of the proposed background research needed to obtain comparative information on potentially relevant site types, data categories, and necessary local and regional contexts.

- If archeological field investigations are warranted, describe and justify the sampling strategy, field methods, and intensity of investigation at each site to be investigated based on the site type, expected data categories, project and research objectives, and research questions.
- Discuss the care and management for the recovered archeological collections, including field notes, other records, artifacts, and other data categories to be recovered. Discuss how large volumes of redundant data, such as construction materials at a historic site, will be treated. Discuss potential discard options for expected categories of artifacts or other data types (see Section **10.0.**).

7.5.4. BACKGROUND RESEARCH

Using local and regional frameworks, conduct sufficient detailed background research to become very familiar with comparable site types, artifactual materials, and other data classes. Thorough background research also includes detailed review of primary and secondary sources and pictorial information of various kinds, such as photos, drawings, and maps, among other sources of information. Oral histories are also important.

7.5.5. HISTORIC CONTEXTS

Phase II investigations on significant sites should result in the development of new historic context(s) for the site types(s) under study, or, must refine existing contexts. Clarifying and describing National Register registration requirements for the property type being investigated is encouraged in the study report.

7.5.6. FIELD INVESTIGATIONS AND DATA ANALYSES

Field methods should be chosen and implemented to satisfactorily meet the Phase II objectives. These may include, but are not limited to, additional shovel test pits at reduced intervals, block excavations around features and artifact concentrations, deep testing, remote sensing studies, and so forth. Recovered data will be analyzed and interpreted using appropriate techniques and theoretical frameworks for the purpose of addressing the research questions. Analyses of data recovered during the Phase I study will be integrated into the Phase II analyses, findings, methodological assessment, and interpretation of findings. Additional analyses, or even re-analysis, of some or all of the Phase I data may be necessary at this level of study.

For precontact archeological sites, radiocarbon (C14) dates should be obtained whenever possible at this phase of investigation. In all cases in which precontact sites are being studied, Phase II budgets must include costs for radiocarbon dates in anticipation that suitable dating material will be recovered.

7.5.7. DOCUMENTING RESULTS

7.5.7.1. SPECIAL CONSIDERATIONS FOR PHASE II END OF FIELD LETTER

The End of Field Letter must include a strong statement of site significance, or lack of significance, based on available evidence, research, analyses, and interpretations at the conclusion of the field work. Comparable Vermont, and if appropriate regional, examples of similar, investigated site types to support the site's significance should be discussed; or an explanation provided if no similar sites exist. For precontact sites, the matrix in Section **4.4.** must be incorporated into the discussion and document. For historic period sites, the End of Field Letter must include the information outlined in Section **4.5.5.**

Since management (including final design or construction) decisions are often based on the End of Field letter, it should include detailed recommendations for alternative treatments for the site if National Register eligible. Alternatively, if all or parts of the site can be avoided and protected with no need for data recovery, then detailed recommendations for site avoidance and preservation before and during construction to ensure that the site is not inadvertently impacted. Such recommendations may include but are not limited to: temporary or permanent fencing to protect the site zone, special plantings and landscape considerations, special construction specifications, pre-construction on-site meetings with contractors and sub-contractors, permanent conservation easements, and so forth.

The End of Field Letter must include detailed maps (drafts and preliminary with hand annotations are acceptable) that clarify results and recommendations.

A revised Vermont Archeological Inventory form that updates information about site significance and other relevant fields should be submitted in the appropriate paper or electronic format.

7.5.7.2. PHASE II INVESTIGATION REPORT

Basic requirements for documenting Phase II investigations are set forth in the *Secretary of the Interior's Standards and Guidelines for Evaluation* (see http://www.cr.nps.gov/local-law/arch_stnds_0.htm). The following requirements supplement the federal guidance.

In some cases when the investigated site produces little additional information **and** a thorough Phase I investigation report has already been completed or in process, the VTSHPO will accept an Addendum to the Phase I report that summarizes the Phase II investigation. Such Addendum shall include necessary and relevant Phase II information, including, but not limited to, detailed description of methods, results and how they compared to the Research Design, conclusions, recommendations, and detailed maps. The VTSHPO must approve preparation of a Phase II Addendum to a Phase I report.

The Phase II investigation report should compare the data recovered during Phase II with that recovered during Phase I for the purpose of clarifying what the site “looks like” at different phases of study. The VTSHPO is interested in knowing how decreased sampling intervals, larger testing units, or different testing methodologies improve our understanding of a site and our ability to interpret it.

If requested, the VTSHPO may review Draft reports for Phase II studies. In some cases, the VTSHPO may require that a Draft copy be submitted for review and comment.

An outline and schedule for report writing must be presented in the Scope of Work and should be adhered to unless there are justifiable reasons why that schedule cannot be met. In general, the VTSHPO expects that the project report will be completed within six (6) months of the field work. Any changes in anticipated schedule should be submitted to the project sponsor and VTSHPO at least 30 days before the report is due.

Phase II investigation reports shall meet the core requirements for Phase I reports and the supplementary requirements for Phase II reports provided in **Appendix H**.

The VTSHPO Report Documentation database form shall be completed and submitted electronically upon completion of the Phase II report (see **Appendix K**).

7.5.8. NATIONAL REGISTER NOMINATIONS

If the study is being carried out in compliance with federal law, the VTSHPO may require that a completed National Register nomination be submitted at the completion of Phase II if a site is determined to meet the National Register criteria.

7.5.9. LONG TERM SITE PRESERVATION THROUGH EASEMENTS OR FEE SIMPLE PURCHASE

Conservation easements are important tools to ensure long term site protection for significant sites that can be wholly or partially preserved in-place. The project’s consulting archeologist should recommend a conservation easement for specific sites both to the VTSHPO and to the project sponsor wherever appropriate. The recommendation can be made in the End of Field Letter or in the Management Summary of the investigation report for Phase I or Phase II. Conservation easements may be stipulated in an Act 250 permit, or as a condition in a Memorandum of Agreement under Section 106, or may be a voluntary action by the landowner. In the latter case, the landowner may donate, or sell the development rights to, the land that contains the site to a non-profit organization, for example, the Vermont Land Trust or a local land trust or other non-profit. Fee simple purchase of the site by a non-profit is another option that ensures maximum site protection. Recommendations for an easement on the site should be supported by a site map showing the area meriting protection in perpetuity. Detailed information on conservation of sites through easements (either through purchase or donation) is available at <http://www.vlt.org/publications.html>. The Archeological Conservancy specializes in the conservation of important sites through fee simple purchase

(<http://www.americanarchaeology.com/aaaquis.html>), although local and regional non-profits may also be interested partners.

7.5.10. SITE MONITORING

When appropriate, the project's consulting archeologist should recommend monitoring of significant sites during construction to the VTSHPO and to the project sponsor. The recommendation can be made in the End of Field Letter or in the Management Summary of the Phase II investigation report. Site monitoring may be stipulated in an Act 250 permit, or as conditions in a Memorandum of Agreement or No Adverse Effect Letter under Section 106.

7.6. PHASE III INVESTIGATION: DATA RECOVERY STUDY

The VTSHPO uses the Advisory Council on Historic Preservation's *Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites* (see **Appendix G**) for guidance on data recovery investigations in both federal and state projects.

Goals for Phase III Investigation are:

- Recover the maximum significant cultural, environmental, methodological and interpretive information and values from the site before the site is destroyed in whole or in part.
- Meet the objectives of the Research Design.
 - Provide a high level of public education and outreach to ensure that the proposed destruction of the site provides maximum benefits to a wide audience.

The Guidelines for Phase I and II Investigations set out the core requirements for Phase III investigation. The following are supplementary requirements for Phase III. The Phase I and II investigations establish both the foundation and framework for this last, most intensive, and intrusive level of archeological study.

7.6.1. PUBLIC EDUCATION AND OUTREACH

The highest level of public education and outreach is required in the course of Phase III investigations to ensure that the proposed destruction of a site provides maximum benefits to a wide audience. Community involvement at different levels is essential. Education and outreach programs must include both short-term programs during the investigations and long-term or permanent programs and/or projects with extended public benefits. (see Section **9.0.**).

7.6.2. COLLECTIONS CARE AND MANAGEMENT

This phase of investigation is data intensive and gathers a great deal of cultural materials, data, and records. Provisions should thus be made early on for the various decisions that must be made about collections care and disposition during and after investigations and analyses. See extensive discussion under Section **10.0.**

7.6.3. RESEARCH DESIGN REQUIREMENTS FOR PHASE III

The Phase III Research Design should:

- a. Meet the Research Design Standards (see Section **7.1.1.**).
- b. Include the appropriate Phase I and Phase II Research Design requirements.
- c. Provide a detailed discussion of the research topics and questions to be addressed.
- d. Discuss the types of data that must be gathered in order to address these topics and questions.
- e. Discuss strategies and methods for recovering the needed data.
- f. Discuss methods of analyses and interpretation.
- g. Identify interdisciplinary experts who may participate in the study.

Depending on the nature and scale of the project and proposed archeological results and methods, the VTSHPO may recommend peer review of the Research Design.

7.6.4. PHASE III SCOPE OF WORK

The Phase III Scope of Work shall meet the general requirements of Section **7. 2.** and shall describe:

- a. Anticipated report format (s), content, number of copies, and public distribution plan.
- b. Proposed public education and outreach programs and publications.
- c. All personnel and interdisciplinary experts who will participate in the investigation.
- d. Detailed schedule for carrying out all aspects of the study.
- e. Detailed budget.

7.6.5. DOCUMENTING RESULTS

7.6.5.1. SPECIAL CONSIDERATIONS FOR PHASE III END OF FIELD LETTERS

- a. Identify and describe any portion of the site that:
 - was **not** subject to data recovery; or
 - continues to contain significant information subsequent to data recovery; and
 - lies outside of the project limits.
- b. Recommend measures to be taken by the project sponsor to protect such parts of the site during construction if destruction of those portions of the site is avoidable.
- c. Provide recommendations for site monitoring, depending on the timing of the End of Field Letter in relation to project construction.
- d. Provide revised Vermont Archeological Inventory form in appropriate format (paper or electronic) that updates information about site significance and other relevant fields.

7.6.5.2. QUARTERLY REPORTS

Brief summary reports shall be submitted quarterly to VTSHPO and the project sponsor and, if appropriate, to the community, and other relevant parties. Quarterly reports shall include, but not be limited to, the following information: summary of data analysis and interpretation tasks completed in the quarter, summary (or examples) of interesting or new findings, status of current public education and outreach efforts; and scheduling concerns, if any.

7.6.5.3. PHASE III INVESTIGATION REPORTS

Phase III reports contain new and important information and should be available to as many scholars and interested individuals as possible. This is especially important since the site or sites investigated will be wholly or partly destroyed. The VTSHPO, the project sponsor, and consulting archeologist will discuss and negotiate the format(s) of the final report, number of copies required, and methods for report distribution. The project sponsor is responsible for distributing the reports to the community, consulting parties, interested persons and organizations, colleagues, and public libraries. The VTSHPO can assist by recommending a report distribution list. A minimum of 5 final reports must be submitted to the VTSHPO. At this level of study in which a site is destroyed, VTSHPO may recommend that the project sponsor publish the report to ensure maximum distribution of the information. Digital publishing on the web may be a useful, complementary new tool to disseminate the results of these studies to the broadest public (see Section **9.0.**). Making copies of the report available on CD Rom is an appropriate substitute for printing hard copies of the report.

The Phase III investigation report should compare the data recovered during Phase I and II with that recovered during Phase III for the purpose of clarifying what the site “looks like” at different phases of study. The VTSHPO is interested in knowing how decreased sampling intervals, larger testing units, or different testing methodologies improve our understanding of a site and our ability to interpret it.

If requested, the VTSHPO may review Draft Phase III reports. In some cases, the VTSHPO may require that a Draft copy be submitted for review and comment.

The VTSHPO Report Documentation database form shall be completed and submitted electronically upon completion of the Phase III report (see **Appendix K**).

7.6.5.3.1. STANDARDS FOR PHASE III REPORTS

1. The format of the Phase III report will be discussed with VTSHPO and the project sponsor and agreed to when the Scope of Work is developed.
2. The report will be special in content, design, and format. For example, different specialists may author separate chapters on general overviews, on specific research topics and questions, on specific data categories, on specific methodological experiments and innovations, etc.

7.6.5.3.2. SPECIAL CONSIDERATIONS FOR PHASE III REPORTS

1. Provisions for a non-technical editor may be desirable and should be considered when developing the Phase III Scope of Work and budget.
2. Electronic publishing may be considered as an alternative, or supplement, to the standard technical report. A Digital Imprint template developed by the University of California at Los Angeles Digital Lab is available free to archeologists. The template facilitates digital publishing incorporating integrated text, databases, photos, and video for display on a web site. This publishing technology has the potential for more rapidly distributing archeological information in an exciting format to a very broad audience. Digital publishing allows the reader to rapidly switch from text to color photos to video to databases with the touch of the mouse. For an overview of the Digital Imprint template, and a link for downloading a free copy, see www.ioa.ucla.edu/dit.html.
3. Distributing reports in CD Rom format should be considered whenever possible.

Basic requirements for documenting Phase III investigations are set forth in the *Secretary of the Interior's Standards and Guidelines for Archeological Documentation* (see http://www.cr.nps.gov/local-law/arch_stnds_0.htm). The following requirements supplement the federal guidance.

1. Management Summary and Recommendations

- a. Briefly identify and describe any portion of the site that was not subject to data recovery; or continues to contain significant information subsequent to data recovery; and lies outside of the project limits. Recommend measures to be taken by the project sponsor to protect such parts of the site during construction if destruction of those portions of the site is avoidable.
- b. Provide any appropriate recommendations for monitoring of site(s), depending on the timing of the report in relation to project construction.
- c. Provide suggestions for long term measures to ensure preservation of the site in perpetuity.

2. Conclusions

- a. Discuss contributions that this investigation has made to state, regional or national precontact or postcontact history.
- b. Revise and refine the relevant historic context(s) and current information on the ideal characteristics of this type (s) of archeological site (s).
- c. Provide recommendations for updating or revising research questions, goals and priorities in the Vermont Historic Preservation Plan.
- d. Discuss any on-going or proposed preservation efforts or programs related to site protection, structures documentation, special studies or analyses, site stabilization, etc.

3. Education and Outreach

Describe and discuss the public outreach programs resulting from the study, including benefits, number of people who actively participated in such efforts, and issues and how they were

resolved; and identify long term, in progress, and/or yet to be completed education and outreach programs.

4. Appendices

- a. Technical appendices should be formatted and bound into a separate volume so that it can be distributed only to those that may be interested in the supporting data such as soil profiles, computer print-outs of catalog forms, etc. Soil profiles should be provided for all test units or for a representative sample, depending on the number excavated and the variation encountered.
- b. Any ancillary studies such as geomorphological reports, special analyses, etc., should be included in the main report volume if they are of broad interest.
- c. A copy of the Research Design, Memorandum of Agreement, and any other relevant project correspondence should be included in the technical appendix volume.

7.7. LONG TERM SITE PRESERVATION THROUGH EASEMENTS OR FEE SIMPLE PURCHASE

As discussed in more detail in Section **7.5.9.**, conservation easements are important tools to ensure long term site protection for significant sites that can be wholly or partially preserved in-place. Where appropriate, the project's consulting archeologist should recommend a conservation easement for specific sites in the Management Summary of the Phase III End of Field Letter or investigation report. Recommendations for an easement on the site should be supported by a site map showing the area meriting protection in perpetuity. In some cases to ensure maximum site protection, fee simple purchase of the site by a non-profit may be desirable. The VTSHPO can help facilitate contact with non-profit organizations who may be interested in the conservation of the site.

7.8. SITE MONITORING

When appropriate, the project's consulting archeologist should recommend monitoring of significant sites during construction to the VTSHPO and to the project sponsor. The recommendation can be made in the End of Field Letter or in the Management Summary of the Phase III investigation report (if completed prior to construction). Site monitoring may be stipulated in an Act 250 permit, or as conditions in a Memorandum of Agreement or No Adverse Effect Letter under Section 106.

8.0. ADDITIONAL DOCUMENTATION

8.1. REPORT DATABASE FORM

A completed report database form must be submitted both electronically and in hard copy to VTSHPO upon completion of any investigation report, including the Alternative Format (see **Appendix K**).

8.2. VERMONT ARCHEOLOGICAL INVENTORY FORM

8.2.1. COMPLETING VERMONT ARCHEOLOGICAL INVENTORY FORMS

A Vermont Archeological Inventory (VAI) form in electronic format must be completed for any previously unrecorded site. Non-significant sites should be minimally recorded. Sites that have been completely destroyed will not be assigned VAI site numbers but should be reported in the ARA or Phase I report.

Common sense should prevail when determining whether or not to seek a VAI number and complete a site form. For example, a form does not need to be completed for a location shown on an historic map for which there are no visible remains on the surface and in which no cultural materials associated with that site are recovered. As another example, the find area for sheet scatter that lacks a significant association with a nearby site will not be assigned a VAI. Designating a cluster of related sites as an “archeological district,” either precontact or historic period, and assigning a single site number to the district may be appropriate in some cases and shortens completion of the inventory form.

Updated electronic VAI forms for sites with existing VAI documentation should be submitted when additional information is obtained during the ARA, Phase I, II or III investigations.

Completed forms must be submitted with the ARA Letter Report (if there’s a visible site and the assessment is likely to conclude at that time), or, with the Phase I End-of Field Letter. Revised VAI forms with updated information must be submitted at the completion of Phase II and III studies.

The VTSHPO will update users of any changes to formats as they arise. **Appendix I** contains the most up-to-date VAI form.

8.2.2. NAMING POTENTIALLY SIGNIFICANT SITES

As site investigations progress from Phase I to Phase II and sometimes to Phase III, it is helpful in technical reports, non-technical publications, and web sites to refer to sites by name, instead of their VAI numbers. It makes for more “reader friendly” text.

9.0. PUBLIC EDUCATION & OUTREACH

Archeological studies carried out in Vermont need to interpret project results for the public benefit and present those findings to the public. The expected level of education and outreach increases for each successive phase of investigation and depends on project scale, investigation results, project sponsor, and anticipated affects to one or multiple sites. Archeological consultants are encouraged to adopt new and innovative methods as well as those that are described below.

Public education supplements data recovery as mitigation for the destruction of all or part of a significant archeological site. The extent of public education and outreach efforts needed to achieve mitigation is based on the extent of the loss of archeological information and the site's importance. Sections **9.1.** through **9.4.** are intended to provide guidance to consultants who generally must take the "lead" role in all aspects of education and outreach.

9.1. STANDARDS FOR PUBLIC EDUCATION AND OUTREACH

- Landowners, towns (both local government and community groups), educators, students, and the general public are likely targets for education and outreach.
- To the greatest extent possible, education and outreach projects and programs should be conducted in consultation with the local community and other interested parties both during planning and implementation.
- Education and outreach activities should be coordinated with Native Americans as appropriate.
- Exceptional sites or special projects may require enhanced education and outreach as a component of the Phase I investigation.
- Historic archeological sites may be suited to different types of education and outreach efforts than precontact sites.

9.2. EDUCATION & OUTREACH FOR LANDOWNERS

- Site information will be provided to the landowner of a site being investigated as it becomes available (including, for example, End of Field Letter, site maps, investigation site reports, non-technical publications, etc.).
- As appropriate, stewardship information can be provided to landowners to promote long term voluntary site conservation. This may include information on The Archeological Conservancy (www.americanarcheology.com), Vermont Land Trust (www.vlt.org), local conservation non-profits, and on other tools and techniques to voluntarily preserve site in perpetuity. Stewardship information on these organizations is available from the VTSHPO or directly through the organizations.
- A public meeting for site landowners and other interested persons may be appropriate depending on the results of the study.

9.3. EDUCATION & OUTREACH FOR THE TOWN

- Local governments, historic preservation commissions, and Certified Local Government commissions (CLG), where they exist (http://grants.cr.nps.gov/CLGs/CLG_Search.cfm), as appropriate, should be made aware of the archeological investigation; project location, anticipated schedule, site tour information; etc. This can be accomplished through written notification, although attending select board, planning commission, conservation commission, and historic preservation or CLG commission meetings can be very helpful, especially on large projects and during Phase II and III investigations.
- At the conclusion of the archeological study, site information should be provided to the Town dependent on the project sponsor's approval. Information may include site maps, GIS data sets, and investigation report.
- A presentation to the Select Board, Planning Commission, historic preservation commission, CLG commission, and /or Regional Planning Commission may be appropriate depending on the results of the investigation.

9.4. RECOMMENDED PROJECTS AND PROGRAMS

The following list illustrates some examples of recommended education and outreach projects. Some of these examples incorporate recent advances in technology. The VTSHPO requires that it be consulted during development of scopes of work for Phase II and III education and outreach programs. The VTSHPO can provide guidance and information on a variety of topics, for example, on available exhibit designers and video and digital production firms, interesting web sites that may provide useful ideas, and samples of excellent non-technical publications from Vermont and other states.

- Develop and maintain archeological information on a web site
- Exhibits (temporary/traveling/or permanent)
- Illustrated Lectures
- Non-technical books
- *Vermont Life* magazine article or news bulletin
- Articles in other popular local, regional, or national magazines
- Videos
- Press releases
- Community archeology projects using adult and youth volunteers or students (examples: field schools, summer camps)
- Education Curricula
- TV and radio programs
- Presentation (power point) – can later be put on web site
- CD Rom
- Virtual archeology (interactive exhibits, educational games, Tours; other programs and site interpretation) on the web or CD Rom (see www.learningsites.com/)



- Digital publication on web
(see Section **7.6.5.3.2.**)
- Interpretive signage
- Site tours
- Site brochures

10.0. CARE AND MANAGEMENT OF ARCHEOLOGICAL COLLECTIONS

Archeological collections include artifacts, soils and feature samples, floral and faunal data, records, reports, photographs, and other sets of data recovered from an archeological site, that contribute to the significance of a site, and that are determined to require collections care.

Archeological artifacts, materials, documents, and other data assembled during archeological investigations should, to the greatest extent possible, be accessible in perpetuity for research, education, and public interpretation. Since even careful, professional archeological excavation of sites is a destructive process, the recovered information is all that remains to tell the story once the site, or parts of the site, is destroyed. Care and management of collections to allow future research, education, and public interpretation is thus a key part of any archeological investigation.

Federal agencies who own land or who fund, permit, license, or otherwise provide assistance to projects are guided by Federal law, regulations and guidelines in their obligation to care and manage collections (specifically, 36 CFR 800, the *Secretary of the Interior's Standards and Guidelines for Archeological Documentation*, the *Archeological Resources Protection Act*, and 36 CFR 79).

State agencies that own land or sponsor archeological investigations on their lands are guided by Title 22 of *Vermont Statutes Annotated*, Chapter 14 (especially sections 762 and 764) (see <http://www.leg.state.vt.us/statutes/title22/title22.htm>). Section 762 of 22 VSA 14 states that “*all information and objects deriving from state lands shall remain the property of the state and be utilized for scientific or public educational purposes.*” Section 764 of 22 VSA 14 requires that:

all specimens so collected under permit shall be the permanent property of the state and that the state archeologist shall make prior arrangements for the disposition of specimens derived from the activities in a appropriate institution of the state or for the loan of the specimens to qualified institutions in or out of the state.

Federal agencies generally impose their obligations for care and management of collections on recipients of federal funds or licenses through contract, Memoranda of Agreement, Programmatic Agreement, or other understanding.

Archeologists must carefully weigh decisions about which artifacts or data sets to keep since caring and managing for collections in perpetuity involves significant costs, commitments, and efforts. The National Park Service offers excellent guidance and information for dealing with many of the complex topics associated with care and management of collections at their web site <http://www.cr.nps.gov/aad/curation.htm>.

Generally, all cultural materials recovered from a precontact site are considered important and worthy of care and management in perpetuity. However, data classes such as fire cracked rock from fire pits, hearth or other feature fill, soil samples, and some other kinds of data should be

judiciously evaluated to assess whether it is necessary to keep all or part of it after analysis. The type of site involved will affect these considerations. Retaining collections from precontact site contexts is especially important when an investigation ends after Phase I since it may not be possible to know what the collected set of data represents.

Artifacts and other data classes from historic period archeological sites require more deliberation and decision-making about what to keep after analysis. Generally, the earlier, or rarer, or otherwise more special the historic archeological site, the more materials should be retained if they pertain to the site's period of significance. Even for early historic sites, disposition of large quantities of brick, glass, rock, and other construction materials needs to be carefully considered; only appropriate samples should be maintained. For more common types of historic period archeological sites, the most important parts of the collection are those data sets that addressed the research questions. Twentieth century artifacts such as tin cans, bottles, bottle caps, and so forth, in 19th century contexts should not be retained although documenting their archeological context may be necessary or even important. Occasionally, however, it is crucial to retain an out-of-context artifact as confirmation of site disturbance or site age or because it offers another important piece of information.

10.1. IF A SITE IS LOCATED ON PRIVATE LAND

All archeological materials collected from private land in the course of archeological investigations are the property of the landowner unless they are explicitly donated to a suitable organization that will care for and manage the collections. It is important that consulting archeologists inform the landowner of their legal entitlement to the archeological materials. If the landowner so desires, some or all of the material must be returned to the landowner after data analyses. Thorough documentation and analysis should be afforded important aspects of any data set that are to be returned to a landowner since they may not be accessible to researchers again. Consulting archeologists should always ask the landowner to donate the collections to ensure perpetual access for future research, education, and public interpretation. Since there is no existing state collections care facility at this time, identifying the organization to whom the collection should be donated is difficult. For the interim, the VTSHPO asks that the consulting archeologist temporarily care for the donated collection until a suitable public facility is established.

If the archeological investigation on privately owned land is federally or state funded, and if the landowner relinquishes ownership of the collection, then that federal agency (or designee) or state agency is responsible for ensuring the care and management of the collection in perpetuity in accordance with federal laws, regulations, and guidelines or under Title 22 of *Vermont Statutes Annotated*, Chapter 14.

Donation of a data collection from privately owned land **must** be documented by letter of agreement or other appropriate document between the landowner and interim or permanent caretaker of the collection. Samples of Letters of Transfer and Deed of Gift are found in **Appendix M**.

Donating an archeological collection and any associated care fee may have potential tax benefits for a landowner. Private developers may wish to consult a tax lawyer or accountant on this possibility.

10.2. IF A SITE IS LOCATED ON PUBLIC LAND

All archeological materials collected from federal or state lands or under state waters in Vermont are the property of that public entity and entrusted to it. Thus, the land-owning or controlling federal agency (or designee) or state agency is responsible for ensuring the care and management of all collections recovered from their lands in perpetuity in accordance with federal laws, regulations, and guidelines or under Title 22 of *Vermont Statutes Annotated*, Chapter 14 (especially sections 762 and 764).

The State of Vermont does not currently have a designated facility for care and management of archeological collections. Although the University of Vermont (UVM) acted in that capacity for nearly 20 years, it no longer accepts collections not recovered by UVM's Consulting Archaeology Program. The VTSHPO and the Vermont Agency of Transportation are now in the process of assessing the state's needs for care and management of Vermont collections, identifying costs for assembling existing collections now distributed in Vermont and elsewhere and future costs, and examining possible facility alternatives. The VTSHPO will keep consulting archeologists, federal and state agencies, private developers, and other potential users informed about the progress being made on this critical initiative. An interim facility may be identified in the near future. Generally, university-based or large consulting organizations are temporarily storing collections at their own institution. Consulting archeologists who cannot store collections on a temporary basis should consult with the VTSHPO and their project sponsor about the interim disposition of collections.

10.3. STANDARDS FOR CARE AND MANAGEMENT OF COLLECTIONS

The National Park Service has developed standards for care of collections, detailed in 36 CFR 79. The State of Vermont expects to meet or exceed these standards when a facility is established. Any institution that permanently or temporarily cares for Vermont archeological collections should attempt to meet the federal standards. The National Park Service has an extensive web page on care and management of archeological collections at [http://www.cr.nps.gov/aad/collections/table\(frame5\).htm](http://www.cr.nps.gov/aad/collections/table(frame5).htm).

10.4. COSTS OF CARE AND MANAGEMENT OF COLLECTIONS

There are serious short and long term costs for collections care and management. The National Park Service conducted a detailed survey of costs in 1997 and found fees ranging from \$200 to \$1080 per box (or cubic foot). Accordingly, consulting archeologists should be aware of these fees and plan on charging a reasonable but realistic amount when planning for future collections care. Fees collected in expectation that a suitable statewide facility will be established should be placed in escrow to ensure that those funds can accompany the collections. (see *Archeological Curation Fees Across the United States*: <http://www.cr.nps.gov/aad/feesstud.htm>).

11.0. ACCIDENTAL DISCOVERY OF ARCHEOLOGICAL SITES AFTER PROJECTIVE REVIEW AND/OR DURING PROJECT CONSTRUCTION

This section refers to archeological sites that are discovered **after** archeological review has been completed and/or after project construction has begun. **If human remains are discovered in the course of archeological review or during project construction, see Section 12.0.**

Examples of archeological sites that may be discovered during construction include:

- Native American sites that are not anticipated by the general predictive model or sensitivity assessments.
- Human remains which are unanticipated.
- Foundations and other structural remains, such as wells, obscured by fill or later disturbances.
- Deeply buried sites in floodplains that are missed by standard testing methods.
- Historic archeological sites that are not identified on historic maps (Beers, Wallings, etc.)

11.1. PROCEDURE TO FOLLOW WHEN DISCOVERIES ARE MADE IN VERMONT AGENCY OF TRANSPORTATION PROJECTS

- Protocols for accidental site discoveries for Vermont Agency of Transportation (VAOT) projects fall under separate guidance. Contact Dr. Duncan Wilkie, VAOT Archeology Officer, immediately at (802) 828-3965.

11.2. PROCEDURE TO FOLLOW WHEN DISCOVERIES ARE MADE IN THE COURSE OF PROJECT CONSTRUCTION FOR ALL OTHER PROJECTS

- The project will stop immediately if previously unidentified archeological sites are discovered during project construction.
- If the human remains are discovered, refer to Section **12.0**.
- The project sponsor, developer, construction company, or project engineer, as appropriate, shall immediately notify the project's consulting archeologist, if there was one during project planning. If not, the VTSHPO shall be notified.
- The consulting archeologist or VTSHPO shall make a preliminary assessment of whether the site is potentially significant and recommend additional steps to mitigate effect. Depending on the project, the nature of the discovery, and the statutory jurisdiction, VTSHPO may ask the project sponsor to retain a consulting archeologist to assist in development of a treatment plan.
- Depending on the statutory jurisdiction of the project (Act 250, state law, or federal law), the appropriate jurisdictional agency may need to get involved in discussions to resolve the matter in accordance with their respective authorities.

- If the project falls under federal Section 106 jurisdiction, the process set out in 36 CFR 800.11 and 800.13 must be followed (see **Appendix A**).

11.3. TREATING AN UNANTICIPATED SITE ONCE DISCOVERED

- The VTSHPO or the project's consulting archeologist will conduct a field assessment of the site to determine whether the site is potentially State or National Register eligible and the project's potential effects.
- The project sponsor may need to hire an archeological consultant if additional information is necessary to determine significance, site boundaries, and State Register or National Register eligibility.
- If the site meets State-National Register criteria, the preferred treatment is to avoid it and protect it in place.
- Site significance and treatment options based on the nature of the site and the situation should be discussed with the appropriate interested public parties and documented.
- If site avoidance of a significant site is not possible, then archeological data recovery of the site may need to be completed if other treatment is not more appropriate.
- If the project falls under federal Section 106 jurisdiction, construction in the site area will not proceed until it has been reviewed and documented according to 36 CFR 800.11 and 800.13.
- See Section **12.0**. if burials are discovered.

12.0. TREATMENT OF HUMAN REMAINS

This section is pending. See **Appendix L** for the Advisory Council on Historic Preservation's policy statements on *Treatment of Human Remains and Grave Goods* (1988), intended for guidance on federal lands or in Section 106 and Section 110 regulatory contexts.

13.0. CAPPING SITES WITH FILL

In certain circumstances, it may be appropriate to cap a site with fill to permit certain uses of the site area and/or to protect the site. The VTSHPO will consider capping a site an adverse effect if the following two conditions are met:

- a. The cap material is potentially removable and does not forever bury the site.

Some examples when capping may be considered (other examples may be appropriate):

- 1' of fill over a site to construct a gravel access road or fire road;
- 4' of fill over a site to permit bike path construction

Examples when capping will not be considered:

- burying a site under a permanent, trafficked road such as a new highway.
- burying a site under a permanent building built on slab

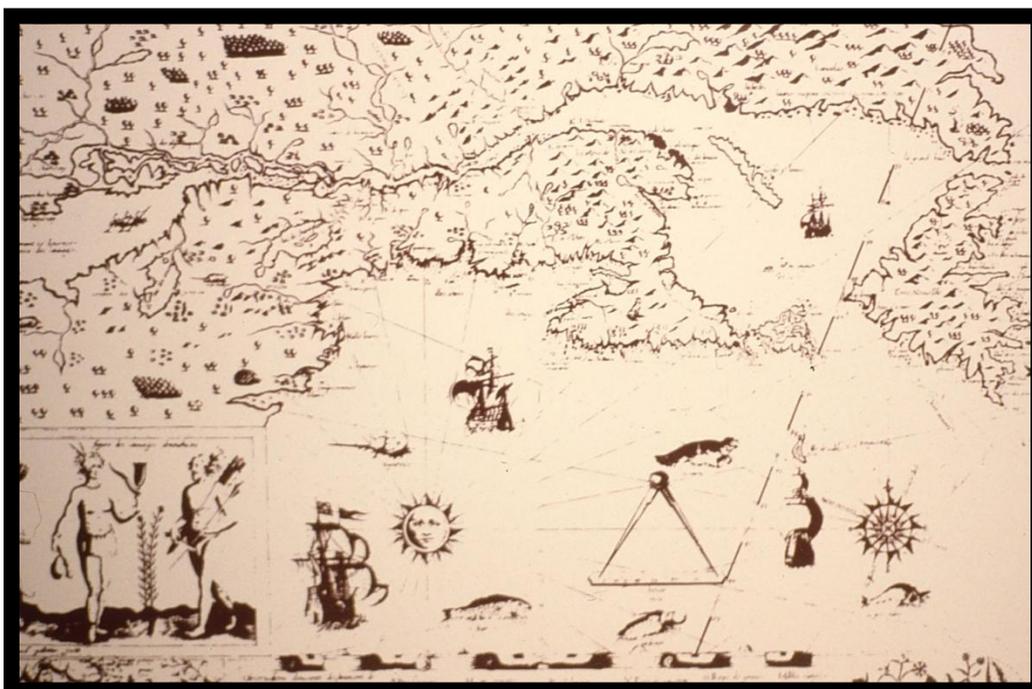
In these examples, the site is “forever” inaccessible for research and its characteristics may be disturbed in unknown ways from vibrations, weight, chemicals, road salt, etc.

- b. There have been sufficient site investigations to determine the feasibility of capping and to gather sufficient data to ensure appropriate capping that will not adversely affect the site. This will require a Phase I investigation at the minimum and, depending on the circumstances, may require Phase II investigations as well.

THE VERMONT STATE HISTORIC PRESERVATION OFFICE'S

GUIDELINES FOR CONDUCTING ARCHEOLOGY IN VERMONT

APPENDICES



<http://www.historicvermont.org/>

APPENDIX A.

Relevant Federal and State Laws, Rules and Guidelines

Title:	Web site, if available:
<i>Section 106 of the National Historic Preservation Act</i>	http://www.achp.gov/work106.html
36 CFR 800 (Advisory Council regulations that implement Section 106)	http://www.achp.gov/work106.html
Advisory Council of Historic Preservation (national)	http://www.achp.gov
Advisory Council on Historic Preservation <i>Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites</i>	http://www.achp.gov/archguide.html
Title 22 of <i>Vermont Statutes Annotated</i> , Chapter 14 (22 VSA 14)	http://www.leg.state.vt.us/statutes/sections.cfm?Title=22&Chapter=014
<i>Vermont Historic Preservation Act Rules</i> (Rules 1,2,3,4,9,10)	Visit the Division's web site
Title 10 of <i>Vermont Statutes Annotated</i> , Chapter 151 (Act 250)	http://www.leg.state.vt.us/statutes/sections.cfm?Title=10&Chapter=151
Title 13 <i>Vermont Statutes Annotated</i> , Chapter 81, Sections 3761, 3764, 3765; Title 18 <i>Vermont Statutes Annotated</i> , Chapter 107, Sections 5201 and 5212 (Vermont cemetery laws)	http://www.leg.state.vt.us/statutesMain.cfm
Title 1 <i>Vermont Statutes Annotated</i> , Chapter 5 Section 317 (20) exempting archeological site locations from the "right-to-know" law	http://www.leg.state.vt.us/statutesMain.cfm
<i>Native American Graves Repatriation Act</i>	http://www.cr.nps.gov/nagpra/index.htm http://www4.law.cornell.edu/uscode/25/ch32.html
Archeological Resources Protection Act of 1979	http://www2.cr.nps.gov/laws/archprotect.htm
National Park Service Curation Guidelines 36 CFR 79	http://www.cr.nps.gov/aad/curation.htm
Secretary of the Interior's <i>Standards and Guidelines for Identification, Evaluation, and Archeological Documentation</i>	http://www2.cr.nps.gov/tps/secstan1.htm
Advisory Council's Hydro-relicensing Guidelines (draft)	Contact the State Archeologist

Vermont Division for Historic Preservation's <i>Hydro-relicensing Guidelines</i>	Contact the State Archeologist
Vermont Division for Historic Preservation's <i>Guidelines to Protect Cultural Resources During Logging</i>	Contact the State Archeologist
Secretary of the Interior's <i>Professional Qualification Standards</i>	http://www2.cr.nps.gov/laws/ProfQual83.htm (see www.cr.nps.gov/local-law/gis/ for the Secretary of the Interior's proposed standards)
Relevant National Register Bulletins: <ul style="list-style-type: none"> • <i>National Register Guidelines for Evaluating and Registering Archeological Properties (2000)</i> • <i>National Register Guidelines for Evaluating and Registering Historic Archeological Sites and Districts (1993)</i> • <i>National Register Guidelines for Identifying, Evaluating and Registering Historic Mining (1992)</i> • <i>National Register Guidelines for Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places (no date)</i> • <i>National Register Guidelines for Evaluating and Documenting Traditional Cultural Properties (rev. 1998)</i> 	http://www.cr.nps.gov/NR/publications/

APPENDIX B

STATE OF VERMONT DIVISION FOR HISTORIC PRESERVATION

ARCHEOLOGICAL CONSULTANTS LIST

Procedures and Criteria

May 1, 2002

The following sets forth the procedure for requesting a determination by the Division for Historic Preservation that a professional 1) meets the *Secretary of the Interior's Professional Qualification Standards* for archeology and 2) has demonstrated ability to meet the *Secretary of the Interior's Standards and Guidelines for Identification, Evaluation, and Archeological Documentation*. Professionals that meet the *Professional Qualification Standards* and have demonstrated ability to meet the Secretary of the Interior's *Standards and Guidelines* shall be included in the State of Vermont List of Archeological Consultants. (For additional information see http://www.cr.nps.gov/local-law/arch_stnds_0.htm and <http://www2.cr.nps.gov/laws/ProfQual83.htm>).

These Procedures are developed pursuant to the Vermont Historic Preservation Act (Title 22 of Vermont Statutes Annotated, Chapter 14), the Vermont Historic Preservation Act Rules (Rules 1,2,3,4,9,10), National Register Programs Guidelines (NPS-49) established by the National Park Service, and federal regulations 36 CFR 800.

The Division for Historic Preservation shall review each request and evaluate the accompanying documentation to determine whether the professional meets the *Professional Qualification Standards* and has demonstrated ability to meet the *Secretary of the Interior's Standards and Guidelines*. Inclusion on the State of Vermont *List of Archeological Consultants* is strongly recommended for any professional wishing to conduct archeological field investigations in Vermont to satisfy federal and state regulatory requirements. "Archeological field investigations" means archeological resource assessments and all phases of archeological investigations. Those professionals listed shall be "Qualified Professionals" for purposes of all Federal and State programs administered by the Division for Historic Preservation.

If at any time the Division for Historic Preservation determines that a Qualified Professional is no longer able to perform archeological investigations or carry archeological research to completion, as required by the *Professional Qualification Standards*, the Division shall terminate the Professional's approved status. The Qualified Professional shall receive notice from the Division setting forth the reasons for its proposed action. The Qualified Professional shall have 30 days in which to comment before the proposed action shall be final.

Procedure:

A request in writing should be submitted to:

State Archeologist
Division for Historic Preservation
National Life, Drawer 20
Montpelier, VT 05620-0501

The written request shall include the following information:

- 1) A letter expressing interest in working in Vermont that:
 - a) identifies in which States the organization (or individual) has conducted archeological field studies;
 - b) highlights the organization's (or individual's) particular capabilities and specializations; and
 - c) identifies specific individuals, by name, who would actually supervise and conduct archeological field studies in Vermont.
- 2) Summary of organization's (or individual's) archeological and historic preservation experience and qualifications, including training in implementing the process set forth in 36 CFR 800.
- 3) Resumes of principals and project directors who will actually supervise and conduct field archeological field studies in Vermont, including individual professional qualifications per the requirements of the *Secretary of the Interior's Professional Qualification Standards* for archeology.
- 4) Two (2) different samples of each of the following documents (the Division will return these reports upon request):
 - Phase I Proposal;
 - Phase II Proposal;
 - Phase I final accepted report;
 - Phase II final accepted report;
 - Phase III final accepted report.
- 5) If you or your organization have never completed a Phase II or III investigation and subsequent report, please state that in the cover letter.

For Additional Information Contact:

Giovanna Peebles
Division for Historic Preservation
Phone: (802) 828-3050
FAX: (802) 828-3206
gpeebles@dca.state.vt.us

APPENDIX C

Environmental Predictive Model for Locating Precontact Archeological Sites

Project Name _____ **County** _____ **Town** _____

DHP No. _____ **Map No.** _____ **Staff Init.** _____

Date _____ **Additional Information** _____

Environmental Variable	Proximity	Value	Assigned Score
A. RIVERS and STREAMS (EXISTING or RELICT):			
1) Distance to River or Permanent Stream (measured from top of bank)	0- 90 m	12	_____
	90- 180 m	6	_____
2) Distance to Intermittent Stream	0- 90 m	8	_____
	90-180 m	4	_____
3) Confluence of River/River or River/Stream	0-90 m	12	_____
	90 –180 m	6	_____
4) Confluence of Intermittent Streams	0 – 90 m	8	_____
	90 – 180 m	4	_____
5) Falls or Rapids	0 – 90 m	8	_____
	90 – 180 m	4	_____
6) Head of Draw	0 – 90 m	8	_____
	90 – 180 m	4	_____
7) Major Floodplain/Alluvial Terrace		32	_____
8) Knoll or swamp island		32	_____
9) Stable Riverine Island		32	_____
B. LAKES and PONDS (EXISTING or RELICT):			
10) Distance to Pond or Lake	0- 90 m	12	_____
	90 -180 m	6	_____
11) Confluence of River or Stream	0-90 m	12	_____
	90 –180 m	6	_____
12) Lake Cove/Peninsula/Head of Bay		12	_____

<p>C. WETLANDS: 13) Distance to Wetland (wetland > one acre in size)</p> <p>14) Knoll or swamp island</p>	<p>0- 90 m 90 -180 m</p>	<p>12 6 32</p>	<p>_____ _____</p>
<p>D. VALLEY EDGE and GLACIAL LAND FORMS: 15) High elevated landform such as Knoll Top/Ridge Crest/ Promontory</p> <p>16) Valley edge features such as Kame/Outwash Terrace**</p> <p>17) Marine/Lake Delta Complex**</p> <p>18) Champlain Sea or Glacial Lake Shore Line**</p>		<p>12 12 12 32</p>	<p>_____ _____ _____ _____</p>
<p>E. OTHER ENVIRONMENTAL FACTORS: 19) Caves /Rockshelters</p> <p>20) [] Natural Travel Corridor [] Sole or important access to another drainage [] Drainage divide</p> <p>21) Existing or Relict Spring</p> <p>22) Potential or Apparent Prehistoric Quarry for stone procurement</p> <p>23)) Special Environmental or Natural Area, such as Milton aquifer, mountain top, etc. (these may be historic or prehistoric sacred or traditional site locations and prehistoric site types as well)</p>	<p>0 – 90 m 90 – 180 m</p> <p>0 – 180 m</p>	<p>32 12 8 4 32 32</p>	<p>_____ _____ _____ _____ _____ _____</p>
<p>F. OTHER HIGH SENSITIVITY FACTORS: 24) High Likelihood of Burials</p> <p>25) High Recorded Site Density</p> <p>26) High likelihood of containing significant site based on recorded or archival data or oral tradition</p>		<p>32 32 32</p>	<p>_____ _____ _____</p>
<p>G. NEGATIVE FACTORS: 27) Excessive Slope (>15%) or Steep Erosional Slope (>20)</p>		<p>- 32</p>	<p>_____</p>

28) Previously disturbed land as evaluated by a qualified archeological professional or engineer based on coring, earlier as-built plans, or obvious surface evidence (such as a gravel pit)		- 32	_____
** refer to 1970 Surficial Geological Map of Vermont			
Total Score:			
Other Comments :			
0- 31 = Archeologically Non- Sensitive 32+ = Archeologically Sensitive			

APPENDIX D

Historic and Archeological Resource Information Available at the DHP'S RESOURCE CENTER MONTPELIER

The Vermont Division for Historic Preservation has created a “user friendly,” town-by-town, county-by-county Resource Center at its office in Montpelier. The following information is of special interest to consulting archeologists and independent researchers. The following list is not exhaustive:

- Comprehensive collection of federal and state archeology compliance reports for Vermont.
- State and National Register files: descriptions and photographs of buildings, structures, districts, and archeological sites.
- Vermont Historic Preservation Plan, Historic Context summaries, and context information.
- Historic and archeological research and reference information (some examples include all published articles and many manuscripts on Vermont archeological investigations, research, and the history of Vermont archeology; Vermont Collections Survey; Archeology Subject files; comprehensive C14 dating information for Vermont sites; etc).
- Regional archeological reports and published research.
- Heritage education (*Vermont Heritage Video* series; archeology kit; curriculum guides and ideas; Vermont architecture and archeology Teacher's Guides; etc.).
- Heritage tourism planning and development information.
- State Historic Sites information.
- Cultural resource management plans.
- Planning and zoning information for individual towns.

APPENDIX E

SELECTED SOURCES OF HISTORIC CONTEXT INFORMATION

The Vermont Historic Preservation Plan Themes, Historic Contexts and Currently Available Information:

October 21, 1999

NATIVE AMERICAN PRECONTACT HISTORY (9,000 B.C. - 1609 A.D.)

Theme Overview (5 pp.)

Historic Context Narratives: Paleo Indian; Early Archaic; Middle Archaic; Late Archaic; Early Woodland; Middle Woodland; Late Woodland. Site Types Description, Research Questions, Bibliographies (240 pp.).

- **The Vermont Heritage Series** - "*A Rich and Ancient Heritage: Vermont's Archeological Sites*" (27 min., Video I).

CONTACT, EXPLORATION, CONFLICT AND EARLY SETTLEMENT (1609 - 1790)

Draft Theme Overview, Historic Context Summary, Property Types Summary, Research Questions, Bibliography (10 pp.).

- **The Vermont Heritage Series** - "*A Rich and Ancient Heritage: Vermont's Archeological Sites*" (27 min., Video I).

AGRICULTURE (1760-1940)

Theme Overview, Historic Context Summary, Property Types List (6 pp.).

Historic Context Narratives: Diversified and Specialty Agriculture; Agricultural Processing; Stock Breeding; Agricultural Social, Educational and Political Institutions; Sheep Farming; Orchard Farming; Dairying. Property Types Descriptions, Research Questions, Bibliographies (233 pp.).

- **The Vermont Heritage Series** - "*A Vermont Heritage: Agricultural Buildings and Landscapes*" (21 min., Video II).
- **Agricultural Resources of Vermont** Multiple Property Documentation Form:
 - Includes the following Historic Contexts:
 - Diversified and Specialty Agriculture, 1760-1941
 - Agricultural Processing, 1760-1941
 - Sheep Farming, 1810-1910
 - Dairying, 1850-1941
 - Stock Breeding, 1793-1941
 - Agricultural Social, Educational, and Political Institutions, 1800-1941
 - Orchard Farming, 1820-1941
- **Historic Resources of the Mad River Valley** Multiple Property Documentation Form:
 - Includes the following Historic Context:
 - Agriculture in the Mad River Valley, 1789-1942

HISTORIC ARCHITECTURE AND PATTERNS OF TOWN DEVELOPMENT (1760 - 1940)

Introduction, Architecture Styles, House Forms, Architects and Builders, Building Technology, Building Materials, Physical Patterns of Communities, Evaluating Architectural Significance. (Interiors, Village and City Amenities, Landscapes design, Research Questions and Bibliography to be developed). (54 pp.).

- **The Vermont Heritage Series** - "*Buildings, Villages, Towns: Traditions in Vermont Architecture*" (32 min., Video III).
- **The Vermont Heritage Series** - "*A Guide to the Historic Architectural Styles of Vermont*" (14 min., Video VIII).
- **Historic Resources of the Mad River Valley** Multiple Property Documentation Form:
Includes the following Historic Context:
Community Development of the Mad River Valley, 1789-1942
- **The Historic and Architectural Resources of St. Johnsbury** Multiple Property Documentation Form:
Includes the following Historic Context:
Community Development of St. Johnsbury, 1786-1942

CULTURE AND GOVERNMENT (1760-1940)

Theme Overview, Historic Context Summary, Property Types List (12 pp.).

Historic Context Narratives: Religious Trends; Native American Life; Ethnic Groups; Arts and Literature; Education; Growth of Government; Reform Trends; Health and Medicine; Entertainment and Popular Culture; The New Deal. Property Types Descriptions, Research Questions, Bibliographies (193 pp.).

- **The Vermont Heritage Series** - "*From Meeting House to Opera House: Vermont's Political and Cultural Heritage*" (29 min., Video IV).
- **Educational Resources of Vermont** Multiple Property Documentation Form:
Includes the following Historic Context:
Education in Vermont, 1777-1942 (Property types described with registration requirements: Schools)
- **Historic Government Buildings of Vermont** Multiple Property Documentation Form:
Includes the following Historic Context:
Growth of Government in Vermont, 1776-1944 (Property types described with registration requirements: Town Halls)

TRANSPORTATION (1760 - 1940)

Theme Overview, Historic Context Summaries: Overland Transportation; Water Transportation and Commerce; Railroads; Automotive Travel; Air Travel. Property Types List, Research Questions, Bibliography (13 pp.).

- **The Vermont Heritage Series** - "*Getting There From Here: Vermont's Transportation Heritage*" (26 min., Video V).
- **Metal Truss, Masonry, and Concrete Bridges in Vermont** Multiple Property Documentation Form:
Includes the following Historic Context:

Metal Truss, Masonry, and Concrete Bridges in Vermont (Property types described: Metal Truss Bridges, Masonry Arch Bridges, and Concrete Arch Bridges)

- **Maritime Resources of Vermont** Multiple Property Documentation Form (in process):
Includes the following Historic Context:
Lake Champlain Commercial Navigation, 1783-1941

INDUSTRY AND COMMERCE (1790 - 1940)

Theme Overview, Historic Context Summaries: Logging and Lumber Production; Textile Industry; Iron Industry; Paper Making; Small Water Powered Mill Production; Small Craft and Cottage Industries; Quarrying; Mining; Manufacture of Water Transport; Manufacture of Land Transport; Manufacture of Building Materials; Public and Private Utilities; Commercial Development in Urban Areas. (Machine Tool Industry, Manufacture of Agricultural Implements, Science and Invention, and Other Industries to be developed). Property Types List, Research Questions, Bibliography (20 pp.).

- **The Vermont Heritage Series** - "*Made in Vermont, Sold in Vermont: Our Industrial and Commercial Heritage*" (31 min., Video VI).
- **Historic Resources of the Mad River Valley** Multiple Property Documentation Form:
Includes the following Historic Context:
Industry and Commerce in the Mad River Valley, 1789-1942
- **Hydroelectric Generating Facilities in Vermont** Multiple Property Documentation Form (in final form but not formally submitted to the National Register):

Includes the following Historic Context:
Hydroelectric Power in Vermont, 1882-1941 (Property Types Described: Hydroelectric Power Generating Facility)
- **Maritime Resources of Vermont** Multiple Property Documentation Form (in process):
Includes the following Historic Context:
Lake Champlain Commercial Navigation, 1783-1941

TOURISM (1790 - 1940)

Theme Overview, Historic Context Summaries: Spas and Hotels; Seasonal Residents; Outdoor Recreational Industry. Property Types List, Research Questions, Bibliography (8 pp.).

- **The Vermont Heritage Series** - "*Two Centuries of Tourism in Vermont*" (23 min., Video VII).
- **Fish Culture Resources of Vermont** Multiple Property Documentation Form:
Includes the following Historic Context:
Fish Culture in Vermont, 1850-1943 (Property types described with registration requirements: Fish Culture Station)

WAR AND PEACETIME (1770 - 1945)

Historic Context Briefs: American Revolution; War of 1812; Civil War; Peacetime (8 pp.). Draft Historic Context Narrative, Bibliography: Modern Wars (5 pp.).

Additional Selected Sources of Historic Context Information:

Precontact Period:

State of Vermont. Vermont Division for Historic Preservation. Montpelier, Vt.

Prehistoric Cultural Heritage. Vermont Historic Preservation Plan. 1991. Prepared by Peter Thomas, University of Vermont, Consulting Archeology Program. Division for Historic Preservation, Agency of Development and Community Affairs, Montpelier, VT.

University of Vermont. Consulting Archeology Program.

Contributions to Understanding Vermont Prehistory: The Chittenden County Circumferential Highway Archeological Studies. Report No. 201. January 2001. DRAFT.

Cultural and Environmental Context for Prehistoric Archeological Resources Identified Within the Chittenden County Circumferential Highway Study Area: A Framework for Preparation of the National Register Multiple Property Documentation Form. 1991, revised 2001.

U. S. Department of Interior. National Park Service.

National Historic Landmark: Earliest Americans Theme Study

<http://www.cr.nps.gov/aad/nhl/eam1.htm>

Vermont Archaeological Society. Vermont Archaeological Society. Burlington, VT.

<http://www.vtarchaeology.org/>

Contact and Post-Contact Historic Period:

ARCCAT. A statewide database catalog of selected historical archival and manuscripts created by the Vermont Archival Network, it can be used to identify which Vermont archives have what records relating to specific towns, people or activities.

<http://www.state.vt.us/vhs/arccat/>

Arthur D. Little, Inc. **Historic Context and Preliminary Resource Evaluation of the Elizabeth Mine, South Strafford, Orange County, Vermont.** Prepared by Public Archeology Lab, Inc. for Arthur D. Little. May 2001 (context = copper mining in Vermont and eastern US)

Calloway, Colin. G. **The Western Abenakis of Vermont, 1600 - 1800.** Norman: University of Oklahoma Press, 1990. (context = contact period)

Grumet, Robert S. **Historic Contact. Indian People and Colonists in Today's Northeastern United States in the Sixteenth Century Through Eighteenth Centuries.** University of Oklahoma Press: Norman. 1995 (context = contact period)

Peters, Natalie D. **The American One-Room Schoolhouse: A Descriptive, Analytic Study of a Community Vernacular Building Artifact in Addison County, Vermont, 1790 – 1858.** Thesis for Master of Architecture. University of Washington. 1997. Copy on file, Division for Historic Preservation, Montpelier. (context = education)

Rolando, Victor. **200 Years of Soot and Sweat: The History and Archeology of Vermont's Iron, Charcoal, and Lime Industries.** Burlington, Vt.: Vermont Archaeological Society, 1992. (contexts = Vermont's iron, charcoal, and limestone industries)

State of Vermont. State Archives.
Guides and indices to archives and collections.
<http://vermont-archives.org/guide/aguide.htm>
<http://vermont-archives.org/archivecollect.html>

U. S. Department of Interior. National Park Service.
National Historic Landmark: Historic Contact Theme Study
<http://www.cr.nps.gov/aad/nhl/eaml.htm>. (context = contact period)

National Park Service National Historic Landmark Theme Studies
<http://www.cr.nps.gov/nhl/themes.htm> (context = various)

National Register Multiple Submission List
(contexts = numerous historic contexts and property registration requirements produced by other states, many that are relevant to Vermont and may serve as frameworks for research, site evaluation, and other purposes)
<http://www.cr.nps.gov/nr/research/mpslist.htm>

U. S. Department of Interior. National Park Service.
The National Register in digitizing the documentation on nearly 75,000 nominations. Multiple property nomination contexts have been digitized and are now available at www.nr.nps.gov. Work on the National Park Service's own listed properties is currently underway.

APPENDIX F

VT DIVISION FOR HISTORIC PRESERVATION

CRITERIA FOR GRANTING PERMITS UNDER 22 V.S.A. 14, Sections 764 and 782

The State Historic Preservation Officer, in consultation with the State Archeologist, will grant permits on the basis of the following criteria:

- The proposed undertaking does not exceed the permit applicant's experience and capabilities. The applicant must demonstrate that he/she has, or has access to, the experience, training, and technical capability to successfully undertake the project or activity level outlined in the permit application in accordance with current archeological standards and State preservation goals.
- The applicant has complied with the conditions of any previous permits issued to him/her and has demonstrated the ability to satisfactorily carry out work under any previous permits.
- In-place preservation of all or part of the property is not essential to the best interest of the public, the sportdiving community, and the scientific community.
- Currently available archeological information, technology and conservation measures exist to properly recover all or parts of the significant information contained in the property.
- Adequate funds and time have been committed to properly recover, analyze, interpret and conserve all or parts of the significant information contained in the property.
- The property is presently, or likely to be, endangered by human activities or natural processes.
- The property does not constitute a part of a State-owned historic or archeological site on land on which the State has reserved to itself the right to conduct historic and archeological research, as authorized by 22 V.S.A. 14, Section 762.

STATE OF VERMONT

Division for Historic Preservation

APPLICATIONS FOR PERMITS FOR FIELD INVESTIGATIONS (SITE SAMPLING PERMITS AND DATA RECOVERY)

APPLICATION INFORMATION

The Purpose of These Permits

These types of permits, granted only for the purpose of conducting historic and archeological research, require interdisciplinary efforts in project planning, execution, analysis and conservation as well as major commitments of personnel, time and money. Granting of these permits is contingent upon a scholarly research program, as specified in the permit application, that addresses not only the immediate problems of data recovery, analysis and interpretation, but also long-range concerns such as conservation and curation.

Allowed Activities Under These Permits

A Site Sampling Permit authorizes the limited recovery of particular or representative types of historic and archeological objects, materials and data, as specified in the proposed project plan and as a previously approved by the State Archeologist, for the purpose of identifying and evaluating an historic property.

A Data Recovery Permit authorizes the systematic recovery of all or parts of an historic property so that the maximum amount of scientific, historic, archeological and educational information is obtained.

PERMIT APPLICATIONS FOR FIELD INVESTIGATIONS APPLICATION INFORMATION

General Conditions for Permit Applicants

It is the responsibility of all applicants and their supporting institution, organization or personnel to record, catalog, analyze, stabilization and conserve all artifacts, materials and other categories of data recovered. Applicants shall furnish proof of their ability to accomplish these responsibilities. As appropriate to the proposed level of research and the known or potential significance of the historic property in question, permit applicants shall demonstrate that the proposed project:

- A) Provides for archeologist, historians, technicians and other individuals as necessary who are proficient in their respective fields of expertise and in the methods and

- techniques necessary to recover, analyze, interpret and conserve the data and who intend to employ these methods and techniques throughout the project.
- B) Provides for adequate personnel, facilities and equipment to fully implement the project goals outlined in the permit application in order that the project is successfully carried out to completion.
 - C) Provides for adequate consultation with scholars and other experts whose research interests or technical proficiencies enable them to contribute to the project goals and to project success.
 - D) Provides for immediate and continued stabilization of recovered artifacts and materials and their long-term conservation and curation.
 - E) Provides for the preparation of a final research report that meets accepted scholarly and scientific standards as set forth by the Division.
 - F) Demonstrates applicant's ability to address and follow through the State's concerns identified in the permit application and in the general permit provisions and conditions and to satisfactorily undertake field investigations under previous permit(s), if any.

The permit application shall be reviewed by the State Historic Preservation Officer and State Archeologist who may issue a permit forthwith, or require additional information, or request changes in the work plan, research design or performance schedule, or there may be other questions and concerns that may need to be discussed with the applicant. As part of the permit application, the permit applicant may be requested to meet with the State Historic Preservation Officer and the State Archeologist to discuss the proposed work plan and matters relating to the issuance of the permit.

Criteria for Granting Permits

The State Historic Preservation Officer, in consultation with the State Archeologist, shall grant permits on the basis of the following criteria:

- The proposed undertaking corresponds to the permit applicant's experience and capabilities as set forth in the completed permit application and supporting documentation. The applicant must demonstrate that he/she has or has access to the experience, training and technical capability to successfully undertake the project or activity level outlined in the permit application in accordance with state-of-the-arts archeological standards and State preservation goals.
- The applicant has complied with the conditions of any previous permits issued to him/her, if any, and has demonstrated the ability to satisfactorily carry out work under previous permits.

Permits for applications for Field Investigations will be additionally evaluated on the basis of the following criteria:

- The State Historic Preservation Officer and the State Archeologist have determined that in-place preservation of all or part of the property is not essential to the best interests of the public and the scientific community.
- They have determined that currently available theoretical background, technology and conservation measures exist to properly recover all or parts of the significant information contained in the property.

- They have determined that adequate funds and time have been committed to properly recover all or parts of the significant information contained in the property.
- The property is presently or likely to be endangered by human activities or natural processes.
- They have determined that the property does not constitute a part of a State-owned historic or archeological site on which the State has reserved to itself the right to conduct historic and archeological research, as authorized under Section 762 of 22 V.S.A. 14.

General Conditions If These Permits Are Granted

- A) These permits are exclusive. No other permit shall be issued concurrently for site sampling or data recovery of the same historic property.
- B) In situations where the Division has received more than one application for a site sampling or data recovery permit, the Division shall select the most qualified applicant on the basis of the proposed project plan and supporting documentation.
- C) No person shall hold both a Site Sampling and Data Recovery Permit at the same time and no person shall hold more than one (1) of these permits during the length of the stated permit period.
- D) These permits shall be issued for a twelve (12) month period unless specifically stated otherwise. If the proposed project is not actively pursued within the period for which the permit was issued, the Division may choose not to renew or extend the permit.
- E) Within thirty (30) days of expiration of the permit, whether or not the project has been completed, the permit holder shall submit a progress report prior to requesting a permit renewal or extension as well as an updated research proposal. Both the project report and the progress report shall follow the guidelines provided by the Division.
- F) Applicants for these permits shall have a qualified archeologist, as defined by the minimal criteria established by the Society of Professional Archeologist and as approved by the Division, involved in the project on a full-time basis who shall be designated the Project Supervisory Archeologist. The Supervisory Archeologist is responsible for preserving the archeological values of the data in the course of recovery, for the data analysis and interpretation and for the preparation of the archeological portions of the final report. The Supervisory Archeologist will be onsite at all time during the field phase of the project.
- G) Applicants for these permits shall obtain formal institutional support and commitment for these activities, as necessary, in order to guarantee the availability of appropriate facilities and personnel for conservation, analysis and other necessary purposes.
- H) Permits obtained by misrepresentation or fraud are null and void.
- I) Special Conditions, as appropriate, will be noted in the permit at the time of issuance.

If you have any questions about the permit application, the permit process conditions, please contact the State Archeologist at the Division for Historic Preservation, National Life, Drawer 20, Montpelier, VT 05620-0501 (802) 828-3050, or Giovanna.peebles@state.vt.us

Please fill out the attached application form and submit it together with the research proposal and all other supporting documentation to the Division at the above address.

Division for Historic Preservation

State of Vermont

**APPLICATION FOR SITE SAMPLING PERMIT
AND
DATA RECOVERY PERMIT**

(Please Type All Entries)

1. Name of Applicant: _____

Address: _____
Telephone: _____ Date: _____
Institutional Affiliation: _____

Please attach an up-to-date vitae indicating all archeological experience, if any.)
Name of Consulting or Supervisory Archeologist (if different than applicant):

Address: _____
Telephone: _____ Date: _____
Institutional Affiliation: _____

Please attach an up-to-date vitae for Supervisory Archeologist.)
Name of Supporting Institution(s) or Organization(s): _____
Address: _____
Name of Contact Person: _____
Telephone: _____

(Please attach vitae for all relevant personnel.) (Note: APPLICANT SHALL ATTACH LETTER OF INSTITUTIONAL SUPPORT AND COMMITMENT FOR THIS WORK. Letter should also include information such as amount of cash contribution or nature and value of donated services, and, if applicable, number of people assigned to project, number of man-hours committed to project, and list of available equipment and laboratory facilities, if appropriate.)

ALL APPLICANTS SHALL COMPLETE ITEMS 2 - 9 BELOW

2. Name and Date of Property (if known): _____

3. Summary of Historic Research: _____

-
4. Summary of Property's Research Value: _____
 5. Summary of what the proposed project is expected to contribute to present knowledge:

 6. In addition to the research potential of the project, provide (in summary form) reasons for why the project should be undertaken at the present time:

 7. Provide exact location of the historic property:
a) in narrative form, b) by longitude and altitude, and c) on a USGS map (submit map as an addendum to the research proposal).
This information will be confidential and is necessary to protect the permittee's interests:

 8. Proposed beginning date of field work: _____
Proposed ending date of field work: _____
Date of submission of completion report: _____
 9. Submit concurrent with these forms a comprehensive research proposal appropriate to the level of work that is being proposed which will at minimum:

A) Discuss the present physical condition of the property; its exact location; a description of its present physical setting.

B) Include a background history of the property including relevant archival and literature research; relevant historic or archeological research previously carried out by other within the project area; previous research by the applicant or by others relevant to particular data recovery strategies or methods that will be employed. Provide full list of all references and archival sources studied or cited.

C) Discuss the historic and archeological significance of the property, its potential research value in terms of all cultural information and data categories that are expected to exist, and the project's potential contributions to our understanding of human behavior, prehistory or history.

D) Discuss the aims and justification of the proposed undertaking (if there are any threats to the property, indicate their nature and their immediacy).

E) Discuss all research problems that will be addressed and the data samples that will need to be recovered towards those ends. Justify all data categories that will be collected and clearly specify those data that will not be collected and why they will not be collected.

F) Specify in as much detail as possible the techniques and strategies that will be employed in the course of recovering different sets of data; describe all field operation procedures, recording techniques, etc. Append to research proposal a detailed budget outline; a list of all available equipment; the name of all project personnel, their assigned tasks, and their experience levels. Submit Vitae for all key personnel.

G) Specify a time frame for the project, from initiation of field work to completion of final report.

H) Describe and list all supporting institutions and facilities and specify their respective financial, technical, personnel or other contribution.

I) Discuss in detail the analytical phase of the proposed project, including projected conservation and analysis strategies and facilities, consultants and scholars that will be employed to implement this aspect of the project.

J) Discuss the format and proposed contents of the completion report and how results of the project will be disseminated to appropriate institutions, scholars and the interested public.

K) Discuss alternatives for short and long term curation, storage and maintenance of the recovered data and materials and potential institutional interest in public exhibition and education programs.

L) Provide recommendations for ensuring the safety and security of the property, both in the course of and after the data recovery program.

With my signature below, I acknowledge that I have read and understand Section 764 , or 782, as appropriate, of the Vermont Historic Preservation Act governing field investigations of historic properties on State-owned land and agree and abide by the law and the conditions and provisions prescribed to carry out he law in the best interest of the citizens of Vermont.

The Division, in issuing a permit, accepts no legal responsibilities for any damage, direct or indirect, of whatever nature and by whomever suffered arising out of activities carried out under permit. The permit holder fully assumes the risk of activities relating to carried out under this permit and assumes full responsibility for determining the potential risks and dangers.

Received By: _____ Signature of Applicant: _____

Date: _____ Date: _____

APPENDIX F

VT DIVISION FOR HISTORIC PRESERVATION

CRITERIA FOR GRANTING PERMITS UNDER 22 V.S.A. 14, Sections 764 and 782

The State Historic Preservation Officer, in consultation with the State Archeologist, will grant permits on the basis of the following criteria:

- The proposed undertaking does not exceed the permit applicant's experience and capabilities. The applicant must demonstrate that he/she has, or has access to, the experience, training, and technical capability to successfully undertake the project or activity level outlined in the permit application in accordance with current archeological standards and State preservation goals.
- The applicant has complied with the conditions of any previous permits issued to him/her and has demonstrated the ability to satisfactorily carry out work under any previous permits.
- In-place preservation of all or part of the property is not essential to the best interest of the public, the sportdiving community, and the scientific community.
- Currently available archeological information, technology and conservation measures exist to properly recover all or parts of the significant information contained in the property.
- Adequate funds and time have been committed to properly recover, analyze, interpret and conserve all or parts of the significant information contained in the property.
- The property is presently, or likely to be, endangered by human activities or natural processes.
- The property does not constitute a part of a State-owned historic or archeological site on land on which the State has reserved to itself the right to conduct historic and archeological research, as authorized by 22 V.S.A. 14, Section 762.

APPENDIX G

Advisory Council on Historic Preservation

Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites

June 17, 1999

(see <http://www.achp.gov/archguide.html>)

Archeological Sites and Their Treatment

The nature and scope of treatments for such properties should be determined in consultation with other parties, but in ACHP's experience they generally need to be guided by certain basic principles:

- The pursuit of knowledge about the past is in the public interest.
- An archeological site may have important values for living communities and cultural descendants in addition to its significance as a resource for learning about the past; its appropriate treatment depends on its research significance, weighed against these other public values.
- Not all information about the past is equally important; therefore, not all archeological sites are equally important for research purposes.
- Methods for recovering information from archeological sites, particularly large-scale excavation, are by their nature destructive. The site is destroyed as it is excavated. Therefore management of archeological sites should be conducted in a spirit of stewardship for future generations, with full recognition of their non-renewable nature and their potential multiple uses and public values.
- Given the non-renewable nature of archeological sites, it follows that if an archeological site can be practically preserved in place for future study or other use, it usually should be (although there are exceptions). However, simple avoidance of a site is not the same as preservation.
- Recovery of significant archeological information through controlled excavation and other scientific recording methods, as well as destruction without data recovery, may both be appropriate treatments for certain archeological sites.
- Once a decision has been made to recover archeological information through the naturally destructive methods of excavation, a research design and data recovery plan based on firm background data, sound planning, and accepted archeological methods should be formulated and implemented. Data recovery and analysis should be accomplished in a thorough, efficient manner, using the most cost- effective techniques practicable. A responsible archeological data

recovery plan should provide for reporting and dissemination of results, as well as interpretation of what has been learned so that it is understandable and accessible to the public. Appropriate arrangements for curation of archeological materials and records should be made. Adequate time and funds should be budgeted for fulfillment of the overall plan.

- Archeological data recovery plans and their research designs should be grounded in and related to the priorities established in regional, state, and local historic preservation plans, the needs of land and resource managers, academic research interests, and other legitimate public interests.
- Human remains and funerary objects deserve respect and should be treated appropriately. The presence of human remains in an archeological site usually gives the site an added importance as a burial site or cemetery, and the values associated with burial sites need to be fully considered in the consultation process.
- Large-scale, long-term archeological identification and management programs require careful consideration of management needs, appreciation for the range of archeological values represented, periodic synthesis of research and other program results, and professional peer review and oversight.

Resolving Adverse Effects through Recovery of Significant Information from Archeological Sites

Under 36 CFR 800.5, archeological sites may be "adversely affected" when they are threatened with unavoidable physical destruction or damage. Based on the principles articulated above, ACHP recommends that the following issues be considered and addressed when archeological sites are so affected, and recovery of significant information from them through excavation and other scientific means is the most appropriate preservation outcome.

If this guidance is followed, it is highly unlikely that ACHP would decide to enter the consultation process under 36 CFR 800.6 or raise objections to the proposed resolution of adverse effects in a given case, unless it is informed of serious problems by a consulting party or a member of the public.

1. The archeological site should be significant and of value chiefly for the information on prehistory or history it is likely to yield through archeological, historical, and scientific methods of information recovery, including archeological excavation.
2. The archeological site should not contain or be likely to contain human remains, associated or unassociated funerary objects, sacred objects, or items of cultural patrimony as those terms are defined by the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001).
3. The archeological site should not have long-term preservation value, such as traditional cultural and religious importance to an Indian tribe or a Native Hawaiian organization.

4. The archeological site should not possess special significance to another ethnic group or community that historically ascribes cultural or symbolic value to the site and would object to the site's excavation and removal of its contents.
5. The archeological site should not be valuable for potential permanent in-situ display or public interpretation, although temporary public display and interpretation during the course of any excavations may be highly appropriate.
6. The Federal Agency Official should have prepared a data recovery plan with a research design in consultation with the SHPO/THPO* and other stakeholders that is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, and the Advisory Council on Historic Preservation's Treatment of Archeological Properties: A Handbook. The plan should specify: (a) The results of previous research relevant to the project; (b) research problems or questions to be addressed with an explanation of their relevance and importance; (c) the field and laboratory analysis methods to be used with a justification of their cost-effectiveness and how they apply to this particular property and these research needs; (d) the methods to be used in artifact, data, and other records management; (e) explicit provisions for disseminating the research findings to professional peers in a timely manner; (f) arrangements for presenting what has been found and learned to the public, focusing particularly on the community or communities that may have interests in the results; (g) the curation of recovered materials and records resulting from the data recovery in accordance with 36 CFR part 79 (except in the case of unexpected discoveries that may need to be considered for repatriation pursuant to NAGPRA); and (h) procedures for evaluating and treating discoveries of unexpected remains or newly identified historic properties during the course of the project, including necessary consultation with other parties.
7. The Federal Agency Official should ensure that the data recovery plan is developed and will be implemented by or under the direct supervision of a person, or persons, meeting at a minimum the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738- 44739).
8. The Federal Agency Official should ensure that adequate time and money to carry out all aspects of the plan are provided, and should ensure that all parties consulted in the development of the plan are kept informed of the status of its implementation.

9. The Federal Agency Official should ensure that a final archeological report resulting from the data recovery will be provided to the SHPO/THPO*. The Federal Agency Official should ensure that the final report is responsive to professional standards, and to the Department of the Interior's Format Standards for Final Reports of Data Recovery Programs (42 FR 5377-79).
10. Large, unusual, or complex projects should provide for special oversight, including professional peer review.
11. The Federal Agency Official should determine that there are no unresolved issues concerning the recovery of significant information with any Indian tribe or Native Hawaiian organization that may attach religious and cultural significance to the affected property.
12. Federal Agency Officials should incorporate the terms and conditions of this recommended approach into a Memorandum of Agreement or Programmatic Agreement, file a copy with ACHP per Sec. 800.6(b)(iv), and implement the agreed plan. The agency should retain a copy of the agreement and supporting documentation in the project files.

APPENDIX H

Detailed Supplementary Guidance for Phase I Investigations.

I. Phase I Research Design Checklist.

___ 1. Objectives of the investigation.

a. Objectives will vary depending on the nature and size of the project, expected site types, proposed impacts, and other factors, but they will minimally include the identification of significant sites that may be impacted by the project.

___ 2. Project's area of potential effects (see Section 3.2.).

___ Describe the locations and extent of archeologically sensitive areas within the project's area of potential effects and describe why these areas are sensitive in terms of the VTSHPO's environmental predictive model, any applicable supplementary predictive model, background research, recorded sites in project area, and/or other relevant factors.

___ Indicate the sensitivity ranking on the VTSHPO's predictive model.

___ 3. Number of acres/hectares.

___ In project area

___ In study area.

___ 4. Describe expected results of the study.

___ Based on the precontact or historic sensitivity of the project area, discuss what kinds of significant sites are expected to be found and explain their potential significance:

___ Expected number of sites, expected site size, location, age, condition, and general characteristics of any anticipated or previously recorded sites and relevant important information about comparable sites.

___ Using the Vermont Historic Preservation Plan, other historic contexts, and the priority research topics in Section 4.5.2. as framework, assess how the expected site types will enhance the contexts and significantly contribute to our knowledge of Vermont precontact or post-contact history. What expected characteristics make the expected sites potentially National Register eligible? What are we expected to learn? Are there comparable sites that can inform this discussion? Provide specific, significant research questions relating to the geographic area and expected time period to support this discussion (see Section 4.0.). Use historic contexts to frame this discussion.

___ Familiarity with other investigations conducted in similar environmental contexts in Vermont and their results, including local and regional overviews and summaries of site investigations, site types, site sizes, and an understanding of site characterizations at different phases of study, is essential in developing this part of the Research Design.

___ 5. Kinds of data that are likely to be found in such sites.

___ Describe the specific research questions that these data can help answer.

___ **6. Sampling strategy and field methods.**

___ Use those most appropriate for locating the expected site types and data categories.

___ This includes a discussion about anticipated site size and relative distribution of data categories based on expected site type and the most suitable field methods that should be applied. For example, identifying some types of historic archeological sites and addressing relevant research questions may require different field methods than precontact sites (see Section 5.1.).

___ **7. Categories of data that will be collected in the field.**

___ Base this discussion on the types of sites that are expected.

___ Describe methods of analysis and interpretation.

___ **8. Expected effect of the project.**

___ Expectd effects on significant archeological sites that are likely to exist.

___ **9. Possible outcomes of the Phase I investigation.**

___ Possible treatment alternatives, for example, site avoidance, additional background research, additional field investigation, or combination of options.

___ **10. Some limited additional background research or field investigation.**

___ May be warranted to expeditiously evaluate a site's significance, or lack of significance, at this phase.

___ Examples of situations in which this may be worthwhile involve historic archeological sites, a very small landform that severely proscribes a site's boundaries, and isolated finds in subsurface test pits. In such instances, describe what additional investigation or research might involve (for example, additional bracketed sub-surface test pits, larger test units, additional background research, or a combination of methods).

Note that exercising this option is solely the decision of the project sponsor.

II. Supplementary Guidance for Background Research.

1. Environmental background research:

Conduct pertinent environmental background research (for example, surficial and bedrock geology, geomorphology, ecology, soils, etc.) to establish the project area's environmental context(s) in terms of how it relates to the types and characteristics of expected significant sites and the methodologies that will be used to locate them. The extent and depth of the environmental background research depends on the scale of the project and must be directly tied into the Research Design.

Purposes:

- Establish the environmental context(s) of the project area and how it affects the potential existence, characteristics, and condition of the significant site types that may exist within in it.
- Identify special environmental characteristics that may influence the field methodologies that should be employed to find particular sites (such as floodplain and other depositional settings).

2. Documents background research:

Conduct pertinent archival, literature, and files research. The extent and depth of the documents background research depends on the scale of the project and must be directly tied into the Research Design.

Purposes:

- Identify the approximate or exact locations and characteristics of recorded archeological sites within the general project area.
- Identify past and present land use patterns.
- Establish historic context(s) of the project area and potentially significant sites that may exist in it.

Conducting Documents Background Research:

As appropriate to the research design, research may include:

- Vermont Archeological Inventory
- Historic maps (See **Appendix J** for some selected maps available on the internet)
- Town histories
- State and county gazetteers
- Historic photographs
- Town files
- State Archeologist's Subject files
- Vermont Archeological Collections Analysis files
- Vermont Historic Sites and Structures Survey
- National Register files
- Historic Context files
- Additional files at the VTSHPO's Resource Center (see **Appendix D**)
- Primary and archival documents
- Other relevant information

III. Detailed Guidance for Completing the Phase I End of Field Letter.

The Phase I End of Field Letter should include the following information. End-of Field Letters used as a basis for final project reviews and decision-making should be more detailed and comprehensive than those intended as status reports. If no site is found, or if a site is found but recommended to be not significant, the Short Report Format should be used.

1. ___Project sponsor and all statutory jurisdictions within which the project development falls.
2. ___Dates of field work and summary of the results of the field work.
3. ___Detailed description of the proposed project and potential impacts to sites.
4. ___Detailed description of the APE.
5. ___Hand-annotated, dated site plans, sketches, and all applicable maps to help clarify findings and recommendations.
 - a. ___The following areas should be mapped: the APE, areas tested, specific locations of test pits or other sampling units, site locations and estimated boundaries as known, sensitive areas to be avoided, and other relevant information.

6. ___ If a site is found, provide the VAI site number on all relevant maps.
7. ___ Any information or inferences about the site's potential or apparent significance using the information described in Section 4.0.
8. ___ Description of the anticipated analysis and report writing schedule.
9. ___ Specific recommendations for avoidance or other treatment, additional research, additional field investigation, construction redesign, and so forth. If recommendations cannot be made at this stage, the letter report must indicate this.
 - a. ___ If applicable, identify any special project design and pre-construction requirements to avoid and protect site such as fencing site off prior to land clearing, perc testing, and/or construction.
10. ___ Completed Vermont Archeological Inventory form and map (copy of USGS map) with site mapped on it, if a site is found.

IV. Detailed guidance for Short Report Format.

Instead of repeating some of the same elements as found in the Scope of Work, this and other relevant, existing documents should be referenced in the text and attached as an Appendix.

1. Report cover page that includes:

___ Report Title
___ Town/ County
___ Name of project
___ Name of consulting archeology organization
___ Project sponsor
___ Date of report

2. ___ Abstract (see Phase I report writing requirements).
3. ___ Number of acres/hectares in the area of potential effects.
4. ___ Number of acres/hectares in the study area.
5. ___ Detailed description of the proposed project and APE.
6. ___ All statutory jurisdictions within which the project development falls.
7. ___ Dates of the field work.
8. ___ Brief description of the kinds of significant sites that were expected to exist in the study area.
9. ___ Predictive model checklist or narrative summary with scoring.
10. ___ Summary of the results of the field work.
11. ___ Description of methodology employed:
 - ___ background research
 - ___ surface collection
 - ___ subsurface shovel testing (including # and size of units)
12. ___ If no site was found, explain this result using the Phase I Research Design expectations and predictive model as basis for discussion.
13. ___ If a site was found and recommended to be not potentially significant, explain this conclusion.
14. ___ Hand-annotated, dated site plans, sketches, and all applicable maps to help clarify findings and recommendations.
 - ___ The following areas must be mapped: the APE, areas tested, specific locations of test pits or other sampling units, and sensitive areas to be avoided.

15. ___ Topographic (or orthophoto) map showing area of study as a polygon, square, or rectangle with UTM coordinates (or VT State Plane Coordinates NAD83).
16. ___ Completed report database form (submitted electronically).
17. ___ Appendices:
 - ___ Copies of field records, such as test pit profiles, and artifact inventory (since no site or no significant site was found, the inventory should include only non-significant cultural materials that will be discarded).
 - ___ Scope of Work
 - ___ MOA for project
 - ___ Other relevant document
 - ___ Completed Vermont Archeological Inventory form and map (copy of USGS map or Orthophoto) with site mapped on it, if a site is found.

V. Detailed guidance for Phase I Investigation Reports.

1. Abstract.

The Abstract should be limited to one (1) page. The Abstract is a factual summary of the contents and conclusions of the report and should emphasize new information. It is not an introduction to the report nor is it an outline of the report's contents. The Abstract should include the following information:

- ◆ Project title, name of Principal Investigator and organization conducting the investigation, specific statutory jurisdictions, project sponsor, specific state or federal government agency (if any), archeological consultant, and date of report.
- ◆ Town (or city) and county. If in multiple towns or multiple counties, list all towns and counties involved.
- ◆ Phase of study.
- ◆ Specific project location.
- ◆ Size of project area.
- ◆ Number of acres [hectares] surveyed.
- ◆ Dates of field work.
- ◆ Brief description of research design, methods used (i.e. background research, surface collection, subsurface shovel testing, including # and size of units, subsurface excavation units, including # and size of units, # and size of backhoe trenches, etc.), and any special analytical techniques (i.e. C14 dating, geomorphological analysis, etc.).
- ◆ Brief description of results including: number of sites found (identify them as precontact or historic period); VAI site numbers; site age; cultural affiliation; relevant historic contexts; estimated site size; data categories; site function; integrity; research potential; potential or demonstrated site significance (or lack of it).
- ◆ Recommendations about the site's eligibility (or lack of) for inclusion in the State and National Registers.
- ◆ Potential impacts to site or other outcomes.
- ◆ New information resulting from the investigation including how site will contribute to our knowledge of Vermont's precontact or post-contact history.
- ◆ Brief management recommendations.

- ◆ Topographic (or orthophoto) map showing area of study as a polygon, square, or rectangle with UTM coordinates (or VT State Plane Coordinates NAD 1983).

2. Table of Contents.

3. Management Summary and Recommendations.

Recommendations to the project sponsor for protecting, treating, mitigating impacts, or otherwise managing a site are generally included in the End of Field Letter. Nonetheless, such recommendations should be repeated at the beginning of the report, especially if the report is used for decision-making by project managers and VTSHPO, or if the project development has not yet commenced. The management summary and recommendations should clearly explain what actions, if any, must be taken by the sponsor to protect and preserve a site, obtain additional information, or mitigate project impacts, among various potential recommendations.

If site avoidance is recommended at this stage, specific recommendations to preserve and protect the site during and after project construction must be presented including, but not limited to, design and mapping of a not-to-be disturbed "buffer zone" or conservation area (s), temporary fencing during construction or permanent fencing, placement of filter fabric, and so forth.

If the report is written after the treatment actions have occurred (i.e. after construction has commenced), describe how the site was, in fact, treated.

4. Introduction.

- a. Describe the proposed project and APE in detail.
- b. Indicate the total APE of the project in acres/hectares.
- c. Indicate total number of acres [hectares] surveyed.
- d. Provide copy of a USGS map with project area marked and a larger scale map of the project area and proposed project.
- e. Indicate project sponsor, names of any state and federal agencies (if any), and all statutory jurisdictions within which the project falls.
- f. Indicate dates of the field study.
- g. Discuss disposition of the field notes and artifacts and any other data collected.

5. Research Design.

- a. Describe the Research Design including objectives.
- b. Describe any constraints on the field investigation, for example, limitations of access, poor ground visibility, and any other environmental limitation such as bad weather conditions.

6. Environmental and Historic Background Research.

Extent of this discussion should be based upon the intensity of research required by the Research Design. The background study must be explicitly tied into the project area.

- a. Project area should be placed in its regional setting with respect to the known precontact, ethnohistoric, and historic culture history and historic contexts. The text must address in detail how the results of the investigation contribute to or revise relevant historic contexts, priority research topics, and known property types.
- b. Discuss the expected sensitivity of the project area and provide the sensitivity scoring from the VTSHPO predictive model.
- c. Discuss the kinds of significant sites that were expected in reference to what was found.
- c. Identify individuals who provided used information, their addresses, and methods used to locate these persons (in some cases, it may be appropriate to include this information in an Appendix).

7.Results.

- a. Provide detailed description of sampling strategies and field methodology, including the intensity of coverage, justification for methodology, and how the actual results compared to the expected results. If the methods actually used differ from those outlined in the Research Design, explain why. Justify in-field modifications of methods and research strategy.
- b. Discuss how the results met the objectives.
- c. Discuss boundaries of study area; provide map(s) of project area showing areas investigated and not investigated, and locations of surface survey and collection, sub-surface testing, backhoe trenches, etc.
- d. Using the environmental fields in the predictive model, provide feedback about the site's orientation to these different environmental features. Explain how the study results confirm, refine, modify, or otherwise affect the sensitivity model.
- e. Discuss each archeological site in the study area; reference the VAI number, although the site name can be used in the discussion. Describe number and kinds of sites. All sites should be described as systematically and fully as possible based on the available information at this phase of study. In many cases, sites are avoided after this phase of study and there may be no further opportunity to study these sites.
 1. Describe each archeological site in as much detail as possible including environmental and historic context, integrity, site boundaries, features, known or potential data categories, function, structure, and so forth. Address both individual sites and stratigraphic, cultural, and/or environmental relationships, or lack thereof, among and between sites.
 2. Discuss nature and extent of previous natural or historic disturbances, if any. Provide soil descriptions and discuss and interpret soils information in relation to the archeological sites identified.
 3. Include important and representative soil profiles in report as an Appendix.
- f. Provide precise site locations using GPS positioning and, as known at this phase of study, spatial boundaries of specific sites. All sites must be referred to by their Vermont Archeological Inventory site number.
- g. Provide scaled, detailed site maps and photographs of site's environmental setting, testing areas, features and structures, etc.
- g. Discuss and describe project areas examined that did not contain

- properties.
- h. Describe and discuss laboratory methods and analytical techniques and the results of these analyses. Provide quantitative and qualitative summaries of artifacts, features, and other data recovered during the field investigations and relevant data viewed in collections. Provide artifact distribution maps and present other analytical summaries in narrative, chart, graph, table, and/or mapping formats. Identify and discuss C14 dates, if obtained, and other specific analyses.
 - i. Discuss threats to properties.
 - j. Describe and discuss the results of the investigation including: description and significance of archeological sites in relation to historic context(s), as known from this phase of study; if known, describe the site's integrity and data potential in comparison to the ideal characteristics (or registration requirements) of the site type(s), as established by background research. Refine and revise the historic context (s) to which the site belongs based on the new information. Discuss apparent or potential relationships among and between sites, or apparent lack of such relationships; site comparisons should address cultural, stratigraphic, and environmental factors.
 - k. Using the tools in Section **4.0.**, discuss in detail the site's potential or actual significance and how it meets or may meet the National Register criteria.
 - l. Discuss new information that may have resulted from the investigation and how this information contributes to our understanding of local or regional precontact or post-contact history.
 - m. Discuss any new environmental, geomorphological, and other non-cultural data and insights obtained in the course of the study.

8. Conclusions and Recommendations.

- a. Summarize the potential the significance of the archeological site specifically addressing the National Register criteria, if possible at this phase of study. The rationale for significance as well as non-significance should be clearly stated.
- b. Provide recommendations.
 1. Describe the expected or potential direct impacts of the proposed project to archeological sites. Describe and discuss potential indirect impacts if these can be expected to occur.
 2. Discuss management recommendations for mitigating potential adverse impacts, if appropriate, at this stage of project planning. Management options include, but are not limited to, site avoidance, additional research, and gathering additional information through field investigations. If site avoidance is recommended at this stage, specific recommendations to preserve and protect the site during and after project construction must be presented, including but not limited to design of a not-to-be disturbed "buffer zone" or conservation area (s), fencing (temporary during construction or permanent), and so forth.
 3. If such a recommendation is being made, provide detailed recommendations for gathering additional information to evaluate the site. Describe possible methodologies and techniques that might be employed to obtain this additional

information. If appropriate, make recommendations for gathering additional information to enhance project planning, for example, specific environmental, archival or laboratory research.

4. If appropriate to the type of project and required by the Scope of Work, provide a long-term management plan for the project area and the known and potential archeological sites within it.

9. References Cited.

10. Appendices, as appropriate.

- a. In some cases, to protect sites or at the request of the landowner or other interested party, it may be appropriate to exclude specific site location information from the main text and instead include it in a Confidential Appendix. All confidential maps, appendices, etc., should be clearly marked "*Not For Public Distribution in accordance with 1 VSA 5 section 317(20) and 22 VSA 14 section 761.*" Such confidential site location information should be distributed only to the project sponsor, regulatory agencies, and the VTSHPO except on a need-to-know basis. (see Section 5.7.)
- b. Where appropriate, append relevant complimentary documentation, for example, predictive model checklist, End of Field Letter, Scope of Work, Memorandum of Agreement, or Programmatic Agreement.
- c. Copies of C14 laboratory results should be submitted in the report appendix.
- d. Field record forms, artifact catalogs, and similar technical documentation should be included in the appendix. When appropriate, this can be assembled in a second, separate volume. NOTE: Copies of reports distributed to landowners, communities, agencies, and other interested parties may not warrant inclusion of this technical information.

VI. Supplementary Detailed Guidance for Phase II Investigation Reports.

1. Management Summary and Recommendations.

The management summary and recommendations should clearly explain what actions, if any, must be taken by the sponsor to protect and preserve a site (before, during, and after construction), obtain additional information, and mitigate project impacts, among various potential recommendations.

- a. Provide detailed recommendations to the project sponsor for protecting, treating, mitigating impacts, or otherwise managing a National Register eligible site. If this information was previously presented in an End of Field Letter, repeat it here. If there is new information that complements or supplements what was presented in the End of Field letter, provide that new information here.
- b. If whole or partial site avoidance is recommended for a site, discuss detailed site preservation requirements for each site before, during, and after construction to ensure that the site is not inadvertently impacted. Such requirements may include but are not limited to temporary or

permanent fencing, special plantings and landscape considerations, special construction specifications, pre-construction on-site meetings with contractors and sub-contractors, permanent conservation easements , and so forth.

- c. If data recovery of all or part of a site is recommended as the mitigation option, provide recommendations for a data recovery program. Note: The Data Recovery Plan for Phase III investigation does not need to be included as an actual component of the Phase II report but can be if required by the Phase II Scope of Work.

2. Introduction.

- a. Provide a summary of the Phase I results. The Phase I Abstract can be used for this purpose.
- b. Describe project objectives specifically as they relate to Phase I findings.

3. Background research.

Discuss in detail comparable site information from Vermont and, if appropriate, regional examples of similar investigated site types to support the site's significance.

4. Results.

- a. Provide detailed maps of the site showing specific testing areas and estimated or established site boundaries.
- b. Analyze the site's integrity in relation to the level of integrity needed to contribute to our understanding of the relevant historic context(s).
- c. Discuss how the data collected and interpreted in Phase I relate to the Phase II results, site evaluation, and interpretation of findings.
- d. Discuss data categories, features, deposits, structures, etc., that were discovered or may be expected at this type (s) of site. Discuss specific important research questions that can be investigated using known or expected data categories.
- e. Evaluate the site's significance in accordance with the tools provided in Section **4.0**. If the site is precontact, use the matrix in Section **4.4**. If the site pertains to the historic period, apply the analyses in Section **4.5**.
- f. Develop, or refine an existing, historic context(s) relating to the site type(s) if the site meets the National Register criteria and VTSHPO's significance considerations. Discuss the site in relation to its historic context(s) and describe its significance to our understanding of the historic context. Identify ideal characteristics of the site type(s); compare the site's characteristics with those ideally expected for this site type; describe how this site meets (or does not meet) the ideal; and describe specific registration requirements met or not met by this property type.

5. Conclusions.

- d. Summarize the site's significance, or lack of significance. Each of the applicable National Register criteria for evaluating significance must be explicitly discussed in detail (see Section **4.1**). The rationale for site significance, or non-significance, must be clearly stated and supported (see Sections **4.4** and **4.5**).

- e. If more than one site was evaluated, provide a list of sites that 1) meet the criteria for inclusion in the National Register and indicate the criteria met by each site; and 2) are not eligible for the National Register.
- f. Discuss the impacts likely to occur to each site if the project proceeds and summarize the management recommendations for mitigating impacts.

6. Appendices.

- a. As appropriate, attach a revised Vermont Archeological Inventory form that includes information developed during Phase II.
- b. As appropriate, attach a National Register nomination for the site.
- c. As appropriate, attach the Data Recovery Plan.
- d. Attach a copy of the Memorandum of Agreement or Programmatic Agreement if one has been executed for the project.

APPENDIX I

VERMONT ARCHEOLOGICAL INVENTORY FORM

KEY MINIMUM FIELDS THAT MUST BE ENTERED ARE IDENTIFIED BY **
(# 1A, 2A, 3, 5A, 5B, 7, 13, 25A, 26, 27, 28, 29, 37).**

ALL FIELDS SHOULD BE COMPLETED FOR BOTH PRECONTACT AND HISTORIC PERIOD SITES UNLESS INDICATED OTHERWISE.

A PAPER COPY OF THIS FORM MUST BE SUBMITTED. INCLUDE TOPOGRAPHIC MAP COPY WITH THE SITE MAPPED AS A POINT OR SHAPE TO ALLOW CHECKING BY DHP.

The DHP will notify you as soon as this form can be completed and submitted via web server. Until such time, the DHP expects a paper record submitted to the DHP in accordance with the *Guidelines*.

**** 1. A. Site No. [text field: must be formatted w/caps: VT- COUNTY ABBREV -] _____

1. B. Site segment or component [text field: rarely used, examples: a district; or a linear site such as the Crown Point Road with a single site number but many Segments. A, B, C, D, etc.]

**** 2. A. Site Name [text field: common name of site, sometimes property name, landowner name, nickname used by survey crew, etc.]

2. B. Other site number

pick list:

USFS

Field #

Other

Not Applicable

**** 3. Town [pick list using list of towns]

4. County [pick list using list of counties]

**** 5. A. Site Type

pick list:

On land:

- Precontact**
- Contact**
- Historic**
- Precontact & Historic**

Underwater

- Precontact**
- Contact**
- Historic**
- Precontact & Historic**

Not assigned

5. B. Specific site type (can pick more than 1):

Precontact or Contact:

- Open air**
- Cave/rockshelter**
- Quarry**
- Petroglyph**
- Burial**
- District**
- Other (specify):**
- Not Applicable**

Historic Period:

- Cellar hole**
- Cellar holes**
- Historic dump**
- Dam**
- Well**
- Stone Foundation**
- Stone Wall**
- Road**
- Railroad**
- Standing structure**
- Stone cairns, piles or structures**
- Ruin**
- Stone chamber**
- Structural debris**
- Subsurface only**
- Underwater feature**
- Shipwreck**
- District**
- Other (specify):**
- Not applicable**

5. C. Cultural Affiliation of Historic Period site

Pick list:

- Native American**
- Euro-american**
- Combined Native American/ Euro-american**
- Other ethnic group (specify: i.e. African-american, asian-american)**

6. Site Located by

pick list:

- DHP staff**
- NRCS**
- USFS**
- Consulting organization (name)**
- CRM professional (if NOT in an organizational capacity)**
- Independent Researcher**
- Collector**
- Informant**
- Other (specify)**

**** 7. Date reported on this form **[4 digit year field]** / /

8. Name/Address of reporter [text fields]

phone #
email

9. Name of Person (s) who found the site **(if different than reporter and if known/address(es))** [text fields]

phone #/
email

10. Date site was Found:

[4 digit year field] / /
unknown

11. A. Primary Project Sponsor [**primary funding agency/organization/ entity**]

pick list:

- DHP**
- VAOT**
- NRCS**
- USFS**
- Other fed agency:**
 - Name of agency:**
- State agency**
 - name of agency:**

- Private developer**
- Utility**
- Non-profit**
 - Name of non-profit:**
- Academic Institution**
- Multiple**
 - Names:**
- Not applicable**

11.B. Statutory jurisdictions under which the site was found

pick list:

- Section 106
- Act 250
- 22 VSA 14
- Multiple
- Other
- Not applicable

If Multiple: [text field: Section 106/Act 250/22 VSA 14 combinations]

12. Project Name (if applicable: typically will be a regulatory or research project) [text field]

****** 13. Study Phase**

pick list:

- Field Inspection**
- Archeological Resources Assessment**
- Phase IA**
- Phase 1**
- Phase 2**
- Phase 3**
- Not applicable**

14. Map Location Data [must pick one]

Vt. State Plane NAD 83 Coord. _____
UTM _____

15. If Orthophoto [can be blank if UTM entered]

VCS NAD 83 Coord. E [6 spaces] _____ N [6 spaces] _____

16. A. Choose the coordinate standard being used:

- NAD 83 ____ (orthophoto map)
- NAD 27 ____ (topographic map)

16. B. UTM/Zone **[can be blank if VCS NAD 83 entered]**

18 ____

19 ____

17. If UTM **[can be blank if VCS NAD 83 entered]**

Easting [6 spaces]_____ **Northing [7 spaces]** _____

18. USGS Format

Pick list:

7.5

15

7.5 x 15

19. USGS Quad **[text field unless pick list available]**_____

20. Permanent Datum Coordinates for site **[text field]** _____

21. Directions to Site **[text field]** _____

22. Landowner type

pick list:

Private

Municipal

State/ANR

State/VAOT

Other state agency

Name of agency:

USFS

US Fish & Wildlife

Other federal

Name of agency:

The Nature Conservancy

The Archeological Conservancy

Other

23. Landowner Name/Address/phone/email **[text field]** _____

24. How Located

pick list:

Exposed bank
Subsurface excavation
Underwater
Archival
Other(specify):

**** 25. A. Precontact and Contact Context and Site Age [can pick more than 1]
[FOR PRECONTACT AND CONTACT ONLY]

pick list:

Paleoindian (11,500 – 9000 BP or 9500 – 7000 BC)
Early Archaic (9000 – 7500 BP or 7000 – 5500 BC)
Middle Archaic (7500 – 6000 BP or 5500 – 4000 BC)
Late Archaic (6000 – 2900 BP or 4000 – 900 BC)
Terminal Archaic
Early Woodland (2900 – 2100 BP or 900 – 100 BC)
Middle Woodland (2100 – 900 BP or 100 BC – 1050 AD)
Late Woodland (900 – 350 BP or 1050 – 1600 AD)
Contact (ca. 350 BP or 1600 AD)
Undetermined precontact

Specific historic context(s) [text field, i.e. Precontact in the lower Winooski, Early Woodland in the Champlain Valley, etc.]:

25. B. Precontact Research Topics from DHP *Guidelines*, Section 4.4.1, site significance matrix [can pick more than 1]

[FOR PRECONTACT AND CONTACT ONLY]

Pick List:

Adaptation
Chronology
Technology
Exchange/trade
Settlement system
Subsistence system
Socio-political organization
Human biology
Belief system
Environmental change

**** 26. Statewide DHP Historic Context for Historic Period sites [can pick more than 1]:

pick list:

Exploration

Conflict

Early Settlement

Industry and Commerce

Agriculture

War and Peace

Tourism

Transportation

Culture and Government

Housing and Community

Undetermined historic

Text field: Specific historic context(s), i.e. Railroads in VT, French in the Champlain Valley, Vt's iron industry, etc.

**** 27. Historic Time Range

pick list:

1600 – 1700

1700 – 1770

1770 – 1800

1800 – 1850

1850 – 1870

1870 - 1900

1900 - 1950

post 1950

Undetermined historic

**** 28. Site Description and Environmental Setting **[text field]**

The following information is intended as guidance (historic period and precontact sites will focus on different kinds of information):

- * **whether the site appears to be an individual site or feature or a complex;**
- * **site length and width in m/ft;**
- * **distance to and type of closest drainage or source of water;**
- * **proximity to relict drainages (include distance and type) [FOR PRECONTACT ONLY]**

- * **proximity to springs, intermittent streams, unnamed intermittent stream [FOR PRECONTACT ONLY];**
- * **site elevation above closest drainage (in meters) [FOR PRECONTACT ONLY];**
- * **whether or not subject to flooding [FOR PRECONTACT ONLY];**
- * **if Phase II or III, describe total site area excavated (in sq. m and auto calculate % of site area)**

*** 29. Data Found [text field] The following information is intended as guidance (historic and precontact sites will focus on different kinds of information):

- * describe relationship of all cultural materials and features;
- * total artifacts found;
- * artifact distribution;
- * artifact density
- * loci/activity area number and sizes;
- * describe in detail internal site patterning;
- * description and size of materials not collected, etc.

30. Greatest Depth Range of Data Found [text field indicating a range]:

from _____ cm to _____ cm

not applicable

31. Data collection Methodology (can pick more than one)

pick list:

Surface collection

Eroding surface

Metal detecting w/ subsurface truthing

Subsurface testing

Backhoe trenching

Underwater recording

Archival

Oral history

Other (specify):

32. A. Total Units Excavated (i.e. 0, 1, 2, 3, 4) [text field]

32. B. Test unit size, volume, and # excavated (if various size units and volumes were excavated, provide the # of units excavated for each size/volume) [text field]

33. **Positive Units Excavated** (specify a number or indicate 0) [text field]

Not applicable ____

34. Estimated total site area (in sq. m/hectares) [text field]

Unknown ____

35. Dating methods

pick list:

C-14 Dates/specify lab numbers (use uncalibrated) (send hard copy of lab results to DHP)

Diagnostic artifacts

Archival

Other dating technique (specify):

36. A. Artifact/Data Repository at the time of completing this form

pick list:

UVM/CAP

Other university

Professional CRM consulting organization

Private collection

State of Vermont

Other (specify):

No artifacts collected

36. B. Address of repository [text field]

**** 37. Statement of Significance [text field]

38. A. State/National Register Status

pick list:

Recommended as Eligible for listing on State and National Registers

Recommended as Ineligible for listing on State and National Registers

Determined Eligible for listing on State and National Register by VT Advisory Council on HP;

Date: _____

Listed on National Register; Date: _____

Listed on State Register; Date: _____

Insufficient Information

38. B. NR Criteria of Significance

pick list:

A

B

C

D

38 C. **Precontact** and **Contact** data requirements for significance, in accordance with DHP *Guidelines*, Section 4.4.1. site significance matrix [can pick more than 1]

pick list:

Insufficient information

Site contains items, deposits, and/or surfaces that can provide inferences about relevant past activities.

Site contains items or deposits that can identify the site's time period.

Site possesses spatial relationships among items, deposits and/or surfaces which can be reconstructed.

Site contains deposits with floral, pollen, faunal or other botanical and zoological data.

Site contains items whose potential source area(s) can be identified.

Site contains the remains of at least one inhumation sufficiently preserved to permit analysis of diet, health, pathologies, or demographic data; or contains evidence of at least one cremation.

Site contains non-utilitarian items or deposits that can provide inferences about past beliefs.

Site contains natural or cultural deposits or surfaces with data pertinent to paleo-environmental reconstruction (including past vegetation, fauna, landscape, water sources, or climate) of the locale or larger region.

38. D. **Historic Period** significance criteria: Priority Themes from DHP *Guidelines*, Section 4.5.2. **[can pick more than 1]**

pick list:

Insufficient information

Native people and their communities after European contact

17th and 18th century military history

War of 1812 and Civil War in Vermont

Abandoned communities (Vermont's "ghost towns")

18th Century French in Vermont

Early Euro-american settlement (ca. 1760 – 1800, although may be later in northern Vermont), including farmstead economy and technology, industry and commerce, health and nutrition, and transportation

Pre-1870 industries and commercial enterprises

Unanswered questions about Vermont's ethnic and minority groups

Vermont's maritime history

Unwritten stories of important Vermonters (pre-1900)

Unique, rare, highly unusual, and exceptional federal, state, and local public works

Unique, rare, highly unusual, and exceptional sites

39. Topographic setting **[FOR PRECONTACT ONLY]**

pick list:

Not applicable

Lakeside

Pondside

Streambank

Floodplain

Relict drainage

Rise/knoll

Edge of wetland

Lake/stream confluence

River/stream confluence

Mountain or ridge top

Mountain or hillside

Side of draw

Head of draw

Valley edge

Outcrop/ledge

Specify other setting:

40. Slope

pick list:

- 0-3%**
- 3-8%**
- 8-15%**
- > 15 %**

41. Elevation (in meter/feet; can be a range of elevation) [text field] _____

42. Aspect **[FOR PRECONTACT ONLY]**

pick list:

- Not applicable**
- N**
- NE**
- E**
- SE**
- S**
- SW**
- W**
- NW**

43. Original landform based on VT Surficial Geology Map [surficial geology map available on CD from State Geologist's office (802) 241- 3603] **[FOR PRECONTACT ONLY]**

pick list:

- Not applicable**
- Champlain Sea or glacial lake shoreline**
- Glacial deposits:**
 - **Till and moraine sediments**
 - **Glacial fluvial sediments**
 - **Kkame deposits**
 - **Esker deposits**
 - **Outwash deposits**

- Aeolian deposits**
- Glacial marine sea/lake bottom sediments**
- Marine sea/lake delta complex**
- Pluvial sediments**
- Bedrock**
- Holocene fluvial deposits**

44. Current setting

pick list:

Crop land

Sand blow

Lawn/yard

Urban

Deciduous woodland

Coniferous woodland

Mixed woodland

Scrub/old field

Park

Beach

Water's edge

Underwater

Other (specify):

45. NRCS soil map series **[FOR PRECONTACT ONLY]**

[pick list – obtain list from VCGI]

46. Watershed Affiliation **[14 digit identifiers based on NRCS hydrological units]**
[pick list available from NRCS]

47. Closest water association to site **[FOR PRECONTACT ONLY]**

pick list [both “existing” and “relict” can be entered]:

Existing (if this field checked, complete 48)

Relict (if this field checked, complete 49)

No apparent water within 180 m (if this field checked, go to 50)

48. Closest existing water to site **[FOR PRECONTACT ONLY]**

pick list:

River

Brook/stream

Seasonal flowage

Lake or Pond

Spring

Wetland

Other (specify):

Not applicable

Distance in m ____

49. Closest relict water to site **[FOR PRECONTACT ONLY]**

pick list:

River

Brook/stream

Seasonal flowage

Lake or Pond

Spring

Wetland

Other (specify):

Not applicable

Distance in m _____

50. A. Site Integrity (can pick more than 1)

pick list:

Excellent

Fair

Poor

Destroyed

Other (specify):

50. B. Site Integrity [FOR PRECONTACT ONLY]:

Never plowed

Plowed

Not known

51. A. Report title (note: may not yet be available when inventory form is submitted)

pick list:

not applicable

in progress

report completed [add text field:

author(s)

date

full title

report #, if any

prepared by

prepared for

51. B. Additional Reports (provide same information as per 51 A.)

52. Previous collections

pick list:

Not applicable

Current location if known

Specify: [who, what, where, when, specify name/address

53. Other site information [can pick more than one]:

pick list:

Historic Map References

ID map and date:

Beers

Walling

Sanborn

APPENDIX J

SELECTED HISTORIC MAP REFERENCE INFORMATION ON THE WEB (COURTESY OF VARIOUS COLLEAGUES)

See updated sources on the Division's web site

APPENDIX K

DRAFT DRAFT DRAFT DRAFT DRAFT DRAFT

VT DHP ARCHEOLOGICAL REPORT DATABASE
Instructions for Entering Data for
ARA, Phase I, IA, II, and III and other Archeology Reports

The Vermont Division for Historic Preservation (DHP) requests that all archeological professionals completing Archeological Resource Assessments, investigations, management plans, annual reports, and research projects in Vermont electronically submit summary information and Abstracts to the *DHP Archeological Report Database* upon completion of any such document. At least quarterly, the DHP will distribute an updated *Archeological Report Database* to archeological and related professionals with consulting obligations and demonstrated research interest in Vermont. The electronically submitted Abstracts will be compiled in a County-based report that the DHP will also distribute quarterly. The DHP's and your efforts will hopefully improve professionals' familiarity with the results of investigations, management plans, and resource overviews across the state, and facilitate desk reviews.

The DHP will provide you via email with an electronic EXCEL template for entering information in the database.

In addition, please submit the following data to Giovanna Peebles via email

(giovanna.peebles@state.vt.us):

1. **Shape file of the project area.** If parcel data exists for the project area, you can email the parcel shape file. If there is no existing parcel data, or if the project area is not a parcel feature, please draw and submit a polygon of the project area. Alternatively, submit a copy of an orthophoto with the project area delineated **and** at least 6 GPS Vermont State Plan coordinate points (state if NAD 83 or NAD 27) of the project area.
2. **Shape file of the sensitive area(s).** Alternatively, submit a copy of an orthophoto with the sensitive area(s) delineated **and** at least 6 GPS Vermont State Plan coordinate points (state if NAD 83 or NAD 27) of the project area.
3. **Shape file of the Phase I survey area(s).** Alternatively, submit a copy of an orthophoto with the Phase I survey area(s) delineated **and** at least 6 GPS Vermont State Plan coordinate points (state if NAD 83 or NAD 27) of the project area.
4. **Shape file of the Phase II evaluation area(s).** Alternatively, submit a copy of an orthophoto with the Phase II evaluation area(s) delineated **and** at least 6 GPS Vermont State Plan coordinate points (state if NAD 83 or NAD 27) of the project area.
5. **Shape file of each site.** Alternatively, submit a copy of an orthophoto with each site delineated **and** at least 6 GPS Vermont State Plan coordinate points (state if NAD 83 or NAD 27) of each site area.

Guidance for submitting the Excel report database:

REPORT #.

Leave empty. This field will be completed by DHP.

COUNTY(S) containing Project Area.

Indicate the county that contains the project area. If multiple counties, write **Multiple** but list all counties in the *Report Title* field.

TOWN(S) containing Project Area.

Indicate the town that contains the project area. If multiple towns, write **Multiple** but list all towns in the *Report Title* field. Do not use village names which are subsets of towns. For example, although the project area is in the village of Taftsville, list "Woodstock" as the town in which the survey occurred.

PARCEL ID containing the project area.

Parcel data can be downloaded from the VCGI web site or regional planning commissions' GIS staff. **Linear projects such as sewer lines or highway projects, etc., may not have a clearcut overlap with a parcel. In such cases, indicate "NA" for "not applicable."**

PARCEL OR PROJECT ADDRESS.

This information is available from the parcel's attribute table, or, if the project area does not overlap a parcel, the engineering consultant or project developer can help you obtain an address is applicable. In cases where there clearly is no address, indicate "NA" for "not applicable."

ACT 250 #.

If available, this number can be obtained from the developer or DHP. Not all projects will have an Act 250 number, either because there is no Act 250 jurisdiction or because the archeological assessment is completed at the “pre-application” stage.

DHP #.

Leave empty. This field will be completed by DHP.

REPORT TITLE and SUBTITLE.

Provide complete title of report as shown on report cover. Indicate if the report is a “draft.”

REPORT DATE.

Write as last 2 digits of year/2 digit month (i.e. October 2001 should be written 01/10).

CONTRACTOR.

Provide the complete name of the archeological consulting organization (or individual) that conducted the archeological study. Abbreviations are acceptable for parts of the name (i.e. Inc., Assoc., UMF, UVM, etc.) but maintain consistency with each individual report entry.

REPORT AUTHOR(S).

List all authors spelled out, last name first.

SPONSOR.

Provide name and address of the organization that directly hired you to perform the archeological assessment or investigation. This could be a state or federal agency, engineering firm, private developer, utility, private corporation, non-profit organization, town, etc. (examples: VAOT; VT Dept. of Forest, Parks, and Recreation; Cross Engineering; The Holden Co.; PG & E; Vermont Housing Authority; Town of Hartford; etc.).

LEGAL JURISDICTION (Section 106, Act 250, 22 VSA 14, other, or combination).

Indicate the specific regulatory jurisdiction under which the study is being conducted.

The majority of projects will consist of:

- Federally funded, licensed, or permitted or undertaken on federal lands = **106**;
- Projects that will or have applied for an Act 250 permit = **Act 250**;
- Projects that are state funded = **22 VSA 14**.
- Indicate “NA” for “not applicable.”

Often times, projects have 2 regulatory jurisdictions, for example, a project needs both an Act 250 permit and a federal Corps permit. In this case, indicate both **Act 250** and **106**. Sometimes a project is state funded but needs a Corps permit. In such case indicate both **22 VSA 14** and **106**. If you have questions about the source of project funds, or whether the project needs a Corps permit, or if it a state or federal undertaking, ask your sponsor or client. Section 1.1. of the DHP’s Guidelines list various other statutory jurisdictions that may apply.

FEDERAL OR STATE AGENCY.

Provide the name of the lead federal agency or state agency that is legally responsible for the undertaking, through funding, licensing, or permitting. Use abbreviations: examples include Federal Highway Administration (FHWA), US Dept. of Housing and Urban Development (HUD), Rural Development (RD),

Environmental Protection Agency (EPA), Corps of Engineers (Corps), U.S. Fish and Wildlife Service (USF&WS), Natural Resources Conservation Service (NRCS), etc.

If there is no federal jurisdiction but there is state funding, provide the name of the state agency that is responsible for the undertaking, for example, the VT Dept. BGS, (BGS).

If you have questions about the identity of the lead federal or state agency funding, permitting, or licensing the project, ask your sponsor or client.

Indicate “NA” for “not applicable.”

STUDY PHASE.

Indicate ARA, Phase I, Phase IA (there should be very few of these under the current Guidelines), Phase IB (there should be very few of these under the current Guidelines), Phase II, Phase III, Annual Report, HPMP (Historic Properties Management Plan, previously called Cultural Resources Management Plan), Research Report, or NA (Not Applicable). If report covers more than one phase of study, indicate all phases.

PROJECT AREA.

Report the total number of hectares of the project area, defined as the total area that is subject to the state or federal regulatory review (i.e. the subdivision, sewer project, etc.), **not** the “area of potential effect.” Indicate “NA” for “not applicable.”

SENSITIVE AREA.

Report the total number of hectares of sensitive lands identified within the project area, whether or not they were surveyed.

PHASE I SURVEY AREA.

Report the number of hectares that were archeologically investigated at the Phase I level. Indicate “NA” for “not applicable.”

PHASE II EVALUATION AREA.

Report the number of hectares that were archeologically evaluated at the Phase II level. Indicate “NA” for “not applicable.”

TESTING STRATEGIES IN HECTARS.

Report the types of testing strategies and how many hectares of each. For example, indicate:

- test pits -- 0.34h
- surface survey – 2.40h
- backhoe trenching – 0.0001h
- test units – 0.15h

When calculating hectares, both for the data table and the shape file, add 5m to all sides of a transect or cluster.

OF PRECONTACT SITES.

Give the total number of pre-contact sites found or investigated during the study. If none are found, indicate “0”. If site discovery is not a goal of the study (such as an Historic Properties Management Plan, indicate “NA” for not applicable.

OF HISTORIC PD SITES.

Give the total number of historic period sites found or investigated during the study. If none are found, indicate "0". If site discovery is not a goal of the study (such as an Historic Properties Management Plan, indicate "NA" for not applicable.

VAI SITE NUMBERS.

List all Vermont Archeological Inventory site designations for the pre-contact and historic period sites discovered or investigated. There should be as many as noted in the *pre-contact sites* and *historic period sites* fields (above)

#S OF NATIONAL/STATE REGISTER ELIGIBLE SITES.

Identify by VAI # any site that has been determined to meet the National or State Register criteria.

SENSITIVITY SCORE

Provide the assigned score from the DHP environmental predictive model for a project area based on a desk review. If DHP applied the model, use that number.

APPENDIX L

Advisory Council on Historic Preservation Policy Statement on

Treatment of Human Remains and Grave Goods (1988) *

While human remains or grave goods are likely to be exhumed in connection with an undertaking subject to review under Section 106 of NHPA, the consulting parties under the Council's regulations should agree upon arrangements for their disposition that, to the extent allowed by law, adhere to the following principles:

Human remains and grave goods should not be disinterred at all unless required in advance of some kind of disturbance, such as construction.

Disinterment when necessary should be done carefully, respectfully, and completely, in accordance with proper archeological methods.

In general, human remains and grave goods should be reburied in consultation with the descendants of the dead.

Prior to reburial, scientific studies should be performed as necessary to address justified research topics.

Scientific studies and reburial should occur according to a definite, agreed-upon schedule.

Where scientific study is offensive to the descendants of the dead, and the need for such study does not outweigh the need to respect the concerns of such descendants, reburial should occur without prior study. Conversely, where the scientific research value of human remains or grave goods outweighs any objections that descendants may have to their study, they should not be reburied, but should be retained in perpetuity for study.

*** In 1990, the Native American Graves Protection and Repatriation Act (NAGPRA) became law. Application of this policy statement must be consistent the requirements of NAGPRA (23 U.S.C.Part 3001 et seq).**

APPENDIX M

VT Archeology Heritage Center

DEED OF GIFT

By these presents, I (We) hereby irrevocably and unconditionally give, transfer and assign to the Vermont Archeology Heritage Center all right, title and interests (including all copyright, trademark and related interests*), in, to and associated with the object(s) described below. I (We) affirm that I (we) own said object(s) and that to the best of my (our) knowledge I (we) have such right, title and interests to give and that said object(s) were collected or acquired in accordance with applicable laws.

DESCRIPTION OF OBJECT(S): Please attach list or describe below.

Dated this _____ day of _____, _____.

Name of Donor: _____

Signature of Donor: _____

The VT Archeology Heritage Center hereby acknowledges receipt of the above Deed of Gift.

Dated this _____ day of _____, _____.

Accepted on behalf of the VT Archeology Heritage Center by:

Giovanna Peebles, VT State Archeologist

Date: