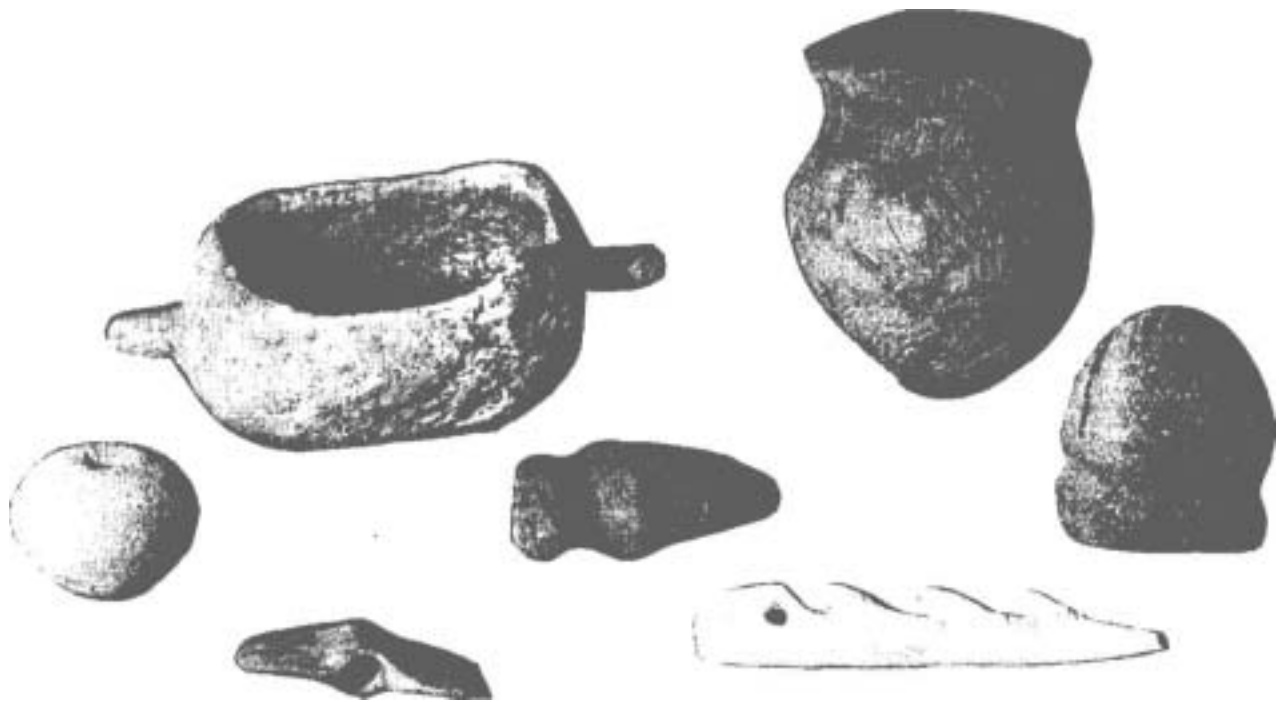


Environmental Review Primer For Connecticut's Archaeological Resources



ENVIRONMENTAL REVIEW PRIMER FOR
CONNECTICUT'S ARCHAEOLOGICAL RESOURCES

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1987

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INTRODUCTION

During the past decade, the historic preservation movement has witnessed a major transformation in both its direction and orientation and the composition of its membership. Historic preservation has matured and expanded its concern through an active recognition of and empathy for the breadth and diversity of America's cultural heritage. No longer can historic preservationists be characterized as "little old ladies in tennis shoes"; a nationwide grass roots movement has grasped the standard of historic preservation. Likewise, historic preservation efforts have far outgrown the traditional concepts of national monuments and house museums: preservation efforts now encompass both the economic viability and community cohesiveness of the rehabilitation and adaptive reuse of the extant building stock. The preservation and conservation of America's natural environment and its cultural heritage have truly become a national concern. The public has acknowledged that our nation's cultural landscape admirably reflects the heritage, ethnicity, imagination, and dreams of America's people. The dynamics of exploration, settlement, growth, and expansion of our nation are embodied in the richness and variety of our cultural heritage. The imagination and achievements of our past are irreplaceable; our cultural landscape is a nexus of nonrenewable resources. With its variety of perspectives, historical associations, and polyglot origins, our nation's cultural heritage enhances the quality of life for all Americans.

The American public's concern with the increasing alteration and destruction of the nation's natural and cultural heritage has generated a proliferation of federal and state statutes and regulations which aim to maintain a balanced perspective and viable planning process for our cultural heritage and the nation's surging growth and development. Unfortunately, the absence of intergovernmental and interagency coordination in reaction to historic preservation issues has resulted in a seemingly complex maze of bureaucratic snares.

The Connecticut State Historic Preservation Office has prepared these guidelines to assist public officials and their consultants in understanding the review process as it relates to archaeological resources (prehistoric, historic, and industrial sites, objects, ruins, structures, and districts) and all federally or state sponsored, assisted, licensed, or permitted undertakings. The State Historic Preservation Office anticipates that these guidelines will further promote positive interagency communication and cooperation. These guidelines should benefit federal, state, and local agencies, private applicants, engineering consultants, and professional historic preservation and archaeological consultants by providing an explicit procedure through which the archaeological resource review process may be expedited.

These guidelines provide a historical synopsis of the various historic preservation statutes and codified regulations. In addition, they are designed to incorporate and implement historic preservation concerns as an integral component of the project planning process. The State Historic Preservation Office believes that the objectives of archaeological resource preservation and project planning are compatible goals which can be achieved, at least partially, via these guidelines. The application of the archaeological resource review process as outlined herein will facilitate applicants in meeting their legal responsibilities as mandated by federal and state historic preservation legislation.

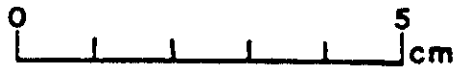
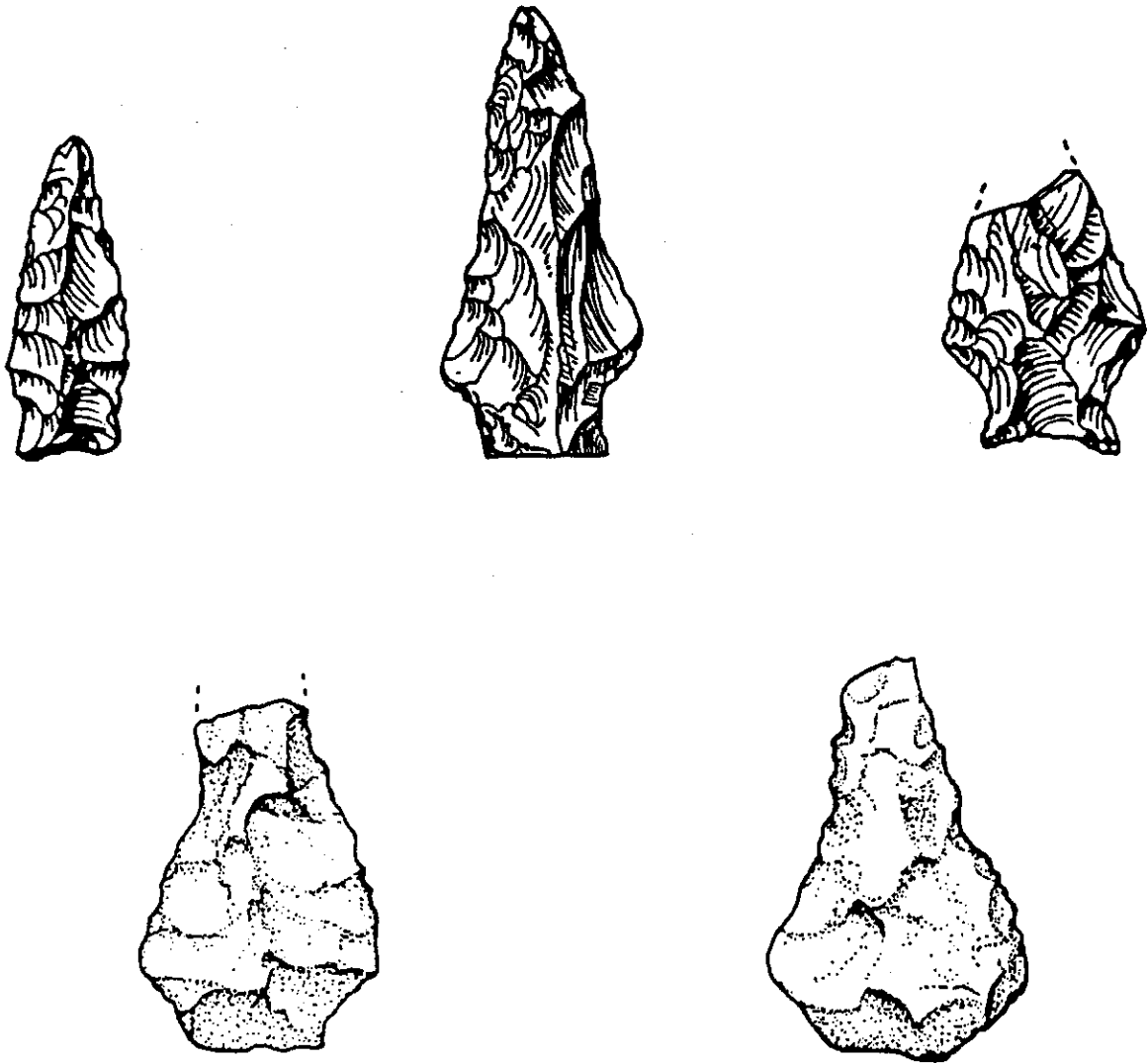
In order that both project planning and archaeological resources may benefit from sound, professional comment and review. The State Historic Preservation Office strongly encourages project planners to incorporate these guidelines as early as possible into the project planning process in order to fulfill the spirit and intent of federal and state historic preservation legislation. Also, the State Historic Preservation Office will use these guidelines as unequivocal measures of acceptability for archaeological survey efforts and their documentation.

Project planners with questions and inquiries that are not resolved by these guidelines are urged to contact the staff of the State Historic Preservation Office directly.

LEGISLATIVE MANDATE FOR HISTORIC PRESERVATION

SUMMARY: This section provides background information which traces the historical development of federal and state historic preservation legislation. Highlights of major preservation legislation and implementing regulatory procedures are noted.

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Prehistoric projectile points and quartzite bifaces.
Line drawing courtesy of the Public Archaeology Survey Team,
Inc.

FEDERAL LEGISLATIVE HISTORY

To the end there maybe convient highways for travellers: It is ordered by the Authority of this Court ... two or three men ... shall from time to time layout all common highways where they maybe most convient, not withstanding any man's properties (foras it occasion not the pulling down of any man's house or laying open any garden or orchard...) Massachusetts Colony, 1639.

Although the legislative seed for cultural resource management has its foundation in 17th-century Anglo-American consciousness, active preservation of America's cultural heritage remained subservient to other national considerations until the 1889 passage of federal legislation which authorized the protection of the Casa Grande prehistoric pueblo ruins in Arizona. The federal effort to halt the deterioration and looting of these prehistoric ruins laid the cornerstone for the eventual creation of our national park system. Interestingly, this legislation authorized the employment of federal troops, if necessary, for the protection of this site - an aggressive commitment to cultural resource protection which has rarely been surpassed. In general, preservation legislation of the 1890s reflected a site-by-site reaction of the federal government to the appeals and political pressures of veterans' organizations for the memorializing of several Civil War battle fields.

Antiquities Act of 1906 (P.L. 59-209)

The Antiquities Act of 1906 marks the federal Government's abandonment of its piecemeal preservation policy in favor of a cohesive management plan for cultural resources on federal lands, as well as functioning as the springboard for all subsequent federal preservation efforts. In general, the Antiquities Act of 1906 provides for the protection of historic and prehistoric resources located on federal lands. Further, it authorizes the scientific examination of archaeological sites on federal lands by means of the controlled issuance of excavation permits. Conversely, the 1906 Act establishes criminal sanctions for the unauthorized destruction or appropriation of antiquities from federal lands. In summary, the Antiquities Act of 1906 serves to establish the principle that the federal government, acting on behalf of the American people, not only should protect archaeological and historical resources, but also should maintain an actively responsive program for the continued preservation and public availability of the nation's cultural heritage.

Historic Sites Act of 1935 (P.L. 74-292)

Congress strengthened the federal preservation policy with respect to cultural resources, as well as mandating the authority of the National Park Service as the lead agency for federal preservation efforts, through its enactment of the Historic Sites Act of 1935. The Act declares a national policy "to preserve for public use historic sites, buildings, and objects of national significance for the inspiration and benefit of the people of the United States." This legislation reflects Congress' recognition that the adequate identification and protection of the nation's heritage could be accomplished only by uniting the efforts of the federal government with those of state and local governments, preservation organizations, and concerned citizens. The National Park Service was authorized to conduct surveys and to study historic and archaeological sites in cooperation with interagency, intergovernmental, and interdisciplinary preservation efforts. The Historic Sites Act of 1935 further authorized National Park Service administration of three new federal programs: the Historic American Buildings Survey (HABS), the Historic American Engineering Record (HAER), and the National Survey of Historic Sites and Buildings (the latter sites are now known as National Historic Landmarks). In addition, the 1935 Act continued the National Park Service's archaeological research program with respect to federal properties.

Reservoir Salvage Act of 1960 (P.L. 86-523)

The Reservoir Salvage Act provides for the recovery and preservation of significant historical and archaeological data "which otherwise might be irreparably lost or destroyed" by flooding or construction activities associated with federally funded or licensed dam or reservoir construction projects. In such cases, the Act authorizes the Secretary of the Interior to initiate archaeological surveys and to recover and preserve historical and archaeological data by means of either the direct actions of the National Park Service or the establishment of cooperative agreements with qualified consultants for the undertaking of a professional, scientific data recovery program.

National Historic Preservation Act of 1966 (P.L. 89-665; 80 Stat 915, 16 USC 470 as amended)

The pivotal preservation legislation with respect to cultural resource protection is the National Historic Preservation Act of 1966. This Act, which establishes a broad policy of historic preservation, including the active encouragement of state and local efforts, came about as the result of the federal government's acknowledgement of the inadequacies of the pre-1966 preservation program in the face of an ever-increasing extension of state and federal

construction projects. The Act serves to define historic preservation as "the protection, rehabilitation, restoration and reconstruction of districts, sites, buildings, structures and objects significant in American history, architecture, archaeology or culture."

Several sections of this Act require detailed discussion. First, Section 101 directs the Secretary of the Interior to expand and maintain a NATIONAL REGISTER OF HISTORIC PLACES which will include cultural resources of state and local as well as national significance in order to ensure future generations an opportunity to appreciate and enjoy the nation's heritage. The National Register criteria are as follows:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history: or
- B. that are associated with the lives of persons significant in our past: or
- C. 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; or information important in prehistory or history.
- D. that have yielded, or may be likely to yield, information important in history or prehistory.

Section 101 also establishes a STATE HISTORIC PRESERVATION OFFICE within each state and territory which functions as the liaison agency between the federal and state governments with respect to both general preservation programs and the coordination of cultural resource review planning for specific projects. In Connecticut, the Connecticut Historical Commission is the State Historic Preservation Office and the Director of the Commission serves as the State Historic Preservation Officer. Specific State Historic Preservation Office staff and preservation plan requirements are stipulated by federal regulations (36 CFR 60, The National Register of Historic Places), Currently, minimal staff requirements mandate that the State Historic Preservation Office consist of professionals from the disciplines of history, architectural history, archaeology, and architecture. The State Historic Preservation Officer and the professional staff implement all federal and state historic preservation programs within Connecticut. Responsibilities of the State Historic

Preservation Office include, among others, administration of the National Register of Historic Places program, the undertaking of a comprehensive state wide cultural resource survey, and the professional cultural resource review of all federally funded, assisted, or licensed projects with in Connecticut.

Section 101 further establishes a MATCHING GRANT-IN-AID PROGRAM to the states with respect to the preservation and rehabilitation of cultural resources listed in or eligible for the National Register of Historic Places. The Connecticut State Historic Preservation Office has actively encouraged and supported, via the matching grant program, the initiation of architectural and archaeological surveys by local communities and professional organizations.

Section 106 of the National Historic Preservation Act instructs every federal agency having direct or indirect jurisdiction over a proposed federal, federally assisted, or licensed undertaking to "take into account the effect of the undertaking on any district, site, building, structure or object that is included in or eligible for inclusion in the National Register." In addition, the federal agency "shall afford the ADVISORY COUNCIL ON HISTORIC PRESERVATION an opportunity to comment with regard to such undertaking." In turn, the Advisory Council has developed Regulations 36 CFR 800, Protection of Historic and Cultural Properties, which outline the procedural process to be undertaken by federal agencies or their representatives in order to comply with Section 106. Together, Section 106 and Advisory Council Regulations 36 CFR 800 establish a mechanism for the professional review of cultural resources which are either active planning phase for all federally funded, assisted, or licensed undertakings.

Section 201 establishes the Advisory Council on Historic Preservation, while 1976 amendments to the National Historic Preservation Act change the administrative status of the Advisory Council from that of a subprogram of the Department of the Interior to that of an independent federal agency.

[National Environmental Policy Act of 1969 \(P.L. 91-190\)](#)

This Act declares a national policy to "encourage production and enjoyable harmony between man and his environment ... and to enrich the understanding of the ecological systems and natural resources important to the Nation. The National Environmental Policy Act mandates the systematic assessment of both natural and cultural resources in federal project planning. This legislation is generally recognized by its major requirement that federal agencies prepare a detailed Environmental Impact Statement for major federal actions which significantly affect the quality of the human environment. Preparation of an Environmental Impact Statement must explicitly assess the undertaking's

potential direct and indirect effect upon cultural resources as an integral part of the review process.

Executive Order 11593: Protection and Enhancement of the Cultural Environment

Issued in May 1971, this Executive Order instructs all federal agencies to provide leadership in preserving, restoring, and maintaining the historic and cultural environment. This executive action further mandates that federal agencies locate, inventory, and nominate all cultural resources under their jurisdiction or control that appear to qualify for the National Register of Historic Places and exercise due caution in any undertaking prior to the completion of such inventories and evaluations. This policy directive has been codified within Section 206 of the National Historic Preservation Act Amendments of 1980.

Archaeological and Historic Preservation Act of 1974 (P.L. 93-291)

This legislation amends the original Reservoir Salvage Act of 1960 so that appropriate federal actions for the preservation of significant archaeological data will be undertaken with respect to any alteration of the terrain caused as a result of any federally funded, assisted, or licensed undertaking. The Act directs federal agencies to notify the Secretary of the Interior when their activities may cause irreparable loss or destruction of significant scientific, prehistoric, historic, or archeological data. The Act further authorizes the federal agency or the Secretary of the Interior to expeditiously undertake procedures for the identification, recovery, and preservation of threatened significant data.

1976 Amendment (P.L. 94-458) to Freedom of Information Act 89-665)

Section 101(a)(4) of this legislation provides the Secretary of the Interior with the authority to withhold from public disclosure the specific location of archaeological resources which are listed on the National Register when it is determined "that the disclosure of specific information would create a risk of destruction or harm to such sites or objects." In keeping with the spirit of this amendment, federal agencies are encouraged to carefully evaluate all potential deleterious effect, i.e., vandalism, which might accrue as a result of the publication of archaeological site locational data.

National Historic Preservation Act Amendments of 1980 (P.L. 96-515)

This legislation substantively amends the original 1966 Act in several ways. Of general importance, explicit

participation of local governments within both the National Register nomination and the Section 106 processes has been mandated. Additionally, owner consent is required for National Register listing.

Section 106 responsibilities remain unchanged except for minor technical clarifications, such as local governmental participation, programmatic exemption of programs when impacts are negligible, and the imposition of higher review standards for federal actions which might affect National Historic Landmarks.

Executive Order 11593 directs that federal agencies inventory all eligible properties within their jurisdiction and exercise caution until the completion of such surveys in toto. This Act further advocates an increased sensitivity of federal programs towards the obtainment of federal preservation objectives. Lastly, Section 304 reaffirms the principle that federal agencies have discretionary authority to withhold from public disclosure information relating to the character and location of archaeological resources.

FEDERAL AGENCY REGULATIONS

Office of Management and Budget

Circular A-95 Revised, issued in partial implementation of the Intergovernmental Act of 1968 (P.L. 90-577), represented a structured approach towards the coordination of planning and development activities among all levels of government. In April 1983, Executive Order 12372 "Intergovernmental Review of Federal Programs" revoked Circular A-95 and provided states with the opportunity to revise or develop new procedures for the review of federal projects. The Connecticut Office of Policy and Management replaced its A-95 process with an "Intergovernmental Review" process, which provides federal, state, and local governments and individual applicants an opportunity for strengthening their program effectiveness through the increase of applicant awareness and the avoidance of conflict at later planning stages. The State Historic Preservation Office provides important input for those projects or activities that have a potential for affecting cultural resources in order that applicants may initiate compliance with the National Historic Preservation Act of 1966.

Council on Environmental Quality

The Council on Environmental Quality Regulations, 40 CFR 1500, Preparation of Environmental Impact Statements: Guidelines, direct that whenever feasible the provisions of the National Historic Preservation Act of 1966, Advisory Council Regulations 36 CFR 800, and the Environmental Impact Statement requirement of the National Environmental Policy Act be effectively combined into a single comprehensive document which meets all applicable federal regulations. However, it is critical to note that where federal projects are not subject to the Environmental Impact Statement provisions of the National Environmental Policy Act, federal agencies are nonetheless obligated to comply with the Section 106 directive of the National Historic Preservation Act of 1966.

Federal Highway Administration

The Department of Transportation Act of 1966 (P.L. 89-670; 49 USC 1653), Highway Act of 1968 (P.L. 90-495), Federal-Aid Highway Program Manual of 1974 (Sections 19n, 20a-c, and 21a-c), and Policy and Procedure Memorandum 20-7 of 1971 (codified as 23 CFR 765, Archeological and Paleontological Salvage) mandate the explicit preservation of cultural resources in the federal highway planning process. Section 4(f) of the Department of Transportation Act of 1966, as amended, declares that the Secretary of Transportation shall not approve any program or project

which requires the use of any land from a historic site of national, state, or local significance unless the following conditions exist: (1) there is no feasible alternative to the use of such land, and (2) the design of the project includes all possible planning to minimize harm to any historic site resulting from such use.

Environmental Protection Agency

Section 6.214(a) of 40 CFR 6, Preparation of Environmental Impact Statements: Final Regulations, and Program Guidance Memo #52, Field Surveys to Identify Cultural Resources Affected by EPA Construction Grant Projects (1975), direct that Environmental Protection Agency-sponsored undertakings conform to the provisions of the National Historic Preservation Act of 1966 and Advisory Council Regulations 36 CFR 800 in addition to the requirements of the National Environmental Policy Act. Program Guidance Memo #52 stipulates that the Environmental Protection Agency shall consult with the State Historic Preservation Office in order to identify all properties that may be eligible for listing in the National Register within the project area. If existing information is insufficient to identify affected properties that may be eligible for the National Register, Memo #52 commits the Environmental Protection Agency to the funding of cultural resource surveys. Memo #52 acknowledges the importance of an early assessment of cultural resources in order to expedite project planning. In addition, Memo #52 provides that reasonable costs for surveys or other identification activities are to be considered as an eligible grant expense.

Department of Housing and Urban Development/Community Development

The Department of Housing and Urban Development has set forth regulations governing environmental review procedures as 24 CFR 58, Environmental Review Procedures for the Community Development Block Grant Program. These regulations require the grant recipient to assume the federal responsibility for compliance with historic preservation legislation. Section 58.24 of these procedures states that applicants must examine, as part of the environmental review process, each project in accordance with the National Historic Preservation Act of 1966 and Advisory Council Regulations 36 CFR 800. Further, if the project will affect any property listed in or eligible for the National Register of Historic Places, then the applicant and not the Department of Housing and Urban Development shall initiate compliance with Advisory Council Regulations 36 CFR 800.

Other Federal Agencies

In response to the cultural resource responsibilities outlined in the National Historic Preservation Act of 1966 and Advisory Council Regulations 36 CFR 800, most federal agencies have developed legislation, regulations, procedures, or departmental policies in order to coordinate effectively agency planning activities with cultural resource concerns. Additional examples of federal agency regulations are noted in Table 1.

Federal grant applicants are advised either to secure copies of pertinent federal agency regulations or to contact the respective agency for details concerning specific agency cultural resource review procedures. Effective and efficient project planning must include cultural resource considerations undertaken in a manner consistent with specific agency regulations, Section 106 of the National Historic Preservation Act, and Advisory Council Regulations 36 CFR 800.

Table 1: Federal Agency Guidelines, Policies and Counterpart Regulations.

AGENCY & CITATION	REGULATION TITLE
Advisory Council on Historic Preservation -36 CFR 801	Historic Preservation Requirements of the Urban Development Action Grant Program: Proposed Regulations, 1981.
- 36 CFR 805	National Environmental Policy Act Implementation Procedures.
Soil Conservation Service - 7 CFR 656	Procedures for the Protection of Archaeological & Historic Properties Encountered in SCS-Assisted Programs.
Corps of Engineers - 33 CFR 325	Processing of Department of the Army Permits: Procedures for the Protection of Cultural Resources: Proposed Regulations, 1980.
Environmental Protection Agency	Program Guidance Memo #52: Field Surveys to Identify Cultural Resources Affected by EPA Construction Grant Projects, 1975.
- 40 CFR 6	Preparation of Environmental Impact Statements.
Housing & Urban Development - 24 CFR 58	Community Development Block Grant Programs: Environmental Review Procedures.
Federal Highway Administration - 23 CFR 765	Archaeological & Paleontological Salvage.
- 23 CFR 771	Environmental Impact & Related Procedures.
Urban Mass Transit Administration 49 CFR 662	Environmental Impact & Related Procedures.

CONNECTICUT LEGISLATIVE HISTORY

The Connecticut Historical Commission is charged by state statute (Section 10-321 et seq.) with, among other tasks, the identification, investigation, and preservation of Connecticut's historic, architectural, and archaeological resources. Major statutory responsibilities of the Connecticut Historical Commission include the establishment of standards and criteria to guide municipalities in the establishment of local historic districts, the administration of the Department of the Interior's National Register of Historic Places programs, and the administration of the STATE REGISTER OF HISTORIC PLACES. The State Register is the official listing of those sites important to the historical development of the state and uses the same criteria for listing as the National Register. Designation is conferred in one of the following three ways: a site is proposed as an individual listing by resolution of the Connecticut Historical Commission; a site is included in a proposed local historic district; or a site is nominated for listing in the National Register. Connecticut State Statutes, Section 10-321(d), provides the Historical Commission with the discretionary authority to withhold archaeological site location information where public knowledge might endanger the site's preservation.

The Director of the Connecticut Historical Commission serves as the State Historic Preservation Officer in carrying out the responsibilities of the National Register program. In compliance with federal regulations, the STATE HISTORIC PRESERVATION OFFICE consists of professionals from the disciplines of history, architectural history, architecture, and archaeology. The State Historic Preservation Office implements its National Register responsibilities by means of a program of historical, architectural, and archaeological research and survey; the study and nomination of cultural resources to the National Register; and the administration of the Historic Preservation Fund grants-in-aid program.

Regulations (Section 22a-1a-1 et seq.) were promulgated in November 1978 for the implementation of the CONNECTICUT ENVIRONMENTAL POLICY ACT. Section 22a-1a-3-(a)(4) of these regulations specifies that considerations of environmental significance shall include an evaluation concerning the "disruption or alteration" of a historic, architectural, or archaeological resource or its setting.

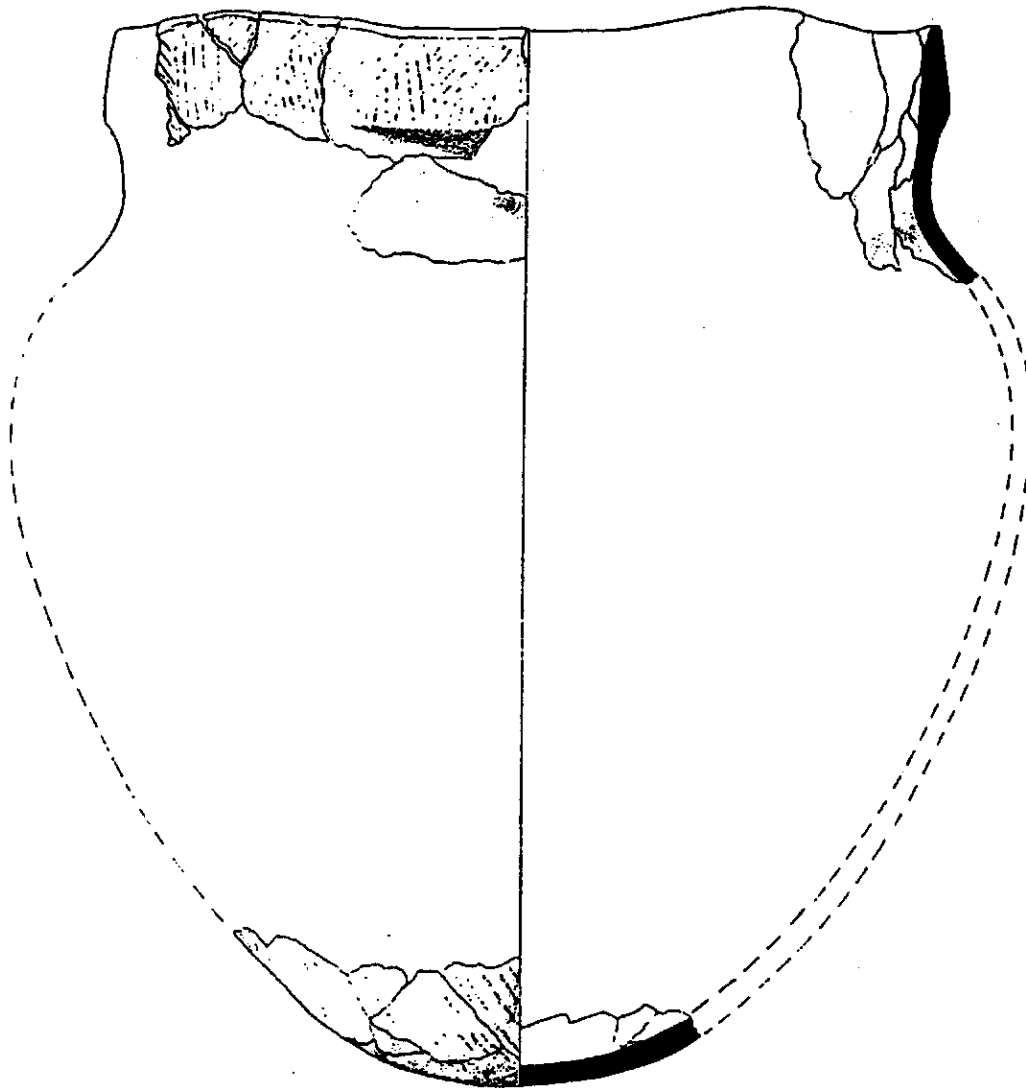
Connecticut Public Act 81-177 amended the Connecticut Environmental Policy Act in the following two ways: (1) cultural resources are explicitly identified as important project-planning factors for state-sponsored undertakings, and (2) the Connecticut Historical Commission is identified as a mandated review agency. Therefore, state agencies should include cultural resource information as an integral

component in the preparation of environmental impact evaluations. State agencies should request as early as possible the comments of the Connecticut Historical Commission with respect to both the identification of significant cultural resources and the nature of any potential effect which might occur as a result of a state-sponsored undertaking.

THE ARCHAEOLOGICAL REVIEW PROCESS

SUMMARY: This section outlines a professional review process for ensuring timely and cost-effective compliance with federal and state historic preservation legislation. Respective agency actions at each step of the review process are described.

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Niantic stamped clay vessel fragments, Nick's Niche prehistoric archaeological site. Line drawing courtesy of the Public Archaeology Survey Team, Inc.

THE ARCHAEOLOGICAL REVIEW PROCESS

Advisory Council Regulations, 36 CFR 800, Protection of Historic Properties, require that federal agencies, at the earliest stage of planning or consideration of a proposed undertaking, consult with the State Historic Preservation Office to identify cultural resources. Similarly, the Connecticut Environmental Protection Act regulations stipulate that state agencies must identify and conserve the state's cultural heritage in coordination with the Connecticut Historical Commission.

State Historic Preservation Office/Connecticut Historical Commission review offers several advantages for federal and state project planning. First, the State Historic Preservation Office bears the responsibility under the National Register program (36 CFR 61, National Register of Historic Places and Comprehensive Statewide Historic Survey and Plans) for the direction of a comprehensive statewide survey of cultural resources. Second, the State Historic Preservation Office possesses the broadest professional experience available with respect to the cultural resources of Connecticut. Together, these factors assure federal and state agencies of an expedient and effective examination of an undertaking's potential effect upon cultural resources. Further, if the professional review by the State Historic Preservation Office is undertaken during the earliest possible stage of planning, then the federal or state agency can effectively satisfy historic preservation directives as an integral component of project planning. The alternative to early compliance with the historic preservation procedures normally involves complicated and costly delays and the acceptance of expedient actions not in the best interests of either project planning or cultural resource management.

When requested, the State Historic Preservation Office will provide professional guidance concerning cultural resources. However, responsibility for initiation and completion of the requirements of the Advisory Council regulations remains a federal agency obligation. Failure to adhere properly to procedural demands of the Advisory Council regulations has on several occasions been construed by federal and state courts to be sufficient justification for the issuance of injunctions prohibiting project completion until Advisory Council Regulations 36 CFR 800 have been satisfied. Therefore, consultation with the State Historic Preservation Office at the earliest stage of project planning ensures both the professional review of cultural resource concerns and the timely implementation of project development.

The State Historic Preservation Office's professional experience and familiarity with both Connecticut's cultural resources and federal and state regulatory procedures form

the basis for the design of the cultural resource review procedures described in this manual. If effectively followed, these procedures will facilitate an expeditious, efficient, and professional evaluation of cultural resources by the State Historic Preservation Office.

REVIEW DOCUMENT REQUIREMENTS

Project information received from Intergovernmental Review or directly from federal, state, and local agencies or their professional consultants is initially examined in order to ascertain if the submitted material is adequate to permit an immediate professional review. If the submitted material fails to describe adequately the nature and location of the project, an assessment of the project's effect on cultural resources cannot be initiated. In those cases in which the information is incomplete, supplemental data will be requested and the State Historic Preservation Office's review delayed until receipt of the requested information.

Therefore, the submittal of sufficiently detailed information concerning a proposed undertaking represents a critical milestone toward the accomplishment of a prompt and effective cultural resource review. The State Historic Preservation Office recommends that the following information be submitted for cultural resource review purposes:

1. Narrative description of the proposed undertaking, including specific discussion and identification of all primary and infrastructural (secondary) areas of construction and ground disturbance. The description of new construction, including alterations, should provide detail as to the number and size of new structures and, if available, elevations or perspective views of new structures. If no construction or ground disturbance will occur as a result of the project, this should be explicitly indicated.
2. Site plan indicating the existing and proposed contours, buildings, and other site features; photogrammetric map (1" = 400') preferred.
3. U.S. Geological Survey topographic map (1" = 24000') indicating the precise location of the project.
4. Photographs of all existing structures to be demolished, abandoned, or altered, or whose setting will be visually changed, and all areas where ground disturbance will take place or has taken place.
5. Information on the location of existing utilities and the nature and extent (vertical and horizontal) of previous landscape alterations.

The following data are optional but will further expedite the review process:

1. Map indicating the soils at the proposed site or soil boring logs.

2. Narrative description of the existing vegetative ground cover at the proposed site.
3. Information on the history associated with structures in the project area
4. Aerial photographs of the proposed site.
5. Copy of any Environmental Assessment Statement, Environmental Impact Statement, or other environmental review record, if previously prepared.

THE CONNECTICUT REVIEW PROCESS

The State Historic Preservation Office's initial review for determining a project's potential impact upon archaeological resources (prehistoric, historic, and industrial) involves a twofold assessment of ground disturbance. First, if the undertaking does not involve any direct landscape alterations or indirect ground disturbance (i.e., land acquisition for active recreation may increase the potential for archaeological site vandalism), then the State Historic Preservation Office will comment that the undertaking will have no effect on archaeological resources. In addition; the State Historic Preservation Office will examine the available evidence concerning past and current activities which have modified the original landscape. Since the integrity and information potential of archaeological sites depend upon the precise interrelationship of the cultural evidence and the surrounding soil matrix, the nature and extent (vertical and horizontal dimensions) of previous ground disturbance are critical variables for assessing the potential impact of a project upon archaeological resources. In general, any project which coincides fairly closely with a previously disturbed area, such as existing utility lines or graded or dredged areas, will receive a no effect comment.

Two factors which affect the evaluation of ground disturbance need further comment. First, the assessment of previous ground disturbance is primarily determined from the information supplied by the applicant, and therefore the importance of accurate and complete documentation for review purposes must be reemphasized. In addition, not all kinds of ground disturbance may adversely affect the integrity of archaeological resources. For example, the systematic displacement of archaeological materials as a result of plowing activities can be compensated for by means of current archaeological field methods. Further, some apparent landscape alterations, such as paved surfaces or filled areas, may have only minimally altered the original ground surface and thus may serve to protect the archaeological resource by increasing its depth beneath the original ground surface. Therefore, documentation submitted concerning ground disturbance should explicitly detail both the nature and extent (vertical and horizontal dimensions) of past alterations of the original land surface.

The next stage of the State Historic Preservation Office's review for determining a project's impact upon archaeological resources involves an examination of archaeological site survey information available at the State Historic Preservation Office. However, since no systematic and comprehensive examination of Connecticut's archaeological resources has been undertaken to date, insufficient information exists concerning the actual

density and distribution of archaeological sites within most areas of the state. In order to improve upon this archaeological data base, the State Historic Preservation Office has encouraged and will continue to actively encourage, via the National Park Service's matching grant-in-aid program, the systematic archaeological investigation of Connecticut by professional archaeological organizations. For historic archaeological resources, the State Historic Preservation Office supplements the existing archaeological site survey data through the inspection of historic maps, atlases, and town histories when available at the State Historic Preservation Office.

Together, the archaeological site survey and historical documentary data may provide sufficient information for an assessment of a project's impact upon archaeological resources. If the project coincides with a previously surveyed area and it can be established that the project will not be situated near known archaeological resources, then the project will receive a no effect comment. However, if the project might affect a known archaeological resource, then the State Historic Preservation Office's comment will so indicate and will provide guidance to the applicant concerning the fulfillment of historic preservation responsibilities, as outlined further below.

The final stage of the State Historic Preservation Office's review concerns those projects which will involve construction or ground disturbance in areas where comprehensive archaeological surveys have not been undertaken. Again, it must be emphasized that as a result of the absence of a systematic statewide archaeological survey, known archaeological sites represent only a small percentage of the entire universe of Connecticut's archaeological resources.

The State Historic Preservation Office's review and assessment of project impact in archaeologically unknown areas is undertaken by means of the application of a predictive model of archaeological site location. Through evaluation of a series of ecological and topographical variables, i.e., distance from freshwater, stream gradient, soil type, local flora and fauna, degree of slope, availability of raw materials, distance from known communication or trade routes, historic settlement patterns and the like, and in conjunction with available comparative ecological and topographical information from the known distribution of archaeological sites, it is possible to predict whether or not a high probability exists that a particular geographic location was inhabited or utilized during the prehistoric or historic period. For example, known archaeological site data and ecological and topographical features combine to suggest that small knolls situated within the Connecticut River floodplain possess a high probability for the existence of prehistoric

archaeological resources. Conversely, the predictive model approach can indicate that the ecological and topographical features at a particular location would have been nsuitable for human occupation or resource utilization. In these latter cases, the State Historic Preservation Office will comment that the project will have no effect on Connecticut's archaeological resources.

If time permits, the State Historic Preservation Office will supplement the available information by means of an on-site inspection. This combination of field visit, predictive model approach, and the professional training, experience and judgement of the State Historic Preservation Office staff generally results in a reliable assessment of the archaeological potential, or lack thereof, for Unsurveyed areas. Further, the absence of a finite inventory of archaeological resources within the potential impact area of an undertaking is not sufficient justification per se for a declaration of no effect. In that the current state of the art for archaeological site predictive studies produces scientifically confident results, the absence of identified archaeological resources does not legally warrant a determination of no effect by either the applicant or the responsible agency.

If known archaeological sites exist within the project area or the predictive model evaluation indicates that a high probability exists for the presence of unidentified archaeological sites, then the State Historic Preservation Office will recommend that the responsible agency initiate a professional archaeological survey in order to locate and identify all archaeological resources within the project area. Agencies are advised that an assessment of archaeological resources by an avocational archaeologist or local historical/archaeological society will not satisfy historic preservation requirements. A list of professional archaeologists who have indicated a willingness to undertake archaeological surveys in Connecticut in accoroance with federal and state statutes has been prepared for the information and benefit of project planners and federal and state agencies (see Appendix I). In addition, there may be other professional archaeologists, unknown to the State Historic Preservation Office, who may be both qualified and interested in undertaking archaeological surveys in Connecticut.

The responsibility for the initiation and completion of an archaeological survey of the project area, as recommended by the State Historic Preservation Office, rests with the lead federal or state agency. The State Historic Preservation Office further recommends that agencies and their archaeological consultants adhere to the archaeological investigation guidelines provided herein in order to facilitate an expedient and effective State Historic Preservation Office review of the resulting

archaeological survey data. Additional archaeological survey guidelines have been promulgated by the National Park Service in 36 CFR 66, Appendix B, Recovery of Scientific, Prehistoric, Historic and Archaeological Data: Methods, Standards, and Reporting Requirements (see Appendix I). Upon completion of the archaeological investigations, the responsible agency should incorporate the abstract of the archaeological survey report, the State Historic Preservation Office's evaluation of the appropriateness of the archaeological survey procedures employed, and the significance, or lack thereof, of the archaeological data recovered as an integral component of the agency's environmental planning document for the project. If the archaeological investigations indicate that no significant archaeological resources exist within the project area, then the State Historic Preservation Office will comment that the project will have no effect on Connecticut's archaeological resources. The responsible agency should retain this documentation as evidence of its compliance with historic preservation procedures. However, if design changes necessitate a shift in the location of the project or a marked increase in the potential impact area beyond the geographical project bounds that were initially examined, then the project should be resubmitted to the State Historic Preservation Office for cultural resource review in accordance with the National Historic Preservation Act of 1966 or the Connecticut Environmental Policy Act.

ARCHAEOLOGICAL RESOURCE SIGNIFICANCE

THE FEDERAL PROCESS

If archaeological investigations indicate that in situ archaeological resources exist within the project area, the State Historic Preservation Office will advise that the federal agency' should formally request an opinion from the Secretary of the Interior with respect to the eligibility of the archaeological resources for the National Register of Historic Places. Data requirements for determination of eligibility requests are specified within 36 CFR 63, Determination of Eligibility for Inclusion in the National Register of Historic Places. In general, the documentation required of a federal agency for a request for a determination of eligibility includes a physical and historical description, a statement of significance, maps, photographs, and the opinion of the State Historic Preservation Officer as to the property's eligibility for the National Register. This information and a formal request for a determination of eligibility should be submitted to the following:

Keeper, National Register of Historic Places
U.S. Department of the Interior
National Park Service
P.O. Box 37127
Washington, D.C. 20013-7127

If a consensus exists as to the property's eligibility, then 36 CFR 63.3 provides that less extensive documentation is required for a determination of eligibility. Under the provisions of 36 CFR 63.3, the federal agency's request may consist of a letter or statement that includes: (1) an explicit statement that the property is eligible for the National Register; (2) a signed statement by the State Historic Preservation Officer that the property is considered eligible; and, (3) substantive information on the property including a description, specific boundaries, significance, and an explanation as to why it is eligible for the National Register. Under the provisions of 36 CFR 63.3, the Keeper of the National Register has 10 working days from receipt of the agency's request in which to respond.

Alternatively, 36 CFR 800.4(c)(2) of the Advisory Council's regulations stipulate that if the agency and the State Historic Preservation Office agree that the property is eligible, then the property "shall be considered eligible for the National Register for Section 106 purposes." The agency should then proceed with further compliance regarding the procedural requirements of Advisory Council regulations 36 CFR 800

The State Historic Preservation Office will provide the federal agency with as much professional guidance as time permits with respect to the accurate identification and description of an archaeological resource for determination of eligibility purposes. Pursuant to a review of the federal agency's documentation for a request for a determination of eligibility, the State Historic Preservation Officer will provide a professional opinion as to the property's eligibility for the National Register. It must be emphasized that the State Historic Preservation Office cannot initiate a request for a determination of eligibility. The legal responsibility for requesting a determination of eligibility, as set forth in 36 CFR 800 and 36 CFR 63, rests with the responsible federal agency or Community Development Block Grant recipient. It must also be stressed that only the Secretary of the Interior or the Secretary's designee has the authority to make a definitive determination of a property's eligibility for the National Register. The opinion of the State Historic Preservation Officer, professional archaeological consultants, or the federal agency is advisory only.

If the Secretary of the Interior determines that a property is not eligible for the National Register, the federal agency should retain this documentation as evidence of the agency's compliance with the Advisory Council regulations: the agency's project may then proceed. However, if the Secretary of the Interior determines that a property is eligible for the National Register, the federal agency should initiate compliance with Advisory Council procedural requirement 36 CFR 800.5, Assessing Effects. For those cultural resources which have been listed on the National Register and identified as being within the proposed project area, the federal agency should initiate direct compliance with Advisory Council Regulations 36 CFR 800.5 et seq.

Determination of Effect

Pursuant to 36 CFR 800.5, the federal agency in consultation with the State Historic Preservation Office must determine whether the proposed undertaking will have an effect upon cultural resources listed on or determined to be eligible for the National Register. In accordance with 36 CFR 800.9(a), Criteria of Effect, a federal project shall be considered to have an effect when "the undertaking may alter characteristics of the property that may qualify the property for inclusion in the National Register. For the purpose of determining effect, alteration to features of a property's location, setting or use may be relevant depending on a property's significant characteristics and should be considered."

If upon application of the Criteria of Effect there is a finding of no effect, the agency should retain adequate

documentation of the finding of no effect and the undertaking may proceed. However, if a finding of effect is established, then the agency must initiate compliance with 36 CFR 800.5(c) et seq.

Determination of Adverse and No Adverse Effect

Upon determining that the undertaking will have an effect upon an archaeological resource either listed in or eligible for the National Register, the federal agency, in consultation with the State Historic Preservation Office, must assess whether the effect of the undertaking will be adverse. The Criteria of Adverse Effect set forth in 36 CFR 800.9(b) include, but are not limited to, the following:

1. Destruction or alteration of all or part of a property.
2. Isolation of a property from its surrounding environment or alteration of its environment.
3. Introduction of visual, audible, or atmospheric elements that are out of character with a property or alter its setting.
4. Neglect of a property resulting in its deterioration or destruction.
5. Transfer or sale of a federally owned property without adequate conditions or restrictions regarding preservation, maintenance, or use.

If upon application of the Criteria of Adverse Effect there is a finding that the effect is not adverse, the federal agency must forward, for review purposes, adequate documentation of its finding of no adverse effect, including the opinion of the State Historic Preservation Officer, to the Advisory Council at the following address:

Executive Director
Advisory Council on Historic Preservation
The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, D.C. 20004

Unless the Advisory Council objects within 30 days to the federal agency's finding of no adverse effect, the agency will have satisfied the procedural requirements of Section 106 and 36 CFR 800 and the undertaking may proceed.

In addition to the Criteria of Adverse Effect as stated in 36 CFR 800.9(b), the Advisory Council has developed special supplemental criteria which should be applied in order to evaluate an undertaking's potential effect upon archaeological resources. These special criteria are established within Advisory Council guidelines entitled

Treatment of Archaeological Properties: A Handbook (see Appendix I).

In general, these guidelines recognize that in certain predefined instances the professional retrieval of data may constitute an appropriate and acceptable treatment for archaeological resources. Proper implementation of these guidelines requires the emphasizing of three critical issues. First, in order to document a determination of no adverse effect under these guidelines, the federal agency must provide the Advisory Council with evidence that: (1) all alternatives for avoiding an adverse effect were considered, and (2) all other feasible approaches for mitigation were investigated. Second, the federal agency must consult with the State Historic Preservation Office concerning the professional appropriateness of the proposed data recovery plan as the most suitable treatment for the resource. Finally, the federal agency must ensure that the Advisory Council is provided an opportunity to comment on the proposed data recovery plan prior to its field application. It must be emphasized that the initiation of a professionally inappropriate data recovery program may constitute per se an adverse effect, that is, the loss of significant archaeological data, and therefore, such action may place the federal agency in violation of Section 106 and 36 CFR 800 directives.

If upon application of the special archaeological effect criteria there is a finding that the effect is not adverse, the federal agency must forward adequate documentation of its finding of no adverse effect, including the opinion of the State Historic Preservation Officer, to the Advisory Council in the same manner as described above. Unless the Advisory Council objects within 30 days to the " federal agency's finding of no adverse effect, the agency may proceed with its implementation of the data recovery plan and subsequently the agency's undertaking.

However, if a finding of adverse effect is established, the federal agency must initiate compliance with 36 CFR 800.5(e) et seq., as described below.

Consultation Process

Upon either a finding of adverse effect or a nonacceptance of a finding of no adverse effect by the Advisory Council, the federal agency must:

1. Notify, in writing, the Advisory Council;
2. Consult the State Historic Preservation Office to explore alternatives to avoid or reduce the effect on archaeological properties;

3. Prepare the appropriate documentation in accordance with the data requirements as set forth at 36 CFR 800.8 (b): and
4. Proceed with the coordination requirements set forth in 36 CFR 800.5(e) et seq.

In turn, the Advisory Council may participate in the consultation process which could include an on-site inspection and a public information meeting. Subsequent to such meetings, the Advisory Council will consult with the federal agency and the State Historic Preservation Office in order to determine whether there exists a reasonable alternative to avoid or satisfactorily mitigate any adverse effect. If the Advisory Council, the federal agency, and the State Historic Preservation Office unanimously agree upon an alternative to avoid or mitigate the adverse effect, these parties will execute a Memorandum of Agreement which stipulates the agreed-upon solution. Upon the expiration of a 30-day review period or the signing of the Memorandum of Agreement by the Chairman of the Advisory Council, the Memorandum of Agreement becomes final and the federal agency may proceed in accordance with its stipulations.

For archaeological resources, feasible and prudent alternatives to satisfactorily mitigate an adverse effect may encompass a variety of possible actions. In that the significance of archaeological resources depends on the integrity of the relationship between the cultural data and the surrounding soil matrix, alternatives which allow for preservation in situ, such as project redesign for site avoidance or site-burial, should be emphasized. Federal agencies should encourage their professional archaeological consultants or staff to develop innovative approaches which would make possible both the preservation of archaeological resources and project completion.

Federal agencies should consider the salvaging of an archaeological resource, that is, the reliance upon a data recovery program, as a feasible alternative only after a thorough examination and subsequent rejection of all other possible mitigative approaches. In that retrieval of archaeological data may represent a substantial investment of time and dollars, the federal agency must earnestly commit itself to a professional archaeological investigation in order to ensure that the best technical treatment will be undertaken to preserve the maximum archaeological information for the benefit of the archaeological community and the citizens of Connecticut and the nation.

After consultation with the State Historic Preservation Office and the Advisory Council, the federal agency may initiate and complete its data recovery plan. However, professional technical guidance and assistance in the development of the data recovery plan and in the initiation

of all subsequent mitigation activities may be obtained from the State Historic Preservation Office. Further, the provisions of the Archaeological and Historic Preservation Act of 1974 (P.L. 93-291) provide that federal agencies may request the professional assistance of the U.S. Secretary of the Interior by contacting:

U.S. Department of the Interior
National Park Service
Office of Cultural Programs 600 Arch
Street, RM 9414 Philadelphia, PA
19106 Telephone: (215) 597-2336

Upon receipt of a formal request (in writing or by telephone) from a federal agency, the National Park Service will provide professional archaeological guidance, on behalf of and to the extent desired by the federal agency, with respect to the formulation of a data retrieval plan, the identification of professional archaeological consultants, the initiation and completion of field survey and data analysis, and the publication and distribution of the reports resulting from such investigations. In accordance with Section 7(a) of the Archaeological and Historic Preservation Act of 1974, a federal agency may transfer up to 1% of the total authorized appropriation for the project to the U.S. Secretary of the Interior, in which case the National Park Service will assume the agency's responsibility with respect to the undertaking of a professional data recovery program. In addition, Section 7(b) of the Act authorizes the appropriation of additional funds which may be utilized at the discretion of the U.S. Secretary of the Interior to supplement the agency's 1% contribution if the data retrieval program requires such action for successful completion.

ARCHAEOLOGICAL RESOURCE SIGNIFICANCE

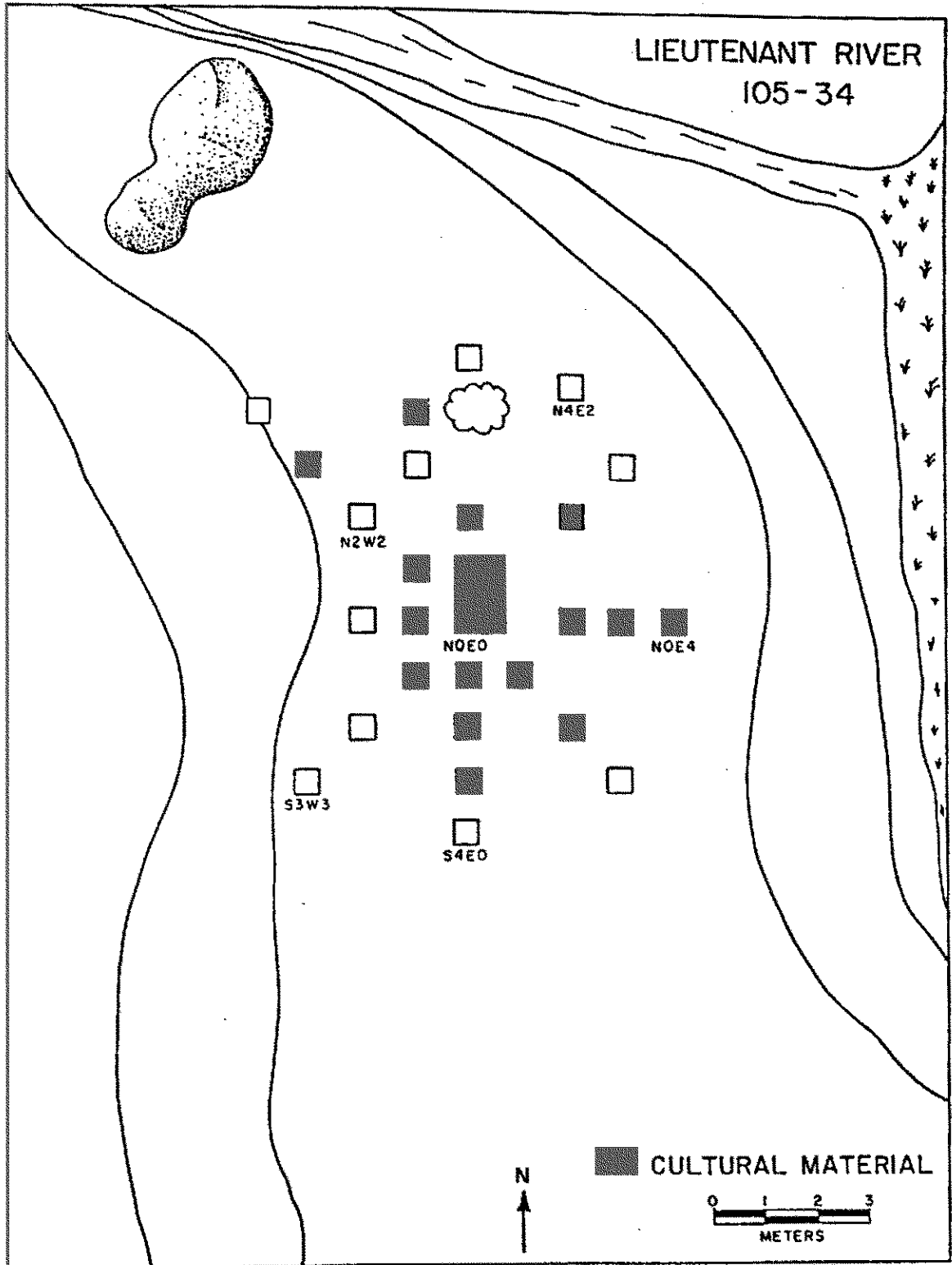
THE STATE PROCESS

If archaeological investigations indicate that significant in situ archaeological resources exist within the project area;-the Connecticut Historical Commission, in its role as the State Historic Preservation Office, will advise the responsible state agency accordingly. The Connecticut Historical Commission will also coordinate with the state agency vis-a-vis Connecticut Environmental Policy Act Regulations, Section 22a-1a-1 et seq.

In general, the Connecticut Historical Commission's philosophy concerning archaeological resources and state environmental review procedures is as follows:

For archaeological resources, feasible and prudent alternatives to satisfactorily mitigate an adverse effect may encompass a variety of possible actions. In that the significance of archaeological resources depends upon the integrity of the relationship between the cultural data and the surrounding soil matrix, alternatives which allow for in situ preservation, such as project redesign for site avoidance or site burial, should be emphasized. State agencies should encourage their professional archaeological consultants or staff to develop innovative approaches which would make possible both the preservation of archaeological resources and project completion.

State agencies should consider the salvaging of an archaeological resource, that is, the reliance upon a data recovery program, as a feasible alternative only after a thorough examination and subsequent rejection of all other possible mitigative approaches. In that retrieval of archaeological data may represent a substantial investment of time and dollars, the state agency must earnestly commit itself to a professional archaeological investigation in order to ensure that the best technical treatment will be undertaken to preserve the maximum archaeological information for the benefit of the archaeological community and the citizens of Connecticut.

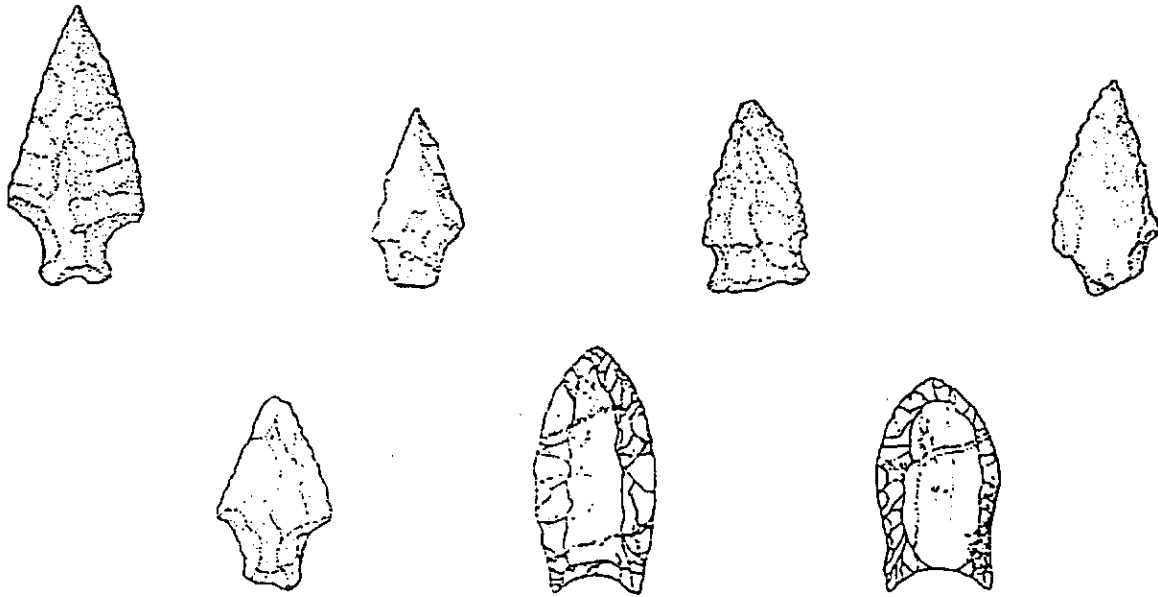


Site excavation plan, Lieutenant River prehistoric archaeological site. Line drawing courtesy of the Public Archaeology Survey Team, Inc.

REVIEW AND IMPLEMENTATION OF ARCHAEOLOGICAL INVESTIGATIONS

SUMMARY: This section provides technical guidance to agencies for the solicitation and review of cost-effective proposals for professional archaeological services. This section also provides agencies and their professional consultants with guidance as to the minimal level of archaeological survey investigatory effort which would be acceptable to the State Historic Preservation Office.

<u>KEY CONCEPTS:</u>	<u>PAGE</u>
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PERFORMANCE CRITERIA.....	47
* Assessment Survey	
* Reconnaissance Survey	
* Intensive Survey	
* Data Recovery Program	



Middle Archaic projectile points (upper row), Dill Farm prehistoric archaeological site. Fluted projectile points (lower row), prehistoric archaeological site #41-085. Line drawing courtesy of the Public Archaeology Survey Team, Inc.

ARCHAEOLOGICAL SITE DEFINITIONS

In accordance with its responsibilities under federal and state cultural resource review regulations, the Connecticut State Historic Preservation Office will continue to emphasize a definition of archaeological site which embodies the principles of significance, distinctiveness, integrity, and potential for assignability to a particular culture or cultural period. Further, these site definition parameters appear to be consistent with the Department of the Interior's definition of archaeological site as published in Preparation of Environmental Statement and Guidelines for Discussion of Cultural Resources (National Park Service, 1973):

...areas of historic, prehistoric or symbolic importance, upon which occurred important historic or prehistoric events, or which are importantly associated with historic or prehistoric events or persons or cultures, or which were subject to sustained historic or prehistoric activity of man....

Therefore, the nature of the artifactual and ecofactual data, combined with their provenience, the possibility for the identification of cultural affiliations, and contextual information, is a critical concern in the classification of archaeological evidence as an archaeological site.

Conversely, if recovered archaeological data fail to satisfactorily meet the above archaeological site definition parameters, then such archaeological data would not be identified as an archaeological site for cultural resource review purposes. The State Historic Preservation Office suggests that isolated finds of single artifacts, as well as small clusters of lithic debitage, appear to lack both contextual information and systemic context, and therefore such archaeological evidence would not constitute an archaeological site for cultural resource review purposes. However, two clarifying statements must be offered. First, in that isolated finds and other "non-site" archaeological data do possess information of utility for scientific research purposes, all archaeological data encountered as a result of archaeological investigations should be properly reported to the State Historic Preservation Office regardless of quality, quantity, or condition. Second, the State Historic Preservation Office will consider potential exceptions to the above archaeological site definition parameters on an individual case basis. The accurate and complete reporting of all archaeological data represents the archaeological consultant's most critical responsibility for ensuring compliance with the spirit and intent of historic preservation directives.

Further, the archaeological consultant is responsible for the professional identification of all archaeological resources, that is, all prehistoric, historic, and industrial archaeological sites, which may exist within the impact area of a proposed undertaking. In general, the archaeological consultant must identify all archaeological resources over 50 years of age within the study area in terms of their potential importance for archaeological research. Archaeological resources under 50 years of age should also be evaluated regarding their potential for yielding information of exceptional importance for historical and/or archaeological research. In order to achieve such a comprehensive inventory of archaeological resources and to maintain an uncompromising accuracy of archaeological data identification, the consultant must utilize a systematic interdisciplinary research approach.

Further, the State Historic Preservation Office reserves the right to inspect all field and laboratory investigations during all phases of archaeological resource identification and evaluation in order to ensure that professional standards are maintained and that the best interests of the cultural resource, the federal government, and the State of Connecticut are served.

REQUEST FOR PROPOSAL

Three factors are critical for ensuring a prompt and project-appropriate response to an agency's request for proposal for professional archaeological services. First, qualified professional archaeological consultants must be identified. The State Historic Preservation Office has identified and will continue to identify professional archaeologists who: (1) have expressed an explicit interest in and willingness to undertake contractual obligations for archaeological survey activities in Connecticut, and (2) have professional training and experience compatible with the professional qualification guidelines suggested by the National Park Service in 36 CFR 66 (see Appendix I). The State Historic Preservation Office will amend and update the list as required.

Alternatively, an agency may undertake to solicit the professional services of archaeological consultants other than those individuals currently known to the State Historic Preservation Office. In such cases, the State Historic Preservation Office recommends that the agency adhere to the professional training and experience guidelines put forth by the National Park Service in 36 CFR 66, Appendix C.1(b), in its solicitation for and evaluation of archaeological consultants.

In addition to these guidelines, the State Historic Preservation Office recommends that an agency ensure the satisfaction of the following criteria:

Professional archaeological consultants should be affiliated with an institution or organization which possesses the capability for providing: (1) necessary equipment for professional field investigations: (2) adequate laboratory facilities for data stabilization, preservation, and technical analysis: and (3) adequate storage and curatorial and retrieval facilities for all primary field records and all data recovered (artifactual, botanical, faunal, soil samples, etc.) or a consensual agreement with a qualified institution for professional data storage and curatorial and retrieval services.

The second major variable which affects the response of archaeological consultants to an agency's request for proposal for archaeological services is the coordination, or lack thereof, between the agency's timetable for project design and construction and the general infeasibility of archaeological investigations during New England's winter and early spring months. Therefore, the agency should actively incorporate the severe difficulty, if not impossibility, of undertaking archaeological field work

during New England's winter weather into the projected schedule for its undertaking.

Due to the impracticability of archaeological field investigations during the winter period and the concurrent increasing demand for professional archaeological services during New England's weather-shortened archaeological field season, the State Historic Preservation Office has intentionally structured the archaeological research requirements, as described below, so that the location and identification of archaeological resources may be undertaken as two distinct phases: assessment and reconnaissance. Together, these two phases of archaeological investigation represent the minimal acceptable standards of investigation that will enable the State Historic Preservation Office to assess professionally whether archaeological resources would be affected by an agency's undertaking. Although separation of these survey activities into two distinct phases may serve to generate modest cost increases in comparison with their accomplishment as a single unified investigation, the State Historic Preservation Office considers that several important advantages outweigh this factor.

First, the assessment archaeological phase emphasizes archival and documentary research and personal communication with knowledgeable individuals. Therefore, the assessment phase appears to be especially appropriate for New England's winter season. Not only are archaeological consultants more readily available during the winter months, but also such activity may promote a more efficient and expeditious reconnaissance archaeological survey through the alleviation of the increasing pressure and the tight scheduling which currently exist during the archaeological field season. Second, the assessment phase has been designed to provide the responsible agency with archaeological information at the earliest stages of project planning when the identification of specific areas that will involve ground disturbance has not been determined. Further, the assessment phase could provide sufficient data for refinement of the scope of service for the reconnaissance archaeological survey, and thus less adjustments in the latter may be necessitated through the assessment phase's identification of heretofore unknown archaeological or environmental factors. Nonetheless, the responsibility for evaluating the merits and disadvantages involved with the undertaking of separate versus unified assessment and reconnaissance phases rests with the responsible federal or state agency.

The final variable which structures the quality and validity of archaeological consultants' response to a request for proposal is the specific content and archaeological relevance of the information provided by an agency which describes the nature of the proposed undertaking. In order to ensure a timely and appropriate

archaeological proposal, the State Historic Preservation Office recommends that the agency include the following information with its request for proposal for archaeological services:

1. Explicit description of the specifics of the proposed undertaking, detailing all project activities which involve alteration of the existing ground contours within the project area.
2. Project maps of sufficient scale to indicate the tentative location of all primary project-related ground disturbance, i.e., access roads, borrow pits, staging areas, and erosion control measures.
3. Any available information as to the nature and extent (vertical and horizontal) of known ground disturbance, i.e., existing utilities.
4. Identification, and availability for inspection upon request, of all previously prepared supplemental environmental data. Studies of potential archaeological significance include soil boring logs, floral and faunal inventories, wetland maps, identification of locally known historic or archaeological sites, or identification of local information sources.
5. Guarantee of access to all locations which require archaeological field investigation.
6. Explicit identification of the agency's requirements concerning the refilling, resurfacing, or reseeded of all subsurface excavations.
7. Information concerning the agency's projected schedule for the design and construction phases of the undertaking.
8. Information as to the potential distribution list for the archaeological survey report. For review purposes, the State Historic Preservation Office requires two copies of assessment and reconnaissance archaeological survey reports and three copies of intensive and data recovery archaeological reports, at least one copy of which should include original photographs, when appropriate. The number of copies of the survey report required should be explicitly stated. Potential recipients may include the federal agency, its state counterpart (i.e., Federal Highway Administration and the Connecticut Department of Transportation), the town or private applicant, their professional engineering consultants, and the professional archaeological community.

9. Explicit provision that the archaeological consultant be knowledgeable of and adhere to the spirit and intent of historic preservation directives concerning actions on behalf of the agency with respect to archaeological resources.
10. Statement that all archaeological data (artifactual, botanical, faunal, soil samples, etc.), field notes, and project reports which result from project-related investigations become the property of either the federal or state government. The State Historic Preservation Office strongly recommends that all archaeological data be repositied with the Laboratory of Archaeology - Museum of Natural History at the University of Connecticut. All inquiries should be directed to:

Dr. Robert E. Dewar or Dr. Kevin McBride
Department of Anthropology
U-176
University of Connecticut
Storrs, CT 06268
Telephone: (203) 426-4264

Exceptions to this policy require the advanced written approval of the State Historic Preservation Office. The Museum of Natural History's curation standards, archival guidelines, and fee structure are contained in Appendix IV. A sample repository agreement is contained in Appendix V.

ARCHAEOLOGICAL PROPOSALS

The State Historic Preservation Office recommends that archaeological proposals be submitted for its review and comment in order to ensure agencies that such proposals are professional, project appropriate, and cost effective. In addition, the State Historic Preservation Office will provide professional archaeological assistance in the development of project-specific archaeological proposals in excess of the general guidelines provided in this section.

In general, the State Historic Preservation Office strongly encourages that agencies and archaeological consultants minimize their utilization of "boiler plate" or "standard" archaeological proposals. Several disadvantages accrue from over-reliance upon standard scopes of service. Of paramount importance, standard archaeological proposals inhibit the development of innovative methodological approaches; thus, the examination and comparison of differing research designs in terms of their effectiveness concerning archaeological data recovery potential and their cost ratios are precluded. Further, in comparison with project-specific archaeological proposals, "standard" archaeological proposals possess a far greater proclivity toward both inflated cost estimates and subsequent cost overruns. Therefore, the State Historic Preservation Office advocates that archaeological consultants develop familiarity with the design specifics and any potential special archaeological problems of each project. Integral to the preparation of a proposal, archaeological consultants should not only review the basic information provided as part of a request for proposal, but should also actively pursue all information which may affect the nature and duration of archaeological investigative activities within the project area. At a minimum, archaeological consultants should consult the State Historic Preservation Office as to both known cultural resources and/or special concerns, as well as undertake an on-site inspection of the proposed project area in-order to ensure a professionally responsible and appropriate proposal.

The archaeological proposals should not simply offer to perform archaeological services in accordance with the request for proposal, but rather should describe the proposed archaeological research in as much detail as possible. In order to expedite the comparison and evaluation of archaeological proposals, the State Historic Preservation Office strongly recommends that all such documents contain, at a minimum, the following information categories and be arranged in accordance with the general sequence described herein:

1. Introduction and Summary. This section should provide a concise description of the proposed archaeological research program, the identification

of anticipated difficulties or special concerns, and the specific archaeological procedures selected for their resolution.

2. Agency Project Description. To ensure accurate and cost-effective field investigation, a verbatim project description should be excerpted from the request for proposal for archeological services. If known, agency timetables for project design and construction, agency project identifier numbers, and Intergovernmental Review project' numbers should be included.
3. Archaeological Research Design. This section should comprise the major portion of the archaeological proposal and, at a minimum, several critical areas should be discussed. These include an explicit acknowledgement of the consultant's responsibility to identify all prehistoric and historic resources over 50 years of age. In addition, the archaeological research design should expressly identify and incorporate all data secured from the on-site inspection and/or preliminary research. Further, this section should include a detailed technical discussion of the proposed archaeological research design, especially with respect to the State Historic Preservation Office's performance criteria for archaeological investigations, as stated below. All proposed divergencies from the State Historic Preservation Office's performance criteria should be explicitly discussed with respect to both the agency's project and the archaeological survey objectives. Provision for excavation via mechanical assistance, i.e., backhoe, should be detailed and justified as to its appropriateness and suitability concerning known archaeological site location data, pedological data, overburden deposits, and the like. If anticipated, factors which may affect the prompt and thorough completion of the archaeological proposal, i.e., denial of access rights until after crop harvesting or formal purchase of easement, should be identified, their potential project impact discussed, and provisions for their resolution offered.
4. Schedule for Archaeological Investigations. The approximate time schedule and duration of archaeological investigations, including anticipated dates for submission of required reports, should be identified.
5. Acknowledgement of Historic Preservation. Knowledge of and adherence to the spirit and intent of historic preservation statutes, as well as other

appropriate federal and state legislation concerning actions on behalf of the agency with respect to archaeological resources, should be stated by the archaeological consultant.

6. Archaeological Data Provisions. All archaeological data (artifactual, botanical, faunal, pedological, etc.), field notes, and project reports which directly result from project-related archaeological investigations become the property of the federal or state government via the responsible agency. In addition, the responsibility for professional data storage, curation, accessibility, and retrieval prior to the final disposition of the archaeological data should be acknowledged by the archaeological consultant. In general, final disposition of the archaeological data on behalf of the federal or state government results from an agreement between the responsible agency and the archaeological consultant (or some other qualified institution) and in consultation with the State Historic Preservation Office. As previously noted, the University of Connecticut's Laboratory of Archaeology - Museum of Natural History is the designated repository for all archaeological data resulting from federal and state-sponsored undertakings in the state of Connecticut.
7. Personnel Qualifications. Curriculum vitae of the project and field directors and all special technical consultants and/or sub-contractors should be provided.
8. Statement of Facilities Available. Specific facilities-required with respect to field, laboratory, and analytical investigations, as well as for data storage, curation accessibility, and retrieval purposes, should be identified. Further, assurance of liability and property insurance or hold-harmless agreement should be noted.
9. Cost Proposal. The State Historic Preservation Office offers no preferred format for fiscal data: however, the breakdown of costs should be identified, in general, according to research activities and personnel categories. Reliance upon technical consultants or subcontractors should be indicated, i.e., industrial archaeologist, structural engineer, cartographer, or computer analyst. If appropriate, costs for resurfacing and/or reseeding, as well as mechanical equipment rental, should be noted. In addition to standard expense categories such as transportation, expendable supplies, report preparation, overhead, and profit margin, cost proposals should itemize

all proposed special analytical procedures, i.e., radiocarbon dating, pollen, faunal and soil analysis, photomicroscopy, computer analysis, etc.

In general, the State Historic Preservation Office re-emphasizes that Advisory Council Regulations 36 CFR 800 mandate that federal agencies consult with the State Historic Preservation Office and the Advisory Council concerning proposals for data recovery programs for archaeological resources determined to be eligible for the National Register of Historic Places. Federal agencies are strongly cautioned that implementation of an inappropriate archaeological proposal for a data recovery program may constitute an adverse effect and such action could place the federal agency in violation of historic preservation directives. Therefore, federal agencies must ensure that the State Historic Preservation Office and the Advisory Council are explicitly consulted for all proposals for data recovery programs and/or other alternative mitigative proposals concerning archaeological resources determined to be eligible for the National Register prior to their field implementation.

PERFORMANCE CRITERIA

Assessment Survey

The State Historic Preservation Office views the assessment archaeological survey as an opportunity for an agency to secure archaeological input at the earliest stage of project planning when the identification and selection of specific project areas have not been determined. Sensitivity surveys should be designed to provide a general evaluation of the archaeological potential within the overall planning area of an undertaking. This should be accomplished through the identification of known archaeological resources, areas of severe ground disturbance, and areas of low to high probability for the existence of unknown archaeological resources.

Conversely, an assessment survey will seldom provide sufficient data to ensure the identification of all archaeological resources within the study area. Nonetheless, an assessment survey should provide federal and state agencies with an opportunity to incorporate and actively consider important archaeological information early in the project-planning process. The acquisition of archaeological data early in the project planning process should strengthen the agency's capability for assessing the potential for conflict between the preservation and professional management of cultural resources and the implementation of the agency's proposed undertaking. The early input" of archaeological assessment data should also generate a more informed, efficient, cost-effective, and satisfactory resolution of cultural resource management objectives and the initiation of all subsequent stages of project design.

Sensitivity surveys should include, but need not be restricted to, the following major research activities:

1. Consultation with the State Historic Preservation Office:
2. Consultation with scholars (historians, archaeologists, etc.) who have or are currently engaged in research pertinent to the area:
avocational archaeological and/or historical societies: preservation organizations: local residents: and project engineers:
3. Study of the background data on the area's prehistory, history, ecology, soils, ethnography, and historical geography. This research effort should consist of a comprehensive literature search in order to identify known or potential

archaeological sites. Sources consulted should, at a minimum, include the following:

- (a) Primary historical documents - deeds, public records, atlases and gazetteers, travel accounts, Sanborn insurance maps, photographs, early U.S. Geological Survey maps, etc.
- (b) Secondary historical documents - town and county histories, archaeological site reports, previously catalogued artifacts, ecological studies, etc.
- (c) Existing surveys and known files of archaeological resources - research and educational institutions, contract archaeological organizations, the National Register of Historic Places, the State Register of Historic Places, etc.

In general, the literature search should encompass both a broad regional perspective as well as an intensive examination of all available data concerning the specific area of the proposed undertaking.

4. Walkover and complete surface inspection of the entire project area. This field inspection should include the verification of the location, condition, and extent of known archaeological sites, the identification of past and current land uses, the identification of historic feral plant species, and the documentation of surface scatters of artifactual materials. Photographic documentation should be undertaken for visible cultural features or structures.
5. Documentation of the nature and extent of ground disturbance by means of field inspection: inclusion of photographic documentation when appropriate. Further, this information should be supported, when feasible, by construction or engineering records: comparison of early photographs or U.S. Geological Survey maps: or the written testimony of the project engineer, former or current town employees, or local residents.
6. Completion of Connecticut Historical Commission inventory forms (Appendix II and III herein) for the documentation of known archaeological sites, visible cultural features or structures, and surface scatters of artifactual materials.
7. Preparation of an archaeological survey report which analyzes and synthesizes the archaeological

and environmental data secured from the above research activities. This report should critically examine the archaeological potential of the project area in terms of the recovered historical, archaeological, environmental, ecological, and all other pertinent data. This preliminary discussion and assessment of the project area's archaeological potential should include graphic materials sufficient to enable the identification of all specific sites and areas discussed within the survey report. At a minimum, the report should include: (a) a U.S. Geological Survey map (or relevant portions thereof) with the project and field investigation areas precisely noted, and (b) larger scale maps which indicate the boundaries of the proposed project, areas previously surveyed, location of known archaeological resources, areas of ground disturbance, areas not field inspected, and predicted areas of low or high sensitivity for the potential existence of unknown archaeological resources.

Reconnaissance Survey

A reconnaissance survey is a detailed field examination designed to locate all prehistoric and historic archaeological resources within the project area. In general, a reconnaissance survey incorporates all the research activities of the assessment survey with a systematic sampling strategy of subsurface field testing. Together, the assessment and reconnaissance surveys represent the minimal acceptable standards of archaeological investigation that will enable the State Historic Preservation Office to evaluate professionally whether archaeological sites exist within the impact area(s) of an agency's undertaking.

Reconnaissance surveys are necessitated by New England's relatively high annual humidity, which generates a substantial floral matting that restrains erosional activities and which in turn limits the serendipitous exposure of archaeological materials. Further, the extent and depth of New England's vegetative ground cover and the richness, density, and complexity of Connecticut's historic settlement patterns necessitate the initiation of subsurface investigations for most areas of undisturbed ground even if the assessment survey does not provide incontrovertible proof of the existence of archaeological resources at a given location. The State Historic Preservation Office must emphatically caution federal and state agencies against relying too heavily upon assessment surveys. Archaeological resources in New England are predominately located beneath the ground surface as a result of the highly active environmental and cultural history of the area.

Reconnaissance surveys should include, but need not be restricted to, the following major research activities:

1. Completion of all performance criteria for assessment surveys.
2. Consideration and application of theories and models from the fields of prehistoric and historic archaeology, cultural anthropology, cultural ecology, geology, historical geography, history, cybernetics, etc.
3. Systematic subsurface archaeological investigations undertaken in accordance with a parsimonious, cost-effective, and professional-quality sampling strategy. The research design for subsurface investigations should represent a statistically valid sample of the total project area in accordance with the professional archaeological literature concerning archaeological sampling, such as the following:

- Lovis, William
1976 Quarter Section and Forests: An Example of Probability Sampling in the Northeastern Woodlands. American Antiquity 41(3): 364-71.
- Flannery, Kent V., ed.
1976 The Early Mesoamerican Village. New York: Academic Press.
- Mueller, James W., ed.
1975 Sampling in Archaeology, Tuscon:University of Arizona Press.
- Redman, Charles L.
1974 Archaeological Sampling Strategies. Anthropology No. 55. Reading, MA: Addison-Wesley Press.

The sampling design should demonstrate sufficient flexibility to accommodate unexpected environmental conditions. and/or new evidence concerning the location, distribution, and density of archaeological resources. Further, two general factors should be considered in the formulation of the subsurface sampling strategy. First, the greater the percentage of the project area surveyed, the greater will be the accuracy of the prediction with regard to the nonsurveyed sections. Second, the environmental homogeneity or lack thereof within the project area may affect the confidence of any archaeological predictive statements.

4. Preparation of an archaeological survey report which analyzes and synthesizes the archaeological and environmental data secured from the above research activities. This report should specifically identify and describe all archaeological resources which exist within the project area. Conversely, the report should critically summarize all archaeological resource-free areas in terms of the recovered historical, archaeological, environmental, ecological, and all other pertinent data. All potential conflicts which may exist between the professional management of identified archaeological resources and the initiation of the agency's undertaking should be explicitly examined: graphic materials should be included as appropriate. Recommendations and alternatives for the early resolution of all potential conflicts should be offered, including the development of estimates in terms of cost, time, and logistics, for an intensive archaeological investigation of all known

archaeological resources for the purpose of securing sufficient data for a determination of eligibility (in accordance with 36 CFR 63 and 36 CFR 800) or a determination of State Register significance.

Intensive Survey

An intensive survey represents an in-depth archaeological field examination of a particular archaeological site(s) for the express purpose of recovering sufficient information to enable the responsible agency and the State Historic Preservation Office to evaluate an archaeological site's context, integrity, and significance. In general, the archaeological investigations should be structured so that sufficient information is recovered in order to satisfy either the data requirements specified within 36 CFR 63, Guidelines for Level of Documentation to Accompany Requests for Determination of Eligibility for Inclusion in the National Register (see Appendix I), for federally sponsored undertakings or Connecticut Historical Commission guidelines for State Register inquiries.

Intensive surveys should include, but need not be restricted to, the following major research activities:

1. Consultation with the State Historic Preservation Office.
2. Systematic subsurface archaeological investigations undertaken in accordance with a parsimonious, cost-effective, and professional-quality sampling strategy. The subsurface investigations should be designed minimally to retrieve data concerning the following general areas: (a) definition of site boundaries in both horizontal and vertical dimensions: (b) functional and chronological nature and range of artifactual, ecofactual, and structural features: (c) contextual data, i. e., provenience and/or integrity information: and (d) environmental context, i.e., geological, geomorphological, and palynological data. In general, the State Historic Preservation Office cautions archaeological consultants that " the utilization of mechanical excavation equipment should be explicitly detailed and justified as to its appropriateness and suitability with regards to pedological data, extent of overburden, and all other pertinent factors prior to its field implementation.
3. Comprehensive review of the archaeological literature for comparative archaeological data and information concerning site distribution patterns.
4. Subjection of all recovered archaeological data to standard archaeological study, including, but not limited to, radiocarbon dating, faunal, floral and edaphic analysis, lithic wear analysis, scanning electron microscopy, etc.

5. Completion of Connecticut Historical Commission inventory forms (Appendix II and III) for all archaeological sites investigated.
6. Preparation of an archaeological survey report which analyzes and synthesizes the archaeological and environmental data secured from the above research activities. The report should objectively evaluate the significance of each archaeological resource investigated with reference to National Register and State Register criteria. The assessment must be undertaken with a comprehensive perspective of the particular intra-site data, the known archaeological record, all research developed by local or regional archaeologists, and the general importance, or lack thereof, of the research potential within each particular archaeological site. Recommendations and evaluations concerning the potential eligibility or noneligibility of each archaeological resource judged to possess significant research potential should be documented in a format consistent with the data requirements for requesting a determination of eligibility as specified in '36 CFR 63.

Further, the report should evaluate the potential impact of the agency's undertaking upon those archaeological resources which appear to meet the eligibility criteria for the National or State Register. . All irreversible and irretrievable commitments of archaeological resources must be examined in detail. For federal projects, all determinations of effect, adverse effect, and/or no adverse effect must be undertaken in accordance with 36 CFR 800.5 et seq. For areas of potential impact, recommendations should be offered for cost-effective decision-making by the agency and the State Historic Preservation Office that maximize the protection and in situ preservation of archaeological resources and that allow the progressive development of the agency's undertaking. The archaeological consultant should employ a catholic and innovative perspective in the formulation and evaluation of mitigation alternatives for all potential areas of adverse effect upon archaeological resources. Mitigation programs should assess the practicality and cost-effectiveness of at least the following courses of action:

- (a) In situ preservation through either the "no build" alternative or project redesign.
- (b) Site acquisition with preservation restrictions.

- (c) Site preservation through inclusion in open space or limited use areas.
- (d) Minimization of effect through technical changes in engineering or construction techniques.
- (e) Site documentation~ and subsequent burial.
- (f) Partial data recovery through professional archaeological excavation.
- (g) Total data recovery through professional archaeological excavation.

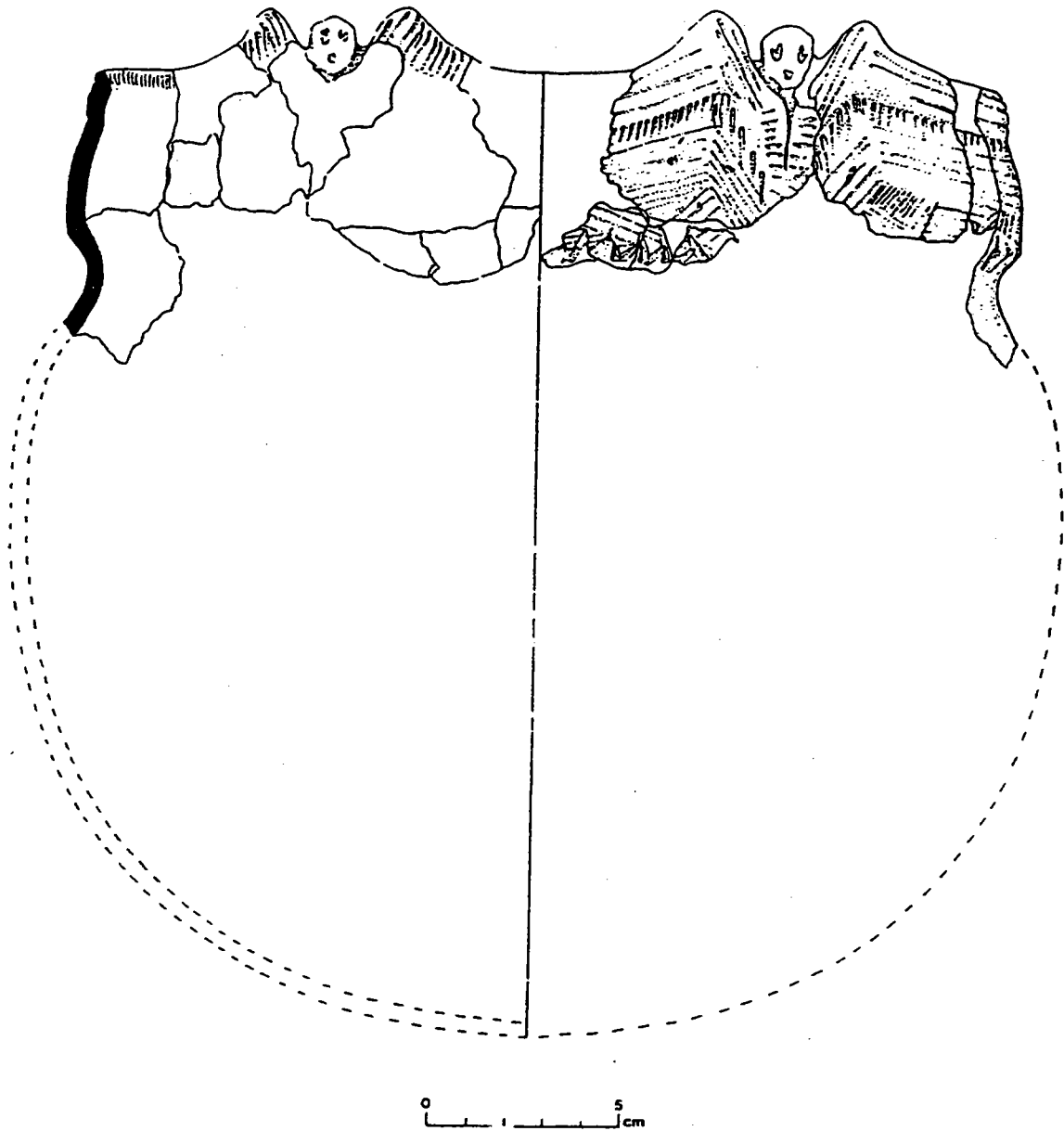
Data Recovery Program

Archaeological data recovery is the systematic and multidisciplinary investigation, documentation, and subsequent removal of all the scientific, prehistoric, and/or historic data which comprise an archaeological resource or a predetermined sample thereof. That is, data recovery represents the professional documentation of an archaeological resource by means of its physical destruction through archaeological excavation. Professional guidelines and standards for archaeological data recovery programs have been established and should be adhered to as specified in 36 CFR 66, Recovery of Scientific, Prehistoric, Historic, and Archaeological Data: Methods, Standards and Reporting Requirements, and the Advisory Council's Treatment of Archaeological Properties: A Handbook (see Appendix I). Due to the unalterable finality of a field- implemented data recovery program for archaeological resources, the State Historic Preservation Office stresses the critical importance of the requirement that federal agencies solicit the professional review and comment of the State Historic Preservation Office and the Advisory Council prior to the field initiation of data recovery procedures, as mandated in 36 CFR 800.

ARCHAEOLOGICAL REPORT STANDARDS

SUMMARY: This section outlines standards for archaeological survey final reports.

KEY CONCEPTS:	PAGE
ARCHAEOLOGICAL REPORT STANDARDS	59



Shantok incised clay vessel fragments, Coudert Ledge prehistoric archaeological site. Line drawing courtesy of the Public Archaeology Survey Team, Inc.

ARCHAEOLOGICAL REPORT STANDARDS

Preparation of a succinct and comprehensive archaeological survey report is a difficult challenge. Both the specific content and the general style and method of presentation represent critical variables which may affect the report's utility and viability as a potentially important planning document. Archaeological reports should attempt to satisfy the valid and often conflicting demands of a diverse audience. Public administrators, i.e., the federal or state agency, the State Historic Preservation Office, the Advisory Council, and the Secretary of the Interior, and others require specific detailed information in accordance with their respective responsibilities as mandated in historic preservation directives. The needs and interests of local communities for general information concerning the professional identification and management of their cultural heritage should be equally addressed. Conversely, the scientific community, that is, one's professional peers, requires an uncompromisingly accurate and comprehensively detailed presentation of the raw data and its analysis and interpretation.

The State Historic Preservation Office believes that a partial solution to the difficult task of satisfying diverse demands within a single archaeological survey "report may be the utilization of a uniform pattern of data presentation within all survey reports. Therefore, the State Historic Preservation Office recommends that all archaeological survey reports undertaken in accordance with historic preservation directives include the general categories outlined below. However, archaeological consultants are cautioned that these guidelines are not intended to represent an exhaustive "check list," but rather represent the most critical and exemplary areas of content for an efficient and expeditious transmission of cultural resource information to all parties concerned.

All archaeological survey reports should include the following major sections:

1. PROJECT DESCRIPTION - if feasible, a verbatim extract from the official project description: all project identifier numbers must be included, i.e., Intergovernmental Review, federal or state agency codes, etc.
2. ABSTRACT - synopsis of the report, including conclusion and recommendations.
3. RESEARCH DESIGN - explicit identification of and justification for research strategies, theoretical constructs, data collection methodologies, and field procedures, i.e., rationale or selection criteria for all research activities, known biases,

outstanding problems (areas not surveyed), etc.

4.

DATA PRESENTATION - including the following areas:

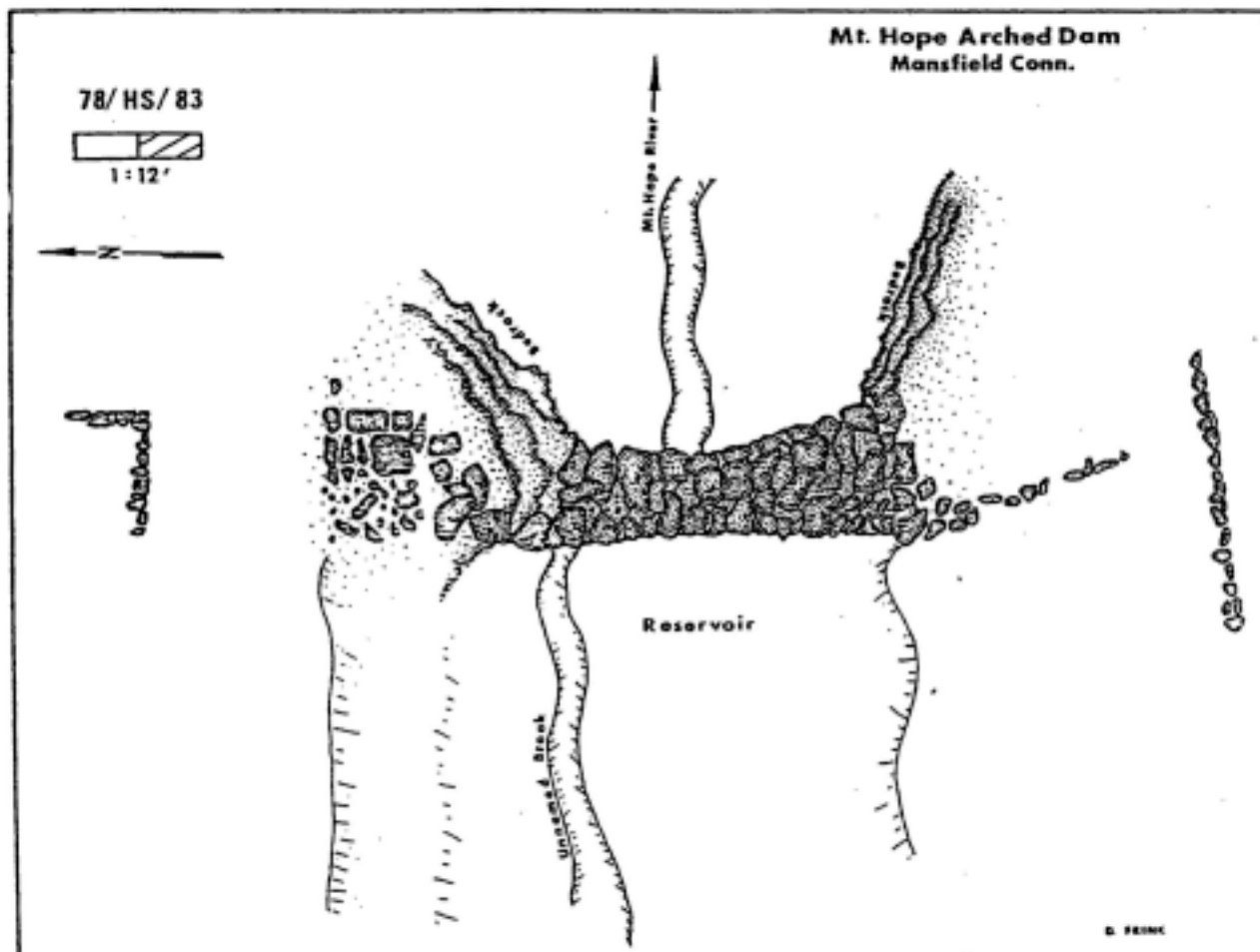
- (a) Identification of study boundaries.
- (b) Identification of regional and site specific historical and environmental settings.
- (c) Summary and evaluation of previous research and known data base.
- (d) Complete artifact inventories presented in terms of vertical and horizontal context.
- (e) Chronological and functional identification of artifactual data.
- (f) Test pit forms and stratigraphic profiles when appropriate.
- (g) Professional-quality black and white 35mm photographs of diagnostic or unique artifacts or important site features.
- (h) Professional-quality graphic materials, including larger scale maps. Drafted data should include precise project boundaries, all areas surveyed, previous surveys, test pit location, known sites, disturbed areas, low to high sensitivity areas, etc. All figures should contain an appropriate identification key and linear scale.
- (i) Explicit identification of all archaeological resources discovered and completion of Connecticut Historical Commission archaeological inventory forms. Specific location data must be reported, but the distribution of such data may be expressly limited and conditioned by either the consultant, the responsible agency, or the State Historic Preservation Office, as follows: "PRIVILEGED DATA: FOR PLANNING PURPOSES ONLY - NOT FOR PUBLICATION" (Connecticut State Statutes, Section 10-321[d]).

5. ANALYSIS AND SYNTHESIS OF DATA - summary and interpretaton of all documentary and field data: results of artifactual and ecofactual studies: discussion of site integrity and/or archaeological research potential.

6. SUMMARY AND RECOMMENDATIONS - explicit discussion

of all reporting recommendations as specified in the section REVIEW AND IMPLEMENTATION OF ARCHAEOLOGICAL INVESTIGATIONS for each particular level of survey.

7. FINAL DISPOSITION OF DATA - acknowledgement of, or provision for, the professional disposition of all archaeological data and primary field records on behalf of the federal or state government.
8. BIBLIOGRAPHY - use of standard American Anthropological Association or American Archeology format for all references cited and/or utilized. Informants and documents which were consulted and failed to yield information should be properly noted. In addition, completion of a professionally current bibliographic form should be undertaken.



Site plan, Mt. Hope false arch dam industrial archaeological site. Line drawing courtesy of the Public Archaeology Survey Team, Inc.

APPENDIX I
LIST OF RESOURCE DOCUMENTS AVAILABLE FROM THE
STATE HISTORIC PRESERVATION OFFICE

LIST OF RESOURCE DOCUMENTS AVAILABLE FROM THE STATE HISTORIC PRESERVATION OFFICE.

I. NATIONAL PARK SERVICE GUIDELINES

1. 36 CFR 63 - Determination of Eligibility for Inclusion in the National Register of Historic Places.
2. 36 CFR 66 - Recovery of Scientific, Prehistoric, Historic and Archaeological Data: Methods, Standards and Reporting Requirements. .

II. ADVISORY COUNCIL ON HISTORIC PRESERVATION GUIDELINES

1. 36 CFR 800- Protection of Historic Properties.
2. Treatment of Archaeological Properties - A Handbook.

III. STANDARD FORMATS FOR DATA REPORTING

1. National Park Service National Register Inventory - Nomination Form.
2. Standardized Bibliographic Format.

IV. LIST OF PROFESSIONAL ARCHAEOLOGISTS

APPENDIX II
CONNECTICUT HISTORICAL COMMISSION
PREHISTORIC ARCHAEOLOGICAL INVENTORY FORM.

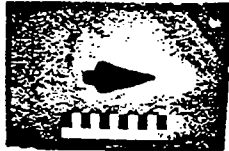
HISTORIC RESOURCES INVENTORY
PREHISTORIC ARCHAEOLOGICAL SITES
 HIST-7 NEW 9/77

STATE OF CONNECTICUT
 CONNECTICUT HISTORICAL COMMISSION
 59 SOUTH PROSPECT STREET, HARTFORD, CONNECTICUT, 06106

FOR OFFICE USE ONLY			
Town No.:	61	Site No.:	p_019
UTM	18	7	09 11: 80 41 59: 41 66 10
QUAD:	Moodus		
NR:	<input type="checkbox"/> ACT	<input type="checkbox"/> ELIG.	<input type="checkbox"/> NO
SR:	<input type="checkbox"/> ACT	<input type="checkbox"/> ELIG.	<input type="checkbox"/> NO
DISTRICT	<input type="checkbox"/> Yes <input type="checkbox"/> No		

IDENTIFICATION	1. SITE NAME	Atomic Power Plant		
	2. TOWN/CITY	VILLAGE	Haddam Neck	
	3. STREET AND NUMBER (and/or location)	Injun Hollow Road, southern extremity		
	4. OWNER(S)	Conn. Yankee Nuclear Power Plant <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private		
DESCRIPTION	5. ATTITUDE TOWARD EXCAVATION	cooperative		
	6. USE (Present)	industrial power generation	(Historic)	farming
	7. PERIOD	<input type="checkbox"/> Paleo <input type="checkbox"/> Early Archaic <input type="checkbox"/> Early Woodland <input type="checkbox"/> Contact <input type="checkbox"/> Middle Archaic <input type="checkbox"/> Middle Woodland <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Late Archaic <input type="checkbox"/> Late Woodland <input type="checkbox"/> Other (Specify)		
	8. DATING METHOD	C-14	<input type="checkbox"/> Intuition	<input type="checkbox"/> Other (Specify)
ENVIRONMENT	9. SITE TYPE	<input type="checkbox"/> Quarry <input checked="" type="checkbox"/> Camp <input checked="" type="checkbox"/> Rockshelter <input type="checkbox"/> Shell Midden <input type="checkbox"/> Cemetery <input type="checkbox"/> Village <input type="checkbox"/> OTHER (Specify)		
	10. APPROXIMATE SIZE AND BOUNDARIES	100 acre tract that contained 2 state sites and known to collectors for over 50 years; bounded on south by river, ridge to north		
	11. STRATIGRAPHY	<input type="checkbox"/> Surface finds <input type="checkbox"/> Plowed <input type="checkbox"/> Not stratified <input type="checkbox"/> Stratified <input checked="" type="checkbox"/> Major Disturbance <input type="checkbox"/> OTHER (Specify)		
	12. SOIL	UFA SOIL SERIES: <input checked="" type="checkbox"/> udorthents, urban land complex-suncok loam sandy TEXTURE: <input type="checkbox"/> sand <input type="checkbox"/> clay <input type="checkbox"/> Silt <input type="checkbox"/> OTHER (Specify) CONTOUR ELEVATION: 10'-30' SLOPE %: <input checked="" type="checkbox"/> 0-5 <input type="checkbox"/> 5-15 <input type="checkbox"/> 15-25 <input type="checkbox"/> over 25 ACIDITY: <input type="checkbox"/> less than 4.5 <input type="checkbox"/> 4.5-5.5 <input type="checkbox"/> 5.6-6.5 <input type="checkbox"/> 6.6-7.3 <input type="checkbox"/> 7.4-8.4		
CONDITION	13. WATER	NEAREST WATER SOURCE	SIZE AND SPEED	DISTANCE FROM SITE
	14. VEGETATION	PRESENT	PAST	
	15. SITE INTEGRITY	<input type="checkbox"/> Undisturbed <input type="checkbox"/> Good <input type="checkbox"/> Fair <input checked="" type="checkbox"/> Destroyed		
	16. THREATS TO SITE	<input checked="" type="checkbox"/> None known <input type="checkbox"/> Highways <input type="checkbox"/> Vandalism <input type="checkbox"/> Developers <input type="checkbox"/> Other (Specify) <input type="checkbox"/> Renewal <input type="checkbox"/> Private <input type="checkbox"/> Deterioration <input type="checkbox"/> Zoning <input type="checkbox"/> Unknown		
ENVIRONMENT	17. SURROUNDING ENVIRONMENT	<input type="checkbox"/> Open Land <input type="checkbox"/> Woodland <input type="checkbox"/> Residential <input type="checkbox"/> Scattered Buildings visible from site. <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Rural <input checked="" type="checkbox"/> High building density <input type="checkbox"/> Coastal <input type="checkbox"/> Isolated		
	18. ACCESSIBILITY TO PUBLIC-VISIBLE FROM PUBLIC ROAD	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

(OVER)

RESEARCH POTENTIAL	<input checked="" type="checkbox"/> Surface Collected	BY WHOM/AFFILIATION Harvey Brooks, High st. Deep River, CT	DATE 1920's
	<input type="checkbox"/> "Pot hunted"	BY WHOM/AFFILIATION	DATE
	<input type="checkbox"/> Tested	BY WHOM/AFFILIATION	DATE
	<input type="checkbox"/> Excavation	BY WHOM/AFFILIATION	DATE
20. PRESENT LOCATION OF MATERIALS			
21. PUBLISHED REFERENCES C.F. Price, Yankee Township			
SIGNIFICANCE	22. RECOVERED DATA (Identify in DETAIL, incl. features, burials, faunal material, etc.) Two state sites (6-MD-37 and 6-MD-38) are located on this neck of land. Harvey Brooks reports that the attached photo was collected in the Cove Meadow area of the neck over 50 years ago, which is just south of power plant. Acc. to Price (p.12) the Indian Battle of Haddam Neck occurred in "...field is at end of the Neck, not far from the bluff that overlooks the Meadows and just east of the famous Indian Cave, once explored by an anthropological expedition from Wesleyan Univ." "pro- 23. ARCHAEOLOGICAL OR HISTORICAL IMPORTANCE "...of arrowheads and tomahawks".		
	Haddam Neck offered superlative resources to Native Americas for centuries before European contact. The full extent of the exploitation through time of this geographic locus should be explored.		
PHOTOGRAPH	PHOTOGRAPHER		
	DATE		
	VIEW		
	NEGATIVE ON FILE		
ADD'L INFORMATION	The Herbert Butler Construction Co. did the bulldozing at this site when the Atomic plant was constructed. Supposedly, the bulldozer operator has material from this action that could be evaluated.		
REPORTED BY:	NAME C.S. Kirkorian	ADDRESS U-176 Univ. of Conn., Storrs, CT 06268	
	ORGANIZATION P.A.S.T.	DATE 5/81	
FIELD EVALUATION		FOR OFFICE USE ONLY	
COMMENTS			

APPENDIX III
CONNECTICUT HISTORICAL COMMISSION
HISTORIC ARCHAEOLOGICAL INVENTORY FORM.


HISTORIC RESOURCES INVENTORY
HISTORIC ARCHAEOLOGICAL SITES
 HIST-3 NEW 9/77

STATE OF CONNECTICUT
 CONNECTICUT HISTORICAL COMMISSION
 59 SOUTH PROSPECT STREET, HARTFORD, CONNECTICUT, 06106

FOR OFFICE USE ONLY			
Town No.:	Site No.:		
UTM:			
QUAD:	Middletown		
NR:	<input type="checkbox"/> ACT	<input type="checkbox"/> ELIG.	<input type="checkbox"/> NO
SR:	<input type="checkbox"/> ACT	<input type="checkbox"/> ELIG.	<input type="checkbox"/> NO
DISTRICT		<input type="checkbox"/> Yes	
		<input type="checkbox"/> No	

IDENTIFICATION	1. SITE NAME Metropolitan Washing Machine Factory Site			
	2. TOWN/CITY Middlefield		VILLAGE Middlesex	
	3. STREET AND NUMBER (and/or location)			
	4. OWNER(S) Fowler's Village Market, H. Dibbern, Lyman Products, Inc. Indian Spring Golf Course <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private			
	5. ATTITUDE TOWARD EXCAVATION unknown			
	6. USE (Present) none - abandoned (Historic) washing machine factory			
DESCRIPTION	7A. PERIOD <input type="checkbox"/> Contact <input type="checkbox"/> 17th C. <input type="checkbox"/> 18th C. <input checked="" type="checkbox"/> 19th C. <input checked="" type="checkbox"/> 20th C. <input type="checkbox"/> Unknown <input type="checkbox"/> Other (Specify)			
	7B. ESTIMATED OCCUPATION RANGE 1820 - 1920			
	8. DATING METHOD		COMPARATIVE MATERIALS	
	DOCUMENTS maps, pub. references		OTHER	
	9. SITE TYPE <input type="checkbox"/> Contact <input type="checkbox"/> Commercial <input type="checkbox"/> Rural <input type="checkbox"/> Other (Specify) <input type="checkbox"/> Agrarian <input type="checkbox"/> Industrial <input type="checkbox"/> Urban <input type="checkbox"/> Unknown			
	10. APPROXIMATE SIZE AND BOUNDARIES 100 x 40 m - Bounded: South by Rte 147 West by Powder Hill Rd.			
	11. STRATIGRAPHY <input type="checkbox"/> No Visible evidence <input checked="" type="checkbox"/> Standing ruins <input type="checkbox"/> Stratified <input type="checkbox"/> Not stratified <input type="checkbox"/> Other (Specify) <input type="checkbox"/> Surface finds <input checked="" type="checkbox"/> Cellar hole <input type="checkbox"/> Plowed <input type="checkbox"/> Major Disturbance			
	12. SOIL USDA SOIL SERIES #1727-W/38B TEXTURE <input type="checkbox"/> sand <input type="checkbox"/> clay <input checked="" type="checkbox"/> Silt <input checked="" type="checkbox"/> loam SLOPE % <input type="checkbox"/> 0-5 <input type="checkbox"/> 5-15 <input type="checkbox"/> 15-25 <input checked="" type="checkbox"/> over 25 ACIDITY <input type="checkbox"/> less than 4.5 <input type="checkbox"/> 4.5-5.5 <input type="checkbox"/> 5.6-6.5 <input type="checkbox"/> 6.6-7.3 <input type="checkbox"/> 7.4-8.4			
13. WATER		NEAREST WATER SOURCE		
PRESENT		PAST		
VEGETATION		deciduous second growth		
14. VEGETATION		cleared		
CONDITION	15. SITE INTEGRITY <input type="checkbox"/> Undisturbed <input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Destroyed			
	16. THREATS TO SITE <input type="checkbox"/> None known <input type="checkbox"/> Highways <input type="checkbox"/> Vandalism <input checked="" type="checkbox"/> Developers <input type="checkbox"/> Other (Specify) <input type="checkbox"/> Renewal <input checked="" type="checkbox"/> Private <input type="checkbox"/> Deterioration <input type="checkbox"/> Zoning <input type="checkbox"/> Unknown			
	17. SURROUNDING ENVIRONMENT <input type="checkbox"/> Open Land <input checked="" type="checkbox"/> Woodland <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Scattered Buildings visible from site. <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Rural <input type="checkbox"/> High building density <input type="checkbox"/> Coastal <input type="checkbox"/> Isolated			
	18. ACCESSIBILITY TO PUBLIC-VISIBLE FROM PUBLIC ROAD <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

(OVER)

RESEARCH POTENTIAL	18. PREVIOUS EXCAVATIONS	BY WHOM/AFFILIATION	DATE
	<input type="checkbox"/> Surface Collected		
	<input type="checkbox"/> "Pot hunted"	BY WHOM/AFFILIATION	DATE
	<input type="checkbox"/> Tested	BY WHOM/AFFILIATION	DATE
	<input type="checkbox"/> Excavation	BY WHOM/AFFILIATION	DATE
20. PRESENT LOCATION OF MATERIALS			
21. PUBLISHED REFERENCES			
Beers 1874, 1884; Middlefield Centennial 1966.			
SIGNIFICANCE	22. RECOVERED DATA (Mostly IN DETAIL, including structures, related outbuildings, landscape features, etc.) This complex industrial site covers an extensive wooded area (100x40 m) on both steeply sloping banks of the ravine immediately east of the intersection of Rte 147 and Powder Hill Rd. on the Cuginchaug River. It includes the remains of at least 6 foundations and the remains of a dam near the E end. All of these ruins were constructed of brownstone, with walls 90 cm in thickness, and average 5 m in height. On the N bank, one ruin (10x16 m) contains the remains of machinery and iron pipe conduit with the N wall surmounted by 1.5 m of brick laid in a running bond. Above the		
	23. ARCHAEOLOGICAL OR HISTORICAL IMPORTANCE The original occupation of this site occurred in 1820 when Ira and Alfred Bailey built a distillery. Various changes in function and ownership continued in the next 50 years including a grist mill in 1849, a machine shop in 1851 and the development of the Metropolitan Washing Machine Co. by David Lyman in 1857. About 1870, expansion up stream to the button factory "privilege" took place (Middlefield Centennial 1966). This extensive and well preserved site merits further archaeological investigation as the largest industrial complex in Baileyville, a section of Middlefield where industrial development was concentrated in the 19th century.		
PHOTOGRAPH	PHOTOGRAPHER		
	J. Cunningham		
	DATE	11/15/78	
	VIEW	from the east	
	NEGATIVE ON FILE		
	Wesleyan Archaeological Laboratory		
ADD'L INFORMATION	22. dam, single low walls parallel the river at the top of the N bank. As the river passes through this ravine it drops 30 - 50 ft.		
REPORTED BY:	NAME	ADDRESS	
	J.P. Cunningham and K. Browner	Box 106, Middle Haddam CT	
	ORGANIZATION	DATE	
	Wesleyan Archaeological Laboratory, Wesleyan University	12/20/78	
FOR OFFICE USE ONLY			
FIELD EVALUATION			
COMMENTS			

APPENDIX IV
GUIDELINES: COLLECTION REPOSITORY, LABORATORY OF
ARCHAEOLOGY AND MUSEUM OF NATURAL HISTORY,
UNIVERSITY OF CONNECTICUT

GUIDELINES

COLLECTIONS REPOSITORY

Laboratory of Archaeology and Museum of Natural History

University of Connecticut

I. Introduction

The Collections Repository of the Laboratory of Archaeology and the Museum of Natural History at the University of Connecticut (hereafter LA/MNH) is intended to serve archaeologists, state and federal agencies, and other organizations and individuals wishing to use the services offered by the repository.

The LA/MNH will accept data and artifacts, accession them into the permanent collections, and curate them in perpetuity according to established museum standards and procedures. Data and artifacts will be accessible for research, publication, and exhibition, and for educational and other purposes in conformance with established LA/MNH policy and procedures.

II. Curation Legislation

The repository is designed to satisfy existing state and federal requirements for the curation of federally owned collections or collections obtained through federally subsidized projects. The term "archaeological collections," as used here, includes: (1) all cultural, geological, faunal, and botanical remains recovered through archaeological survey, testing, or excavation; and (2) all written and visual records (notes, maps, field forms, and photographs), documenting the provenience and recovery of specific archaeological materials. The legal basis for the curation of federally owned collections or those obtained from federally subsidized projects lies in a series of acts beginning with the Antiquities Act of 1906 (P.L. 59-209: Stat. 225). The Uniform Rules and Regulations for this act express a concern that "antiquities" recovered on federal lands be permanently preserved and accessible. The regulations are outlined below.

The Historic Sites Act of 1935 (P.L. 74-292: 49 Stat. 66) directs the Secretary of the Interior to secure and preserve archaeological records: preserve and maintain archaeological objects: and contract or agree with the states for the

protection, preservation, and maintenance of archaeological objects.

The Reservoir Salvage Act of 1960 (P.L. 86-523: 74 Stat. 220) provides for the collection and preservation of significant archaeological data endangered by the construction of dams. The legislation also directs the Secretary of the Interior to consult with various federal and state entities to determine the most appropriate repository for recovered archaeological specimens, and allows contracts or agreements to be made with federal, state, or other entities in the administration of the act.

The Archaeological and Historical Preservation Act of 1974 (P.L. 93-291; 88 Stat. 174) amends the Reservoir Salvage Act of 1960 and extends its provisions to include any federal construction program or federally licensed activity or program. It also allows up to one percent of the funds appropriated for the activity to be used for the implementation of the act.

The Archaeological Resources Protection Act of 1979 (P.L. 96-95; 93 Stat. 721) stipulates that archaeological resources removed from public lands are the property of the United States, and that such resources and associated records and data will be preserved by a suitable university, museum, or other scientific or educational institution.

Finally, the National Historic Preservation Act Amendments of 1980 (P.L. 96-515) contain provisions intended to ensure that prehistoric or historic artifacts are appropriately curated in an institution with long-term curatorial capabilities. Such curation is to be adequate to preserve the data and materials for future research and public interpretive programs. Eligible project costs include the costs of preservation activities under this act. The term "preservation" as used in the act includes curation, management, restoration, stabilization, and maintenance.

In summary, existing federal legislation provides for the preservation of archaeological data on federal lands or endangered by federal or federally licensed construction projects. Mere recovery, however, is not synonymous with preservation: archaeological data must be curated in an institution that can assure its continued preservation, maintenance, and access. Such preservation activities are eligible project costs, and agencies may consult and enter into agreements with various entities for the preservation of recovered archaeological materials.

III. Purpose

By agreeing to serve as the repository for archaeology collections from the State of Connecticut, the LA/MNH recognizes its responsibility to implement a high standard of curation for such materials. Proper and systematic preparation of collections prior to transfer to the LA/MNH, is an integral part of ensuring this standard.

Collections deposited with the LA/MNH must represent a substantially complete record of information derived from the study that produced them so that they are suitable for research and public interpretation. A complete collection is one that includes all survey forms or excavation records, field notes, maps showing locations and boundaries, photographs, negatives, artifacts or other cultural materials, ecofacts, environmental material, analysis records, and copies of any reports and publications produced as a result of the study. Any materials destroyed during the process of analysis, such as in Carbon 14 dating, must be accounted for in the written documentation of the project. Other types of materials released for special analysis prior to submission must also be accounted for in the written documentation. Final deposition of such materials must be clarified with the Collections Division of the LA/MNH. It is the responsibility of the party seeking to deposit collections in the repository to ensure that any materials analyzed by outside specialists are received by the LA/MNH in conformance with the procedures outlined below.

Containers used in preparation of collections must conform to LA/MNH specifications. Such supplies may be obtained from the LA/MNH as part of the curation agreement: alternative arrangements may be made in advance.

It is the responsibility of each project director to ensure that all materials are delivered in good condition to the LA/MNH. Normally, this will be accomplished through hand delivery by the project director or an authorized representative. Any exceptions to hand delivery must be arranged in advance by consultation with appropriate LA/MNH personnel.

Assistance in complying with prescribed procedures is available from LA/MNH staff. Consultation is especially encouraged in dealing with conservation problems. Staff persons include Dr. Robert E. Dewar, Associate Professor of Anthropology and Curator of Archaeological Collections, Department of Anthropology; Dr. Kevin A. McBride, Assistant Professor, Department of Anthropology; Dr. Carl Rettenmyer, Director of the Museum of Natural History; and Mr. Nicholas Bellantoni, Zooarchaeologist - Physical Anthropologist, Department of Anthropology.

IV. Policy

As the primary state institution curating archaeological collections, the LA/MNH acknowledges a responsibility for the preservation of materials recovered by archaeological projects undertaken in Connecticut. To the extent feasible, the LA/MNH will enter into agreements to curate recovered materials, provided the materials are complete, thoroughly documented, and prepared for curation according to Museum standards, including site information submitted on the appropriate Connecticut Historical Commission site inventory forms. Criteria for determining if the LA/MNH will curate a collection are included in the LA/MNH's established research and collections policies and priorities. Except in the case of collections of outstanding research importance from unfunded projects, the LA/MNH will be compensated at a predetermined rate. If these conditions are not met, the LA/MNH may refuse the collections.

The LA/MNH will provide storage in perpetuity and accessibility to materials accepted.

V. Procedures

A project using LA/MNH curatorial services must follow LA/MNH requirements and conditions in effect at the time the agreement is made. A request for curatorial services must be directed to the Curator of Archaeological Collections, who will present the request to the LA/MNH's administrative staff for consideration. If the LA/MNH agrees to provide curatorial services, the Curator will communicate such agreement in writing to the applicant, stating the conditions of the agreement and the applicable fee structure. The conditions are outlined below.

Requirements for Processing of Archaeological Project Materials

All archaeological sites recorded in survey, testing, or excavation projects covered by a Repository Agreement with the LA/MNH must be assigned a Connecticut Historical Commission site number. Site numbers will not be assigned until a Connecticut Historical Commission site inventory form is completed and submitted to the LA/MNH. Inventory forms will be provided by the Connecticut Historical Commission.

GENERAL PROCEDURES FOR PROCESSING ARCHAEOLOGICAL COLLECTIONS

The procedures established by the LA/MNH for the processing and preparation of archaeological collections are intended to ensure that all such collections are consistently and systematically prepared to preserve both the collections

and their accompanying documentation for future use. Certain general procedures may be outlined for all such archaeological collections.

Disposal of Collections

In agreeing to serve as a repository for archaeological collections, the LA/MNH will accept no responsibility for disposal of any archaeological material prior to the transfer of such materials to the LA/MNH. Although no further disposal of such materials is anticipated at this time, the LA/MNH reserves the right of de-accessioning.

It is the responsibility of all parties using the LA/MNH as a collections repository to comply with all counterpart guidelines of the sponsoring agency for disposal of collections. Complete records of any such disposal must be provided to the LA/MNH as an essential part of the entire project documentation.

Preservation of Collections

It is the policy of the LA/MNH that all preservation treatment of specimens be performed in a generally conservative manner. No unnecessary treatment should be attempted and, in any event, no such treatment should be irreversible. Stabilization of perishable and fragile materials will, in most cases, be performed at the LA/MNH by the Museum's Conservator. In those cases in which emergency conservation or stabilization must be performed in the field or field laboratory, the LA/MNH should immediately be consulted for advice.

Cleaning and Washing of Collections

Most non-perishable materials, including bone, shell, ceramics, and stone, should be washed and cleaned in plain water with a soft bristle brush. Perishable and very fragile artifacts, including all vegetal, hide, and fiber items, metal artifacts, artifacts suspected of bearing fugitive paint, and unconsolidated mineral specimens, should not be washed. Such materials should be carefully brushed with a soft brush to remove loose or unconsolidated soil: further cleaning will be performed, as necessary, at the LA/MNH under the direction of the Conservator. Under no circumstances should such perishable and fragile artifacts be stored or transported in plastic bags or other impervious containers. They should be packed in boxes or bags with soft tissue paper until they can be transferred to the LA/MNH.

Labeling of Specimens

Most specimens should be labeled with Field Numbers (FNs) or Specimen Numbers (SNs) and, if possible, with the proper Connecticut Historical Commission site inventory number.

Other numbers should be limited to the absolute minimum necessary to maintain proper control of the materials.

Black india ink should always be used to label most specimens: felt tipped pens should not be used. Very dark-colored specimens may be labeled with white india ink: white typing correction fluid should not be used to prepare a label surface on such specimens. Very coarse material, such as basalt or quartzite, may be labeled by using a small artist's brush and black or white paint, as appropriate: otherwise, rough or porous surfaces should be prepared for labeling by a light application of clear nail polish or shellac. All labels should be protected by a light application of clear nail polish or shellac after the label is thoroughly dry.

Labels should be small, neat, legible, and inconspicuously placed. In general, labels are best placed near and parallel to an edge of a specimen. Ceramic sherds should be labeled on the interior. Labels should not be applied over diagnostic or potentially informative features of artifacts. Chipped stone artifacts, for example, should be labeled on unflaked areas whenever possible.

Perishable specimens such as vegetal, hide, and fiber artifacts should not be labeled directly. These types of artifacts should be identified with labeled string-tie tags or placed in labeled bags or boxes, as appropriate. Very small artifacts such as disc beads and lithic debitage also need not be labeled directly but may be placed in clearly labeled bags or boxes or in glass or plastic vials.

Exceptionally rough or porous materials, such as rusting metal, as well as very large artifacts, should be identified additionally with a labeled string-tie bag.

Boxing and Inventorying of Collections

Upon completion of analysis and the illustration and photographing of all necessary specimens, project collections should be organized for disposition. As each archaeological project will undoubtedly present specific problems of collections organization, only general guidelines will be offered here.

The fundamental organizing principles should be provenience and artifact class. Collections should be organized first by site and then by intra-site provenience and artifact class.

Cardboard containers for final packing of collections are available from the LA/MNH in two standard sizes. The larger size (12 X 15 X 10 inches) is a general-purpose container and may be used for most types of materials, while the smaller size (5 X 8 X 12 inches) is intended for packing very dense

materials such as ground stone and iron artifacts. Projects for which containers are not obtained from the LA/MNH should use new, clean boxes that conform as closely as possible to the sizes described. Paper bags used for internal packing of material should also be new and clean.

Standard recording forms for the inventory of collections are not necessary. However, a detailed artifact inventory list must be submitted, recording all the information and documentation accompanying the collections. The list must document the occurrence of specific materials in the collections, identify their location, and provide information on field provenience. Standard labels for boxes should be used to ensure that certain basic information is always consistently displayed for visual inspection.

Procedures for Preparation of Photographic Collections
The photographic record of archaeological projects, surveys, and collections will be incorporated into the Special Collections Department of the Homer D. Babbidge Library of the University of Connecticut. Since the material may eventually be used in research, publication, exhibition, interpretation and education, proper preparation and documentation is vital in order to ensure a high standard of curation.

General information, guidelines, and specific procedures to be followed in the preparation of such collections prior to deposit at the LA/MNH and Special Collections are as follows.

Designation of Archival Film

For archival purposes, the LA/MNH considers the black-and-white negative the original record and its corresponding print the temporary image. Color positive and negative films of every commercial brand are chemically unstable and should be used in project documentation only as a supplemental record. Advice and information on the use and archival quality of different film types may be obtained on request from the Special Collections Department of the Homer D. Babbidge Library.

Preliminary Organization of Collections

Prior to the actual documentation process, photographic material should be organized by film type (roll film, sheet film, 35mm slides, etc.) in logical, chronological order. Due to the nature of the photographic process, not all film produced during a project represents a significant archival record. For this reason, it is important during preliminary organization to carefully edit and cull out redundant, irrelevant, and poor-quality images.

Procedures for Preparation of Archival Materials

Materials must be arranged in some logical order (working order, alphabetical, chronological, etc.). It is not advisable to rearrange a file which is in good working order. Individual parts must be marked (guide-cards or other system). If the arrangement of the file is such that it cannot easily be understood by outsiders, a note explaining the file order is necessary.

The Special Collections Department needs the following.:

- (1) name of the project:
- (2) name(s) of the site(s):
- (3) name of the Project Director:
- (4) name(s) of the author(s) of notes and reports: and
- (5) date(s) of notes, reports, etc.

Additional information regarding the purpose and result of the project is helpful. If the data mentioned above can easily be gathered from title page(s) or short introduction(s), no special information sheet is needed.

The Special Collections Department needs the name and address of a person who can be contacted if additional information is needed.

Curation Services and Costs

All fees charged by the LA/MNH are associated with the costs of curation services, which include maintaining storage areas and environments, monitoring stored materials, providing remedial conservation, providing access and management, and maintaining staff to carry out these functions. Both initial and long-term fees are charged for the curation of particular collections: their sum constitutes the total curation fee for a given collection.

1. Initial Curation Fee. Initial curation fees cover the costs of processing incoming materials, their preparation for storage, and the purchase of appropriate storage supplies and equipment to physically house a collection. Initial curation fees are based upon a curation inventory and assessment of collections to be curated, and take into account factors such as conservation, labeling, cleaning, (re)packaging, etc. For small collections, the minimum initial curation fee is \$50.00: for larger collections, the initial curation fee will range between \$100.00 and \$500.00. These fees will be determined after consultation with the director of the archaeological project and an initial assessment of the overall condition of the materials to be curated.

2. Long-term Curation Fees. Long-term curation fees are designed to provide funds for the general maintenance and storage of and access to particular collections. The fee is 2 percent of the direct costs of a particular project. The assumption is that the amount of time (and money) spent in excavating, processing, and analyzing the materials from a

project reflects either the amount (volume) of material or sensitivity of material (i.e., botanical, textiles, fabric, faunal) and the subsequent need for long-term conservation and monitoring.

APPENDIX V

REPOSITORY AGREEMENT, LABORATORY OF ARCHAEOLOGY

AND MUSEUM OF NATURAL HISTORY

UNIVERSITY OF CONNECTICUT

REPOSITORY AGREEMENT

LABORATORY OF ARCHAEOLOGY/MUSEUM OF NATURAL HISTORY

UNIVERSITY OF CONNECTICUT

The Laboratory of Archaeology/Museum of Natural History (LA/MNH) agrees to serve as collections repository for artifacts and archaeological data recovered by _____ as a result of archaeological survey and limited testing projects on state, federal, and Indian lands in Connecticut, or as a result of archaeological survey for federally funded projects. This agreement is limited to projects initiated by _____ and _____. The LA/MNH will provide storage in perpetuity for such materials and accessibility for use in research, display, and education.

_____ agrees to the following provisions:

1. _____ must submit copies of all contracts and change orders to contracts covered by the permits for which the Museum has been named as a repository. Such copies must be sent to the LA/MNH within one week of the award of contract.
2. All project materials must be received by the Museum within two months of the termination of the contract.
3. All projects for which the LA/MNH has been named as repository must submit properly completed Connecticut Historical Commission site inventory forms for all sites recorded.
4. All artifacts submitted must be documented and processed according to LA/MNH requirements for processing of archaeological project materials (see Guidelines).
5. Complete data and documentation from all projects in which the LA/MNH has been named repository must be submitted to the LA/MNH, regardless of the recovery of artifacts. Project data and documentation must include one complete set of the following:
 - a. map defining project area
 - b. field maps
 - c. field notes
 - d. field recording forms
 - e. analysis and catalogue sheets
 - f. photographic negatives, contact prints, and
 - g. any computer readable data, final analyses, inventories.

Originals of these records must be submitted whenever possible: they must be documented and processed according to the requirements of the Special Collections Department of the Homer D. Babbidge Library at the University of Connecticut.

6. In the case of projects which involve private as well as state, federal, or Indian lands, artifacts, data, and documentation from work performed on the private land must be submitted to the LA/MNH along with other project materials.

_____ is responsible for obtaining permission for the LA/MNH to curate artifacts recovered from private land.

7. One original and two copies of all preliminary, final, and other reports must be submitted.

8. The LA/MNH will be compensated at the rate of 2 percent of the total direct cost for each project, plus \$50.00 for initial accessioning of each project.