HISTORIC NEW ENGLAND
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Property Care White Papers

Archaeologists and Archaeology

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Archaeologists specialize in analyzing historic trends and data relating to the occupancy of a site. They accomplish this generally through the recovery and analysis of the material culture and environmental data that has been buried over time. In addition to analyzing artifacts uncovered and structures that have been buried, archaeologists can make determinations about features (paths, fence locations, original terrace level, planting beds, etc.) or the plant material of a cultural landscape. Historic New England's work with archaeologists tends to be more reactive to proposed work that may disturb archaeological resources rather than research driven archaeology in order to better protect resources in situ.

Note: Any work disturbing the ground and potentially impacting any subsurface resources will need to be evaluated in keeping with Historic New England's Procedure for Archaeology in the Policy and Procedures Manual. With the assumption that any work requiring archaeology will require the use of a consultant the white paper for working with consultants should be reviewed in addition to these guidelines.

Guidelines for Working with Archaeology and Archaeologists

- Leave ample time in the project schedule in order to perform the necessary archaeology. The larger the project the more important it is to perform the assessment and field testing during the preceding year.
- There are many different specialties and to be most effective one should work with a consultant who has a specialty in the artifacts most likely to be discovered on the site.
- Think about the project approach required and how invasive the investigation. There are different ways to investigate subsurface resources.
- Develop a scope and contract out for the necessary archaeological assessment.
- Archaeology may require different permits or approvals depending on the resource.
- When reviewing the archaeologist's final report it is important to consider how the subsurface resources affect the overall management of the site.
- Landscape repair will not be a part of the archaeologist's scope of work and will need to be budgeted separately.
- It may be necessary to engage the archaeologist during construction to prevent damage to sensitive resources.
- Even if work is approved to proceed without monitoring by an archaeologist, any time resources are uncovered during construction all work should cease until an assessment can be made.

Technical Information for Working with Archaeology

Leave ample time in the project schedule in order to perform the necessary archaeology. The larger the project the more important it is to perform the assessment and field testing during the preceding year.

- The ideal scenario is to implement archaeology the year before a major construction project in order to allow time to alter plans based on the findings.
- It may be the most efficient to perform archaeology in conjunction with the project planning in order for the archaeologist to be able to respond to the plan and the project planner to adapt the plans based on the results of the archaeology.

There are many different specialties and to be most effective one should work with a consultant who has a specialty in the artifacts most likely to be discovered on the site.

- Working with the same archaeologist at the same site over a number of years can result in a continuity of analysis. However it is not a requirement and competition for services has a role.
- Verify that the archaeologist is in good standing with any state permitting offices.

Think about the project approach required and how invasive the investigation. There are different ways to investigate subsurface resources.

- Geophysical remote sensing are non-destructive techniques that can be used to help identify the location of subsurface resources such as path systems, pipes, and foundation walls.
    - The different geophysical methodologies include:
        - Electric Resistance: mapping based on electricity and the ability of different materials to more or less sensitive to electricity.
        - Electro Magnetic Conductivity: measuring how the conductivity of subsurface materials.
        - Ground Penetrating Radar: An electromagnetic pulse is directed into the ground and subsurface objects and soil layers will cause the signal to bounce back to the receiver at different rates.
        - Magnetic Gradient: Subsurface materials below the ground can cause local disturbances in the Earth's magnetic field that are detectable with magnetometers.
    - It should be noted that the relative success of these types of surveys are very much subject to the physical characteristics of the soil surrounding the resources, the physical properties of the resources themselves and the capabilities of the technician both in the field and during analysis.
    - These processes may be used jointly to create a more complete image of sub-surface resources.
- Physical exploration may be required even if geophysical methods are used during the survey. Before construction begins physical testing may be required to verify the locations of resources identified through geophysical survey or, because geophysical surveys may not locate all resources, to inspect areas identified for construction.

  - Shovel test pits are usually sized about 50 cm square. A scattering of shovel test pits can help identify the sensitivity of an area. These are also helpful ways to review the soil stratigraphy of an area.
  - Larger pits, often 1 meter square or larger depending on the requirements or the project, are used in areas of concern. The larger area will reveal a more clear understanding of the archaeological sensitivity.
  - Full excavation of a subsurface resource is rarely enacted by Historic New England.
- For areas deemed as having a low sensitivity to resources, or the resources are known to the archaeologist, it may be determined that construction monitoring is all that is necessary. While work is ongoing the archaeologist is on site reviewing the material that is excavated to ensure there is no artifacts of significance that are unearthed.
  - This process will slow down a construction project. Plan accordingly during the bid process for the contractor to take this into account.

Develop a scope and contract out for the necessary archaeological assessment.

- A draft RFP scope is detailed in the Technical Specifications section.
- Prior to bidding a project archaeologists will generally make their preliminary assessment of integrity and site sensitivity.
  - This assessment is based on their understanding of the site and the development of the site, their reading of the landscape forms and their background dealing with similar situations.
  - Any project plans or details should be shared in order for the archaeologist to make an accurate assessment of the needs of the project.
  - Historical data is helpful in this analysis as well.

Archaeology may require different permits or approvals depending on the resource.

- Resources may be protected by cultural groups and permission should be sought for work
- Each state has its own requirements for handling archaeology but several states require an archaeologist to pull the permit for any project.
- Historic New England should approve all permit requests before they are submitted.

When reviewing the archaeologist's final report it is important to consider how the subsurface resources affect the overall management of the site.

- Items that should be called out as part of the conclusions/ recommendations include:
  - The results of the survey and how it affects additional future work on the site.
  - Recommendations for future study.
  - If the report is in anticipation of a construction project, recommendations should be issued as part of the report for the mitigation of the effects of the proposed construction project.
- The archaeologist should work with staff and even the consultant to determine how the construction project can be altered so that the subsurface resources are no longer subject to impact or that impact is minimized.

- In certain instances it will not be possible to work through the archaeological zone and so the construction project will need to be altered to go around the sensitive area. This will be the preferred methodology for certain subsurface resources, specifically buried patios, foundations and other large subsurface structures.
- Construction monitoring at key moments is a strategy that can help guide work in and around archaeologically sensitive areas.

Landscape repair will not be a part of the archaeologist's scope of work and will need to be budgeted separately.

It may be necessary to engage the archaeologist during construction to prevent damage to sensitive resources.

- The archaeologist should attend any pre-construction meeting to review the project with construction contractors.
- Construction monitoring at key moments is a strategy that can help guide work in and around archaeologically sensitive areas however note that this will slow the contractor's work down significantly.

Even if work is approved to proceed without monitoring by an archaeologist, any time resources are uncovered during construction all work should cease until an assessment can be made.

Technical Specifications

The following is a draft RFP for soliciting archaeology based on the guidelines presented in the white paper. This RFP should be edited for use as appropriate with the specific project.

DRAFT Request for Proposal

Project Description

A. Archaeology is required for XXXX project.
B. The goal of this archaeological assessment is as follows:
    a. Review the history of the site and the cultural landscape through information and reports provided by Historic New England and limited archival research.
    b. Review the proposed project plans and make a preliminary assessment of sensitivity for different zones of the project.
    c. Perform field work as identified and as necessary
    d. Process, analyze and curate artifacts found in the field
    e. Work with Project Manager and design consultant on how to manipulate the project to minimize or eliminate impact on subsurface resources.
    f. Deliver a report that incorporates the analysis from the field testing with the proposal for construction and makes recommendations for management.
C. The proposal should contain the following items:
    a. Goals of the project.
    b. Identification of principle investigator and their credentials and certifications
    c. Identification and fulfillment of any local or state permits or approvals that will be required for the archaeology work.
    d. Identification of research requirements for the proposed project.
    e. The scope of field work including methodology and justifications should be detailed.
        i. Proposed methodologies for field work.
        ii. Justification of the field work methodology is important to understand the necessity of the work and the methods chosen.
        iii. A site map indicating approximate locations for proposed work. This plan should coordinate with the recommendations in the written proposal
    f. Identification of artifact processing, analysis and curation methodologies.
    g. Schedule for the project including completion of field work, analysis of artifacts and completion of report.
    h. Budget for the proposed work plan.
        i. Budget should include hours allocated for each component of the project with salary expenses specified by personnel position, rate, and task; additional expenses should be identified and specified.
        ii. Budget should reflect that the project is time and materials with a not to exceed figure. A budget for reimbursable should be factored into the project cost.
D. Archaeologist required to obtain all local or state permits or approvals required for the project. Historic New England must approve all permit applications.
E. Digital mapping data or plans that are created for this project should be in a coordinate system specified by Historic New England.

F. All information and resources, digital and hard copy, gathered or produced for this project is the property of Historic New England and should be provided to the organization at the completion of the project.

Deliverables

A. Before final report is considered complete a draft shall be reviewed by Historic New England for content and accuracy.
B. It is expected that the project report shall contain the following, or their equivalent, at a minimum:
    a. Executive Summary
    b. Personnel
    c. Project Objectives and Location;
    d. Site History and Context;
    e. Methodology;
    f. Analysis and Results
    g. Interpretation of Findings
    h. Conclusions
        i. The conclusion should include, but not be limited to, the information necessary for the continued management of the property.
            1. The results of the survey and how it affects additional future work on the site is critical
            2. Recommendations for future study
            3. Recommendations should be issued as part of the report for the mitigation of the effects of the proposed construction project.
    i. Catalogue of artifacts processed.
    j. Documentary sources
    k. Figures, Maps, Images, Excavation plans and profiles as necessary
C. Five bound hard copies of the report should be issued.
D. One digital copy of the report should be issued in PDF format.
E. All information and resources, digital and hard copy, gathered or produced for this project is the property of Historic New England and should be provided to the organization at the completion of the project.
    a. Artifacts should be properly protected and packaged in acid free boxes with inventory sheets attached both to the exterior and interior of the box.
    b. Physical documents, images or other reports created through the project should be delivered with the Final Report.
    c. Digital data such as images, databases created for the objects, site plans, or data generated through geophysical survey should be transmitted on a portable storage device with the PDF version of the report.