

GUIDELINES FOR

ARCHITECTURAL AND

ARCHAEOLOGICAL SURVEYS

IN

DELAWARE

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OCTOBER 1993

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**The Secretary of the Interior's Standards and Guidelines for
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omitted; available at:
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- Outline of the Secretary's Standards and Guidelines**
- A. Preservation Planning**
 - B. Identification**
 - C. Evaluation**
 - D. Historic Documentation**
 - E. Archeological Documentation**

omitted; available at:
<http://www.cr.nps.gov/archeology/tools/36cfr79.htm>

APPENDIX III.

Federal Curation Standards

APPENDIX IV.

Delaware State Museums: Interim Guidelines for Sampling and Curation of Archaeological Collections

replaced with updated guidelines

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Defined State Plan Historic Contexts

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State Antiquities Legislation:

omitted; current laws available at:
<http://www.delcode.state.de.us/title7/c053/index.htm>
<http://www.delcode.state.de.us/title7/c054/index.htm>

7 Del. C. ch. 53 Archaeological Sites in the State

7 Del. C. ch. 54 Archaeological Activities

APPENDIX VII.

Outline of Section 106

omitted; current regulations available at:
<http://www.achp.gov/regs-rev04.pdf>

APPENDIX VIII.

Blank CRS Forms

omitted; current forms available at:
<http://history.delaware.gov/preservation/surveys.shtml>

PUBLICATION STATEMENTS

The activity that is the subject of this Survey Manual has been financed in part with Federal funds from the National Park Service, Department of the Interior. However, the contents and opinions do not necessarily reflect the views or policies of the Department of the Interior.

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INTRODUCTION

This package of materials provides guidelines and information on the conduct and reporting of cultural resource surveys in Delaware, whether funded by the Historic Preservation Fund, conducted for compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, or performed in conjunction with related treatment activities. It includes definitions of different levels of survey and treatment activities, recommended survey methods, report guidelines, and instructions on how to record information in Delaware's inventory system. This guidance is based on and expands on the Secretary of the Interior's **Standards and Guidelines for Archeology and Historic Preservation**, which are appended. (See Appendix I.) Outlines of the most relevant Standards and Guidelines (Preservation Planning, Identification, Evaluation, Historical Documentation, and Archeological Documentation) are attached as well, to serve as a quick checklist for agencies and consultants required to conform to these Standards. (See Appendix II.) This material is provided in notebook form, so that additions and updates can be easily added.

What Is Cultural Resource Survey?

Cultural resource survey is the systematic location, description, and evaluation of the physical remains of our past, such as older buildings still standing and archaeological sites in the middle of fields and woods or underwater. Survey provides the primary data about where things are on the landscape, what they are, and how important they are to our knowledge and sense of the past. Evaluation in this program and throughout this document means measuring a located property against the standards set by the National Park Service for the National Register of Historic Places. If a property is significant in some way to our past and if it still has enough integrity to illustrate or reveal that significance, then it is said to be eligible for the National Register, and is protected from being carelessly damaged by federal actions. Some private developers and property owners are also subject to these federal regulations because they need a federal permit or monies to carry out a proposed activity and the federal agency granting the permit or monies has delegated this responsibility to the applicant.. (See Appendix VII for an outline of the federal Section 106 process as it relates to survey.)

Certain state agencies also consider and protect National Register-eligible properties, including those in state parks and wildlife areas, and in some state-funded road project areas. State law requires that any archaeological work on state-owned lands be conducted under a permit from the Director of the Division of Historical and Cultural Affairs. The Unmarked Human Remains Act further requires that the discovery of unmarked human remains during any project, private or public, must be reported to the Director of the Division of Historical and Cultural Affairs, and triggers a public notification period, during which project work must stop in the area of the remains. Depending on whether the remains are prehistoric or not, the Human Remains Committee may decide on their disposition, or descendants found during the notification process may claim the remains. If the remains are to be removed, an

archaeological survey and excavation of them must be done under the review of the DE SHPO. (See Appendix VI for these laws.)

Surveys are carried out by professionals trained in history, architectural history, archaeology, or related disciplines to assist agencies in project planning or to gather information needed by state or local governments in planning for the use and protection of cultural resources in their communities.

Resource Type Definitions¹

The National Park Service uses certain definitions in its survey and National Register programs. Surveyors should be careful to keep their uses of these terms consistent with the NPS usage.

1. **Building:** a resource created principally to shelter any form of human activity, such as a house, outbuilding, or factory.
2. **Site:** location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure, such as a battlefield, historic landscape, or subsurface remains.
3. **Structure:** a functional construction made for purposes other than creating shelter, such as a bridge, dam, or railroad line.
4. **Object:** a construction primarily artistic in nature or relatively small in scale and simply constructed, such as a statue or milepost.
5. **District:** a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Management Plans and Their Link to Survey

The Delaware State Historic Preservation Office (DE SHPO) has sponsored the writing of a number of cultural resource management plans in recent years. These plans set the framework for the study of prehistoric and historic period resources in Delaware. Surveyors must fit their work into this framework, and are expected to contribute to the fulfillment of goals and priorities contained in these plans whenever possible. They are also expected to

¹National Register Branch, NR Bulletin 16A: How to Complete the National Register Registration Form, p. 15.

point out weaknesses in and new interpretations of historic context information where warranted.

An historic context is defined as the conjunction of a geographic area, a chronological period, and an historic theme. (A list of defined contexts is attached in Appendix V, and further information on them is available from the DE SHPO. A bibliography of all plans and developed contexts is on p. 68.) Within each context, expected kinds of resources that reflect that context are called property types. These types are the link between the actual physical remains of the past and the historic context. Part of the development of an historic context is the definition of these property types and the development of specific evaluation criteria to aid in determining whether a particular building, site, structure, or object has historic significance and integrity.

The Principal Investigator on a survey project should check the list of plans and developed historic contexts to see which may be applicable to the project. (See bibliography of plans and contexts, p. 68.) Criteria from previous survey reports can also be used. If such criteria have not yet been developed for a property type that is represented in the survey area, the criteria **must** be developed in the evaluation report. If the Principal Investigator feels that a different or expanded set of criteria should be used, he must present those criteria and explain how they relate to the criteria already developed.

Levels of Work

Survey has several components which build on one another in a hierarchical sequence. The definitions given here split the process into its smallest possible components. It is expected that each survey will go through these components in the sequence given. However, a survey project will not necessarily perform only one of these levels at a time with separate reports for each, nor will every survey project go to the evaluation level.

The **Standard I for Identification** states that surveys are done only to the level necessary for decision making. If, in a federally funded project, a reconnaissance survey can quickly eliminate an area as a project alternative because it has too much potential for eligible resources thus making treatment costs too high, and the agency drops that area from the project, then an intensive evaluation of that area does not need to be done. If the project area is very small (less than 20 acres in a rural area or a city block in an urban area) or if there is no other alternative, the agency can contract for a joint reconnaissance and intensive survey where it is highly probable that an intensive survey will be needed, thus skipping a separate report for the reconnaissance work. Thus all survey must be appropriate to the kinds of resources expected, the area to be covered, and the project's needs or objectives, and it must be completely reported, regardless of its level.

The survey levels present a logical progression and build on one another. While they can be separate or combined, when the project is very large or many planning options exist, it is best to perform the survey in these separate levels, with reports at those points at which

decisions for further work need to be made and/or where DE SHPO comment is required by federal law. (See Appendix VII for these points.) Consultation with the DE SHPO staff is encouraged at any point where guidance is needed or questions arise that are not covered in these guidelines.

Treatment is not part of the survey process, but is often the end result of the federal cultural resources management process. These actions are used to mitigate adverse effects of federal projects, after the significant resources in a project area are known and the potential adverse effects identified. Certain kinds of treatment result in reports that must meet the Secretary's Standards and Guidelines and the DE SHPO Guidelines, and so archaeological data recovery and architectural recordation are discussed in this manual as well. Because all parties in Section 106 actions, including the federal Advisory Council for Historic Preservation, must agree on the necessity and form of particular kinds of treatment before any treatment is implemented, such options must be developed, approved, performed, and reported on separately, after the evaluation survey is complete. (See Appendix VII.)

Remarks on Survey Guidelines

The survey guidelines provide specific guidance on standard survey methods, data coordination procedures for surveys filed with the DE SHPO, and instructions on how to fill out DE SHPO survey forms. It is the Principal Investigator's responsibility to see that all required data coordination of forms, maps, and photographs is completed before submitting the final report. The final report will not be accepted until the data coordination is complete.

State and private activities with no federal funding or permitting, not carried out on state-owned lands, and not involving human remains do not require review by the DE SHPO. Archaeologists involved with such excavations are encouraged to conform to these guidelines, to consult with the SHPO staff, and to provide copies of the final reports for the SHPO library.

Remarks on Report Guidelines

These guidelines outline the required content of reports. The format may vary somewhat from this, provided the resulting report presents the work in a clearly understandable sequence and that all the points in the guidelines are addressed. The guidelines also inform the consultant of other technical requirements, including report copies, survey documentation, artifact curation, and the DE SHPO report review criteria.

Sources of Background Information for Survey

The DE SHPO maintains files and reports on the results of previous surveys and of National Register nominations. It also has a small library of other studies and reports dealing with Delaware's history and architecture, and with national preservation programs and issues. The Delaware State Museums maintains the archaeological collections, including a library of Delaware's and other areas' archaeology and material culture. They too have an extensive library on Delaware's history.

New Castle and Kent counties and the City of Wilmington have preservation planners working for their governments who are knowledgeable about the history and architecture of their jurisdictions. In addition, the planners conduct surveys and write National Register nominations themselves.

The main repositories for archival and historical information for Delaware are the Delaware State Archives in the Hall of Records in Dover, the University of Delaware Morris Library in Newark, the Historical Society of Delaware and the Wilmington Institute Library in Wilmington, and the Historical Society of Pennsylvania in Philadelphia. Specialized collections on economic and industrial history can be found at the Hagley Museum and Library near Wilmington, and on agricultural history and material culture at the Delaware Agricultural Museum and Village in Dover.

RESEARCH DESIGNS

A research design is the overall plan of action for a survey, and acts as a guide for all of the project's activities. All survey is done to a research design developed prior to starting any fieldwork. Research designs have three main components: objectives, methods, and expected results. Scopes-of-work and grant proposals generally present the research design for the proposed work. Usually some secondary historical research into or knowledge of the region's basic history is necessary prior to developing this design so that the researcher can determine what kinds of work need to be done and what kinds of methods will be successful in accomplishing that work. Part of this background information is consulting the State Plan(s) and deciding how the project area fits into the framework of already defined historic contexts, which will help define the research themes and expected property types for the survey.

Objectives

Objectives are what the survey is intended to accomplish. An objective can be as simple as "locate all pre-1950 buildings in the town of Leipsic and record their basic architectural information." These objectives should be precise formulations of the total work program for the survey, including level of survey to be done, type of resources included in the survey, area to be surveyed, amount and kinds of background cultural and historical information to be collected, and any special research themes to be studied or analyses to be done.

Methods

Methods are how the objectives will be carried out. Methods for the example objective given above would include "fill out all relevant survey forms, and photograph all properties in black and white and main buildings and streetscapes in color slide." Recommended methods are discussed in the survey instructions given below. Methods must be given for any historical documentation done for the survey, for fieldwork, and for laboratory procedures and analysis, as appropriate.

Expected Results

Expected results include discussions of the property types, which are the kinds of historic resources expected in the project area, their density, their probable location patterns, and their probable condition or likelihood for survival. Expected results depend on the research objectives. If the objective is fairly general (all the resources in a geographic area, for instance), then a broad range of properties must be considered. If the objective is tightly

focused (all the pre-1950 bridges in the Piedmont zone), then the expected results will also be narrowly defined.

Historical Documentation Research Design

If the project includes secondary and/or primary historical documentary research, then this also needs to be discussed in a research design, with objectives, methods, and expected results. For instance, the objectives of historical research may be to locate the builder of a property or to define settlement patterns in a community. In setting out this research design, the surveyor needs to know what kinds of biases exist in the records; for example, certain years in a run of a newspaper's publication may be missing, or deeds in a certain area may have been only haphazardly recorded. The research design should outline any biases known to exist in the intended sources.

As the level of survey advances through the stages given below and more and more is known about the resources in an area, the detail and focus of the research design increase. For an evaluation survey, the expected results of the research design must also include the specific evaluation criteria for each expected or known property type in the survey. These criteria include discussions or lists of the specific elements a property must retain or display to be considered to have integrity and significance. Many property types have already had these criteria defined in other reports or historic context documents on file at the DE SHPO. (See discussion on management plans and historic contexts above.)

LEVELS OF WORK AND REPORTS

SURVEY

Background Research

This level of survey is a preliminary planning tool. (It is often part of what is called a Phase IA Survey in the 106 process, which is the process by which federal agencies fulfill their responsibilities mandated by Section 106 of the National Historic Preservation Act.) At this level, the surveyor gathers all relevant secondary and readily available primary source material on the prehistory and history of the project area. This includes a check of the Delaware Cultural Resource Survey (CRS) Inventory and National Register files to identify the known cultural resources in the project area. Enough material must be gathered to allow the surveyor to identify the historic contexts and property types that will most likely be encountered in the area and on which a preliminary research design can be based. This level of survey is very rarely done separately from the levels of survey discussed below; if it is, the report needs to meet only the Secretary of the Interior's Standards for Historical Documentation.

Reconnaissance Level

This is a preliminary planning tool, in which immediately visible or well known cultural resources and areas needing further survey are noted. (This too is often part of what is called a Phase IA Survey in the 106 process.) It results in an informed opinion about the kinds and densities of resources that may be expected in different areas, and suggests appropriate methods for future intensive surveys. Historical research for this level is equivalent to the background research level described above.

Architectural survey can include a windshield survey of an area, mapping concentrations of historic properties and noting their primary types and ages.² Archaeological fieldwork is kept to a minimum, and may or may not include subsurface testing. In large areas, a valid statistical sample based on a predictive model or on historic documentation from maps should be used.

While determinations of a particular resource's significance cannot fully be made at this level, decisions on a lack of physical integrity can often be made where such a lack is immediately obvious. Coupled with the initial background research, this level results in a

²DE SHPO has used the term reconnaissance in its Historic Preservation Fund grants to denote a comprehensive architectural survey in an area, with all CRS forms filled out, but without final evaluations of all properties to distinguish it from a full intensive survey, where such evaluations must be done. Strictly speaking, this level of survey is location, and is described in the next section.

report with suggested historic contexts and research topics for the next stage of work. The report must meet the Secretary of the Interior's **Standards for Identification** and, as appropriate, for **Historical Documentation** and/or **Archeological Documentation**.

Location/Identification Level

This level of survey is the first step in an intensive survey. (It is often called a Phase I or Phase IB Survey in the 106 process, if done separately from the evaluation survey.) It includes a detailed, systematic field inspection, in which the surveyor locates and records all cultural resources in a project area, or conducts archaeological testing in conformance with a valid site predictive model of the project area as supported by the research design conceived by the Principal Investigator. Additional historical documentation for this level may include primary deed research to identify property owners and property development.

In archaeological surveys this level includes both surface collection and subsurface testing either to provide a preliminary analysis of a surface site's integrity, horizontal boundaries, and data potential, or to test areas of little or no surface visibility for such site information. Sufficient information should be gathered to allow the surveyor to fill out a site form for each located site. While this level of testing will not answer all the questions about a site's eligibility, it is often enough to determine that the integrity of the site is so poor that the site is not eligible.

In architectural surveys this level includes basic descriptions and photographs of every existing building (including outbuildings), structure, and object built prior to 1950 in the project area. All appropriate forms for newly located resources must be filled out and integrated into the DE SHPO's data coordination system. Forms for resources already identified in earlier surveys should be checked and new forms prepared if the earlier forms are inadequate or incomplete, or an update form filled in if the property has been radically altered or destroyed or if the previous planning or evaluation information was inadequate. Since archaeological site forms are kept on file in paper, changes and additions can be added directly to the form; only if there is no longer any room or if the additions are very extensive does a new form need to be made.

Based on any eligibility criteria developed for or cited in the research design (see above), it may be possible to determine at this level of survey that particular sites and/or buildings have little potential for significance or poor integrity and are therefore not eligible. Resources that are potentially eligible will not be fully determined eligible at this stage. This report must meet the Secretary of the Interior's **Standards for Identification**, and, as appropriate, for **Archeological Documentation** and/or **Historical Documentation**.

Evaluation Level

This level is the second and final step in an intensive survey. (This is often called Phase II in the 106 process.) In an archaeological survey, it involves systematic testing of potentially eligible sites found in the location survey and provides definitive information on both vertical and horizontal boundaries, internal site structure and its integrity, and significant data categories represented at each site. For architectural surveys, this involves more detailed descriptions, boundary determinations, and photographs. This level also includes, for both kinds of survey dealing with historic period resources, detailed historic research sufficient to provide an understanding of the properties' place within the state's historic context framework and to identify any associations with significant people or events, for example, examining deeds, wills, and probate records, or consulting census, poll tax, or street directories to identify associated people.

This level of survey results in the evaluation of every cultural resource located in the project or sample area for its eligibility to the National Register of Historic Places, excluding those previously determined ineligible due to integrity problems or those in areas dropped from the project's area of effect. This is done by identifying the resource's applicable property type or types, and applying the criteria of significance and integrity developed either in the report itself, or in one of the developed historic contexts for that type. Determinations of eligibility must be made by a professional qualified in the relevant field, as outlined in the Secretary of the Interior's **Professional Qualification Standards** (also published in 36 CFR 61). However, it is expected that archaeologists will consider standing resources within an identified archaeological site as part of the data potential for that site. It is also expected that architectural historians and historians will consider the data potential of standing resources under Criterion D for their fields of study.

For those resources determined eligible, the report must also include recommendations for alternatives for treatment and/or protection, including significant research questions and methods for data recovery or recordation, based on what is known of the project's effects. If effects are unknown, these recommendations should be general in nature. As an overall policy, preservation in place should always be the preferred treatment. This survey report must meet the Secretary of the Interior's **Standards for Evaluation**, and, as appropriate, for **Archeological Documentation** and/or **Historical Documentation**.

Evaluation reports done for compliance with Section 106 must append Determinations of Eligibility (DOE) on National Register forms. Those done for non-Section 106 purposes must discuss and determine the eligibility of every resource located within the study area but do not have to submit DOE forms. Generally this level will not involve new CRS forms but should a previously unknown resource be encountered, forms and data coordination have to be completed. Boundary modifications to listed historic districts require additional work. Boundary additions and reductions require complete revision of nomination documentation which must be approved by the Delaware State Review Board and sent to the Keeper of the National Register.

TREATMENT

(There are many other options for treatment of historic properties, including preservation in place of archaeological sites and preservation, rehabilitation, restoration, and reconstruction of standing resources. These options, however, do not require reports meeting the guidelines given here, and so are not discussed in this document.)

Data Recovery Excavation

This level of fieldwork is not survey but a treatment option. It involves the detailed excavation and analysis of a National Register listed or eligible site, based on a research design developed as a result of the intensive survey. Ideally, complete excavation of the affected site area is carried out. However, for very large, complex sites, a statistical sample may be excavated, provided its representativeness is adequately defended in the research design. Historical documentation for this level of work should be as complete as possible, and include analysis of secondary and primary sources that provide both comparative and direct evidence concerning the site's occupation and use.

This research design must be approved by the DE SHPO before work proceeds. The excavation and report must meet the Secretary of the Interior's **Standards for Archeological Documentation** and, if appropriate, for **Historical Documentation**. However, once the excavation and sampling as required by the research design has been carried out, with a final site review by the DE SHPO staff, the project construction can proceed prior to the laboratory analysis and report writing.

Architectural Recordation

This is analogous to data recovery for sites. It is a treatment option, not part of the survey process. It involves the detailed recordation through drawings and photographs of the significant features of a National Register-listed or eligible building, structure, or object, and often includes detailed historical research to the same level as a National Register nomination.

The kind and level of recordation must be approved by the DE SHPO before work proceeds. All work must meet the Secretary of the Interior's **Standards for Architectural and Engineering Documentation** and, if appropriate, for **Historical Documentation**. Both the National Park Service HABS/HAER staff and the DE SHPO review the final documentation for acceptability.

Table 1.

Survey Process

BACKGROUND WORK

define survey area
determine project needs
check DE SHPO inventory files for already recorded properties
do historical research (as needed)
develop historic context(s) for area
define expected resources based on context & known properties
define research goals based on context & expected resources
define methods based on research goals.

SURVEY

do fieldwork
fill out survey forms

ANALYSIS

process artifacts (if archaeological)
analyze field (& lab, if archaeological) work
do data coordination
determine appropriate management & planning recommendations

REPORT

produce report documenting process, results, & recommendations
revise draft based on DE SHPO & agency comments
submit final report with completed forms
provide for archaeological curation (as needed)

ARCHITECTURAL SURVEY METHODS

The comprehensive identification and evaluation of standing resources provide clear physical evidence of the course of Delaware history. In order to produce consistent and accurate survey information, the standards and methods contained in this manual must be followed. All survey work must also follow the appropriate Secretary of Interior's **Standards and Guidelines for Archaeology and Historic Preservation**. All buildings, structures, and objects constructed or erected before 1950 are included in identification survey, regardless of current condition or apparent lack of historic significance. Comprehensive architectural surveys must be supervised by a professional meeting the **Professional Qualification Standards** for Architectural Historian.

Background Research and Research Design

Identification architectural survey starts with documentary research, especially into maps and secondary histories, to establish settlement patterns, economic trends, and general land use in the project area. This may also reveal important individuals associated with the development of the area, but probably will not find every person that may be significant at this stage. From this and from previous knowledge, including that given in the State Plan, and from the overall project's needs, the Principal Investigator determines the research design to guide the actual performance of the survey.

Field Survey: Forms and Photographs

The surveyor chooses a base map, usually the USGS 7.5' topographic map for rural areas or tax parcel maps for urban areas, on which to map the location of every resource found and to make notes on those areas or elements not surveyed due to recent age or otherwise outside of the research design.

Fieldwork includes investigation of every road in the area, including dirt roads, to locate any buildings or structures that pre-date 1950. For each pre-1950 property, all appropriate forms are filled out and black and white photographs are taken, including at least two oblique views of the main building showing the facade and side elevations, and at least one oblique view of every other building or structure associated with the main building. The photographs should document what appears on the CRS forms. Make sure the entire building is showing in the elevation photographs. For rural properties, also include one long view showing the general layout and setting. For urban properties, include streetscapes. When the landscape itself is documented (CRS-8), photograph the elements mentioned on the form.

In order to be accepted, complete information on the appropriate forms is necessary. If a particular item is not applicable to the property being described, note that as NA. Architectural forms always include a CRS Property Identification Form (see below), with location information, resource descriptions, number of standing resources on the property,

identification of historic context and property type or function, and a preliminary evaluation of the property's significance and integrity based on the State Plan contexts and the criteria established by the National Register of Historic Places. Forms for description of a dwelling or other main building, related outbuildings, industrial buildings, structures, objects, and/or a landscape are completed as needed. If access to the property is denied for some reason, complete only the Property Identification Form, with a note that other forms could not be completed due to lack of access.

If the property was already surveyed and assigned a CRS number, but the old forms are inadequate or incomplete, the surveyor should fill out a Survey Update Form (CRS-10) and any other descriptive forms as appropriate, marking these extra forms "UPDATE" in the front upper right hand corner of each form. If the descriptive information on the earlier forms was adequate, but the property has been radically altered or destroyed, or if the planning information or evaluation was inappropriate or not included, fill out only the Survey Update Form.

If the surveyor is unclear about which forms are appropriate for any particular resource, he or she can ask the DE SHPO staff for guidance. For large, specialized surveys, a consultant can devise a new form in consultation with the DE SHPO staff, but generally DE SHPO forms must be used. The DE SHPO will supply forms on request at no charge. (Forms are also available on disk in Word Perfect 5.1.) Information that does not fit in a category on a form or requires more detailed discussion or a larger drawing can be supplied on a plain sheet of 8½" by 11" paper, with name, address, and CRS number of the property noted at the top.

Once all forms are completed by the field worker, they must be reviewed. The initial review is done by the Principal Investigator. He or she must verify the information and ensure that all information possible is provided. Where information cannot be obtained for some reason, this must be noted. The Principal Investigator then signs and dates each form in the appropriate location.

Data Coordination and Report

The Principal Investigator is also responsible for the proper completion of all data coordination for the survey. (See data coordination guidelines below.) He or she either prepares or supervises the field surveyors in the preparation of the survey report. Especially critical to include in the report are the objectives and expectations for the survey, a modern map of the survey area, historic maps of the survey area, a general historical background for the area that sets the historic context, and a bibliography, as well as resumes of all field workers and the Principal Investigator. (See DE SHPO report guidelines on p. 55.)

Review of Survey Information

If survey information is provided by means other than by a comprehensive survey, that information must be verified by DE SHPO staff, particularly if it is provided by someone who is not qualified in architectural history. Because basic recordation is often the only record of a resource, the accuracy of the information is critical. Therefore, before the survey record can be entered into the file, it must be verified by the professional staff of the DE SHPO or by a recognized professional in architectural history, such as one of the city or county preservation planners. Any corrections or additions are made directly on the form, and the professional reviewer then signs the survey form as the Principal Investigator.

When the initial survey work is completed and all information is verified for accuracy, all survey material is delivered to the DE SHPO. At this time, the appropriate professional staff member will review the forms for accuracy and for the planning and evaluation components of the survey. If the staff member questions any of the information, those comments will be entered onto the form and the form will be returned to the Principal Investigator and field workers for justification or correction. The forms will then be returned to the DE SHPO for final review.

Storage and Microfilming of Survey Information

The final step in the identification survey process is for all material (forms, photograph cards, contact sheets, negatives, slides, maps, and the report) to be filed by DE SHPO staff in the appropriate location within the office of the DE SHPO. The forms will be prepared for microfilming and processed as soon as possible. Once the microfilming is completed and the fiche have been reviewed for accuracy, the paper form will either be destroyed or returned to the Principal Investigator, if requested. Microfiche copies of inventory information are available for consultation in the DE SHPO office, the Delaware State Archives, and the appropriate county or city preservation planner office, and can be obtained for a small fee per fiche if desired.

Evaluation of Surveyed Buildings and Structures

After the basic information on a building or structure has been recorded, that property needs to be evaluated, that is, assessed for its historic value. To make this evaluation, the level of historical documentation must be increased through both primary and secondary research, to provide an in-depth historic context. The historic context provides a discussion of the historically important trends and events that created the physical remains of the past that we see in the landscape today. A particular building or structure only has significance, under the National Register criteria, if it accurately reflects and represents those past activities or trends. The context must also include specific information about significant people, the types of properties that can be expected to illustrate this context, and the eligibility criteria for each property type within the survey.

Eligibility criteria guide the decisions about eligibility of a particular property by providing specific guidelines for integrity and significance. **Integrity criteria** set out those elements that must survive on and/or in the building or structure for it to illustrate the property type adequately. **Significance criteria** define 1) the **physical characteristics** that must be present on the building or structure that identifies it as a certain property type that has significance within the context; and, 2) the **associational characteristics** that must be documented for the building or structure that identifies it as a property type that has significance within the context. Property type lists can be found in the State Plan (Ames, et al., 1989). Many of these types have had criteria developed for them in various historic context documents already produced. (See bibliography of plans and contexts, p. 68.)

After reviewing all the individual properties in the project area, the Principal Investigator should determine if a National Register eligible historic district or multiple property collection exists. If so, determine the boundaries and/or associated resources. In a district, determine contributing and non-contributing properties. Historic districts receive an overall CRS number, and each resource within the district receives a sub-number. (See data coordination guidelines, p. 51.)

The report for this survey level will reflect this increased documentation including precise boundaries for all properties evaluated; evaluations of all resources within the project area, and recommendations for further work. In reports dealing with more than five or six properties, it is especially helpful to include a summary table listing the name, CRS number, property type, integrity, eligibility decision, and comments justifying the eligibility decision. Reports done for Section 106 and other federal law compliance must include formal determination of eligibility documentation to the Secretary of the Interior's Standards for Registration on a National Register form in the appendices for each eligible resource. (See report guidelines, p. 55.)

Data coordination and forms instructions omitted; see current ones available on web:
<http://history.delaware.gov/preservation/surveys.shtml>

ARCHAEOLOGICAL SITE SURVEY INSTRUCTIONS

Archaeological site survey is undertaken by the DE SHPO and its subgrantees as part of survey and planning activities funded by the Historic Preservation Fund, and by federal agencies and their consultants to comply with Section 106 of the National Historic Preservation Act.³ All federally funded surveys must conform to the Secretary of the Interior's Standards and Guidelines for Identification, Evaluation, Archaeological Documentation, and Historical Documentation, as appropriate.

Research Design

Archaeological survey can be comprehensive within a project area or based on a statistically valid sampling design. No one particular kind of testing or analysis, sample distance, or intensity of coverage is mandated here. It is however expected that any location and identification survey will include some amount of subsurface testing, such as to test areas where visibility is poor or to determine amount and kinds of soil erosion or deposition. It is also expected that when the testing design is based on a predictive model for site location, that some testing will be carried out in areas of low potential as well as in areas of moderate to high potential.

The Principal Investigator is expected to examine the project area and its general cultural history and to propose research topics and methods of testing that will fit the area. He or she is encouraged to fit the research objectives into the research goals and information needs identified in the State Plan volumes on prehistoric and historic archaeology. The research design must fully describe the objectives of the research, how those objectives relate to the State Plan, and all methods used for both field work and laboratory analysis. It must justify any sampling employed to find sites, either through predictive models developed for the project or those already developed in the State Plan or other reports.

Methods must be appropriate to the level of survey being done and to the kinds of research information that the Principal Investigator hopes to recover. If a consultant has a question or concern about a particular technique being proposed, he or she is encouraged to discuss it with the DE SHPO staff to see if it is acceptable or appropriate under the project's circumstances. Agencies sponsoring excavations in Delaware are encouraged to submit their scopes-of-work or proposals for DE SHPO review.

Recommended Methods

Methods can include remote sensing, mapping of surface features (including existing buildings), field surface collection, shovel test pits, and/or larger unit test pits along a

³Note that testing and excavation on federally owned lands requires an Archeological Resources Protection Act (ARPA) permit. Contact the National Park Service, Washington, D.C., for information on this process.

transect or within a grid. Because existing landscape features and/or buildings are relevant parts of many sites, their examination and recordation through photography, contour maps, and/or location maps are frequently necessary methods as well, and their contribution to understanding the information value of the overall site should be explicitly discussed.

Controlled trenching with heavy machinery may be appropriate under certain circumstances. Mechanical stripping of large areas can be done (and is often necessary to uncover features), but **only** after adequate testing of the plow zone or other overburden is done to determine integrity of the soil layers and to recover artifact distributions or other kinds of distributional information, such as soil chemistry. In urban areas with very complex stratigraphy and disturbances, mechanically dug trenches may be used in initial testing, but care should be taken that the trenches are deepened incrementally, so that important features, such as barrel-lined privies, are not heavily damaged before their presence is noted.

Consultants should take all appropriate samples during evaluation and data recovery excavations to support the research design, including pedology, soil chemical analysis, pollen analysis, carbon-14 and wood identification analysis, flotation analysis, phytolith analysis, and so on, even if the samples cannot be immediately processed due to funding or time limitations. Evaluation survey level samples must include those for soil chemical analysis across historic sites, and carbon-14, flotation, wood identification, and pollen analysis from prehistoric or historic features (as applicable) excavated at this level and with sufficient preservation to support these samples. Also at this level on prehistoric sites, pedology to determine site formation and age, and soil analysis to determine viability of phytolith analysis must be done. (See Appendix IV for the interim curation policy on handling of these samples.) Laboratory analyses actually performed must be appropriate to the site, the level of survey, and the information needs of the project.

All hand-excavated units must be sifted through ¼-inch hardware cloth to insure standard recovery of artifacts. (See Appendix IV for Delaware State Museums' interim sampling and curation policy, with discussion of kinds of materials to be sampled and kinds to be completely retained.) Measurements can be in either feet and tenths or metric for historic sites, but on prehistoric sites, they should be in metric. All field observations must be recorded in a field log or excavation record, and profile and plan drawings and photographs (black and white and color slide) must be made of all features and a sample of units as appropriate. Particularly diagnostic artifacts should be photographed and/or drawn.

Site Definition

Archaeologists have different concepts and definitions of what constitutes a site. At the moment, the DE SHPO is using the following standards and procedures for assigning site numbers.

The overall site number is assigned usually on the basis of a reconnaissance or location survey. (See *Levels of Survey*, p. 8.) Often little is known at that time about the exact extent and nature of the site or site areas. This number primarily denotes a locus of human

activity, indicated by the presence of buildings, structures, or ruins, artifact concentrations, soil discolorations, or other surface or subsurface signs of the modification or use of a geographic area bounded by visible natural or cultural features, such as ephemeral or permanent streams, or roads and field boundaries (depending upon the time period of the site). Such signs (artifact scatters, etc.) may or may not conform to the site boundaries and are not necessarily contiguous on the surface.

Recent work has shown that artifact concentrations alone are not altogether reliable indicators of a site's actual boundaries. Often concentrations that appear discontinuous on the surface are found to be connected during subsurface testing, and merely denote areas of greater activity. At other times, features are found outside of the artifact concentration. Therefore the DE SHPO assigns a single site number to a geographic locus and gives letter designations to differentiate spatially distinct sub-areas within that locus. A single artifact with no other site areas or components in the related area does not constitute a site, but is labelled a findspot or isolated find, and is not given a site or CRS number. Another common phenomenon in Delaware, historic field scatter, is caused by the nineteenth-century practice of field manuring, to increase the fertility of the soil. This manure included all the trash and garbage from the farm, so it is common to find a light scatter of nineteenth-century artifacts over agricultural fields. While this is evidence of this kind of farming practice and should be noted, it does not constitute a site within the State's present definition but is an isolated find, not given a site or CRS number.

In urban areas, the site number is given to the National Register Historic District (if one has been designated) or to a section of the urban landscape that shares a common historical development. Individual lots or areas being excavated are denoted by sub-area letters, as above, or, in Wilmington, by the block number.

All sites located must be recorded, even if they appear to be "modern" or post-World War II. However, testing of sites that are less than 50 years old need only be sufficient to identify the time period covered by the site, since sites of this age do not meet the National Register age criterion. Note that buildings, structures, objects, and specialized landscapes such as cemeteries are recorded as archaeological sites (on CRS-4) only when they are archaeologically tested. Otherwise, they are recorded with a Property Identification Form (CRS-1) and any other appropriate forms. If such resources were recorded prior to the archaeological survey, the surveyor uses the CRS number for that resource, adding a site number to it.

Artifact Processing and Curation

See Appendix IV, Interim Guidelines for Sampling and Curation of Archaeological Collections, for a complete discussion of sampling, curation, and storage requirements for the Delaware State Museums system. Collections that will be curated in the state system must conform to these guidelines. If a computer catalog system is used, a coding manual and/or procedures manual must be included with the artifact inventory, and a copy of the inventory must be provided on disk in ASCII (text) format.

A complete inventory of all artifacts found and samples taken must be made and provided with the artifacts and samples when placed in a repository. All fieldnotes, drawings, photographs, analyses, maps, and other relevant material must be curated with the artifacts. Currently, only the Delaware State Museums and the University of Delaware Department of Anthropology are state-approved repositories and any collections from state-funded projects or private collections donated to the state must be curated in one of these two repositories.

Collections obtained as a result of federally funded projects can, at the federal agency's option, be curated in a federally approved repository. (See Appendix III, Federal Curation Standards.) The report must contain full information on where the collection is stored and what kinds of information and documents are stored there. The DE SHPO expects the consultant to sample and analyze the site on the basis of the guidelines here. If the federal repository refuses to accept parts of the collection due to differences in sampling policy, the agency may be able to store those parts of the collection with the state, at the option of the state. If parts of the collection have to be discarded, this must be fully documented. The agency must see that a copy of all information on the collection, with location of the repository noted, is provided to the Curator of Archaeology, Delaware State Museums. Agencies wishing to store federal collections with the State Museums must provide curatorial agreements with any private owners of parts of the collections.

Conservation of significant artifacts that require treatment is the responsibility of the consultant. However, due to the uncertainties of archaeological discovery, conservation requirements should be handled as a change order to the original contract, based on an agreement between the agency, the consultant, and the DE SHPO specifying which artifacts should be treated.

Data coordination and forms instructions omitted; see current ones available on web:
<http://history.delaware.gov/preservation/surveys.shtml>

REPORT GUIDELINES

This outline is intended to serve as a guide to the kinds of information that must be in a survey report, and is not a rigid format. The author can for instance vary the order and placement of individual items of information or include tables or indices summarizing information as long as the report text includes sufficient information to support the conclusions in the summary.

All work done due to federally permitted or funded activities must meet the appropriate Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. The DE SHPO will also review by those criteria; see Appendices I and II.

REPORT CONTENT

Title Page

1. Author.
2. Contractor(s) groups.
3. Contracting agency.
4. Date of report.

Abstract

1. Project name and purpose of work.
2. Summary of work accomplished, including management information and cultural and historical conclusions.

Table of Contents

List of Illustrations (Place illustrations within the text at appropriate points and not in an appendix.)

Review criteria: Photographs and maps with all appropriate information, including scale and adequate identification.

Introduction

1. Project description, including sponsoring agency or funding source.
2. Level of and reason for survey or treatment work, and project goals for the investigation, including compliance requirements with citations of law if appropriate.
3. Project location and size in acres, including description of modern land use. Include maps to show location within state and details of project area.

Review criteria: Project limits adequately (map & text) located and defined.

4. Dates of fieldwork.

Background Research

1. Physical geography and environment of project area, including changes and development up to the present. Stress those features that affected placement of resources and types of or changes in land use (topographic relief, types of streams, agriculturally productive soils, etc.).
2. Regional and local social, economic, and cultural history, based on State Plan and other secondary sources, including summary of prior surveys or research in immediate area and/or time period, sufficient to provide an historic context(s) within which significance can be evaluated. In an historic context, you must identify area covered, time periods covered, and historic or cultural theme(s) considered. These must be linked to the State Plan context framework. This context must be sufficiently in depth to identify the property types that can be expected within the survey area. Lists of property types can be found in the State Plans for both prehistoric and historic period resources. A bibliography of plans and fully developed contexts is attached.

Research Design

1. Research objectives, including relationship to State Plan research questions, goals and priorities. Include historical documentary objectives, where appropriate. Also include a discussion of known biases or gaps in the historical records that could affect the outcome of the research. For archaeological surveys, include theoretical orientation, testable hypotheses, and/or site predictive model.

Review criteria: Sources of background research identified and appropriate to work area, without obvious oversights. Research objectives appropriate to the project; any hypotheses both significant and answerable by the anticipated fieldwork.

2. Methods, including specific field and analytical techniques and historical documentary methods employed to answer research questions and/or to meet research objectives. These must be appropriate to the level of work proposed and the kinds of questions being asked.

Review criteria: Methods clearly defined and appropriate to level of survey and/or treatment as defined by scope of work and/or research objectives.

3. Expected results, including expected property types and their projected number, density, location, character, and condition, based on the identified historic context(s). For an evaluation survey, include type-specific eligibility criteria for each expected property type covering both significance and integrity and note how these are related to the National Register criteria. If a testable hypothesis or predictive model is among the research objectives, include a discussion of the expected or possible answers and what kinds of information will be sought to provide those answers.

Review criteria: Property types defined, with eligibility criteria related to historic context.

Descriptions of Work

1. Areas with no relevant cultural resources -
 - a. Description and map indicating vacant areas where resources are absent and/or areas now completely developed or disturbed by modern construction.
 - b. For archaeological survey, indicate limits of undisturbed sterile areas and of disturbed areas, extent and kind of testing, and location of isolated finds, if any.
 - c. For architectural survey, note location of any non-surveyed buildings or structures and reason for exclusion from project.

Review criteria: Non-resource areas adequately delineated.

2. Resources description.
 - a. Boundary of each located property, including description and map, indicating the limits of the resource. Precise boundaries are essential for an evaluation report; for an identification report, indicate boundaries as far as they are known. For architectural survey, note relationship to current tax parcel and to historic bounds of property. Discuss relationship with setting. For archaeological survey, note extent and kind of testing, areas where resource may extend beyond project zone or testing limits, and areas where resource was disturbed or setting altered.

Review criteria: Properties adequately mapped and with clearly defined boundaries.

- b. Primary documentary research about each resource, including historic maps, deeds, census information, wills and inventories, and so forth (where appropriate and available). In an evaluation survey, this must be sufficient to identify any significant associations with events or people and to delineate a property's place within the appropriate historic context(s).
- c. Archaeological survey: discuss site structure. Give limits of testing and excavation, and describe stratigraphy and/or features discovered, including drawings and/or photographs with scale (metric or English). Drawings must include at least one plan map showing relationship of features and location of test units with site boundaries. (Include DE SHPO survey forms in an appendix.) Identify State Plan context(s) and property type(s).
- d. Architectural survey: describe each element of each resource recorded including State Plan context(s) and identification of property type(s). Include photographs or streetscapes. (Include DE SHPO survey forms in an appendix.)
- e. Archaeological survey: give artifact description and analysis (complete inventory should be in appendix), including drawings and/or photographs, with scale (metric or English), of significant artifacts.
- f. For all surveys: when large numbers of properties are included in the survey area, a table can be used to summarize the findings. Include for each resource CRS number, site number (if appropriate), property name, address or location, major context(s), property type(s), and integrity. If it is an evaluation survey, also include eligibility, NR criteria met, and comments on eligibility (how the property meets or fails to meet the significance and integrity criteria outlined in the research design).

Review criteria: Standing resources and/or archaeological fieldwork and artifacts adequately described and illustrated for each property. Properties, fieldwork, and analyses clearly presented and understandable to the knowledgeable reader.

Interpretations and Conclusions

1. Discuss results and interpretations of work in relation to research objectives, for both historical documentation and fieldwork (and laboratory analysis if appropriate).

Review criteria: Appropriate analytical tables included and clearly presented. Interpretation and evaluation relates property information to background research and to the research objectives.

2. Discuss the usefulness of the overall research design and any inadequacies of the methods used in answering research questions or meeting research objectives. Note where reliability of results was compromised due to survey or contracting constraints. For historical documentation, include discussion of accuracy and biases of sources actually used (may be in an annotated bibliography).

Review criteria: Adequacy of research designs, general utility, and any constraints or problems discussed.

Recommendations

1. For initial reconnaissance or identification surveys, note which properties or areas need further work to assess National Register eligibility. Note any properties or areas that have clearly lost integrity and do not require any further work. If more than four or five properties were considered within the survey area, include this in the table. (See Description of Work, 2f, above.)
2. For an evaluation survey, assess National Register eligibility and identify area(s) of significance for each property located. Discuss in detail the reasons each property meets or fails to meet the criteria of integrity and/or significance by measuring each property against the criteria developed for that property type in the research design. (This can be addressed in the property description section, especially when dealing with a large number of resources; see Description of Work, 2f, above.)

For any properties eligible under National Register Criterion D, note the major research questions that should be addressed in any future work. If more than four or five properties were considered within the survey area, include in the summary table the primary recommended treatment(s). (See Description of Work, 2f, above.)

Review criteria: National Register eligibility appropriately assessed.

3. If possible and appropriate to the project, make specific recommendations on determinations of direct and/or indirect effect which the project will have on the properties, and the consequences of any loss caused by the project's effects.

Review criteria: Project impacts (primary & secondary) upon identified properties clearly identified where known.

4. Suggest areas for further field work, treatment options, and/or future research questions. If proposals include further archaeological testing and/or excavation,

they must focus on the recovery of data relevant to the areas of significance for the property. Treatment options should be based on the determinations of direct and indirect effect, as far as is known, and should include alternatives in the event of project changes.

Review criteria: Recommendations for further work supported by property information and interpretation, especially in regard to National Register significance and to the mitigation of identified effects.

5. Recommend changes to historic contexts and planning goals and priorities, including new or revised information needs or areas of research.

Review criteria: Recommendations for changes to historic contexts and/or to goals and priorities of the State Plan included and adequately supported.

6. Note location(s) of survey forms, fieldnotes, field maps, field drawings, photographs, artifacts, forms, transcriptions of documents, tapes of oral histories, and any other primary documentation of work (may be in a footnote or an appendix). If final disposition of this material has not yet been made, note where it is now and where it will be deposited in the future (as far as is known).

Review criteria: Location of survey forms, photographs, maps, fieldnotes, artifacts, etc., given.

Bibliography

1. Use format appropriate to the major discipline, such as American Antiquity for archaeology or The Chicago Manual of Style for history and architectural history.
2. Include both secondary and primary sources; include all sources consulted, even if not used in the text of the report.

Appendices

1. Qualifications of principal investigator, field and lab director (if appropriate) and/or other supervisory personnel, and surveyors. (May be in shortened form if complete resume demonstrating the person meets the NPS Professional Qualifications Standards is on file at DE SHPO.)
2. Scope of work and accepted proposal.
3. CRS inventory forms for each resource located as a result of the survey. (Original forms must be filed separately from the report with the DE SHPO. See Survey Documentation below.)

Review criteria: Survey data coordination complete and on file at DE SHPO.

4. Determination of eligibility on National Register forms, for each eligible site and building. (See NPS Bulletin 16 Guidelines for Completing National Register of Historic Places Forms and DE SHPO's Guidelines for Determination of Eligibility Forms and National Register of Historic Places: Application Guidelines.)

Review criteria: DOE forms properly filled in.

5. Archaeological surveys: provenienced artifact lists - in detailed inventory.
6. Archaeological surveys: specialized analyses (faunal, C14, etc.).

Review criteria: Appropriate appendices included and complete.

SURVEY DOCUMENTATION

Report Copies

one bound and one unbound copy now required, regardless of source

1. Submit ~~three~~ one bound and one unbound copy with high-quality plates (for microfilming) of the final, approved report. Binding can include spiral, 3-hole notebook, other protective covering. (The microfilming copy may be omitted if the report will be submitted by another state agency for filming through the Delaware Documentation program of the Delaware State Archives.)

Forms and Backup Documentation

1. All properties newly identified by a survey or requiring updated information are be documented on the appropriate DE SHPO survey forms. Data coordination to DE SHPO Standards is the responsibility of the surveyor or consultant. These forms are filed at the DE SHPO.
2. For archaeological sites, all field notes, drawings, negatives, photographs, slides, analyses, artifact inventories, and any other related documents must be deposited with the artifacts at the Island Field Repository or other approved repository.
3. For standing resources, all slides, contact sheets, negatives, maps, forms, recording sheets, and related documentation must be filed at the DE SHPO.

Artifact Curation (for archaeological projects)

1. Basic artifact processing, including cleaning, labelling, inventorying by provenience, and boxed storage is the responsibility of the consultant. If the collection to be curated at the Island Field Repository, boxes must conform to state standards and should be obtained through the Delaware State Museums. (See Appendix I

Interim Guidelines for Sampling and Curation of Archaeological Collections.)

2. Once a project is completed, the artifacts can, at the option of the contracting agency, be deposited with the Division of Historical and Cultural Affairs at the State's archaeological repository, the Island Field Repository. If, however, the artifacts have not been curated by their standards, the Division may refuse to accept them.
3. It is the agency's responsibility to obtain curation agreements with the owners of artifacts excavated under federal law on privately owned lands. (See Appendix III, Federal Curation Standards.) This should be done in consultation with the Curator of Archaeology of the Delaware State Museums.

GLOSSARY

Artifacts	remains of past objects, such as glass and ceramic vessels or stone tools, found on archeological sites, and providing information on the function and time period of the site.
Chronological Period	the time range within which a property existed. Defined chronological periods can be found in the various state plans. (See Bibliography of Plans and Developed Historic Contexts, p. 68.)
Complex	in architectural survey, a group of related buildings or structures built either as a unit or for a single purpose and usually on a contiguous parcel of land. In archaeological survey, a defined cultural sub-unit of a larger time period, characterized by a specific group of artifact types.
Comprehensive Survey	recording of the location and description of either all archaeological or all standing resources within a project area.
Condition	the physical state of a resource, including its level of repair and functionality. Not equivalent to integrity.
Criteria - Evaluation from Context	the specific standards of integrity and significance for a property type, against which a particular property is measured to determine eligibility.
Criteria - National Register	the general standards of age, integrity, and significance defined by the National Park Service for the National Register of Historic Places program. See NPS Bulletin 15:
Curation	the maintenance of an archaeological collection and its accompanying documentation.
Data Coordination	the systematic mapping and cross-referencing of survey documentation for filing and retrieval purposes.
Documentary Research Design	the defining of the objectives, methods, and expected results of historical documentary research.

Eligibility	capability of a specific property to meet the National Register criteria.
Environment	the current physical surroundings of a property.
Evaluation	the assessment of a property's eligibility for listing in the National Register.
Features	the physical remains of human activity, generally not removable from the site, such as a building or its foundation walls, trash pits, storage pits, post holes, fire hearths, and so on. The archaeological study of these reveals information about how people lived in the past.
Field Work	the systematic retrieval of information about historic properties from the properties themselves, by documenting them on forms and in photographs, thus recording architectural elements and surroundings or recording archaeological testing and excavation.
Function	the use to which an historic property is put. Historic function is the use for which it was built; current function is its present use.
Geographic Zone	the bounded geographical areas defined in the State Plan, determined by a common development pattern or use within each area in the past. (See Bibliography of Plans and Developed Historic Contexts, p. 68.)
Historic Context	the historic or prehistoric background which is represented by physical remains of the past and within which the historical significance of the resource is evaluated. This provides a framework for historical research, by setting out the geographic area, time period, and cultural or historical theme to be considered. (See Bibliography of Plans and Developed Historic Contexts, p. 68.)
Historic Theme	the general topic that provides the organizing principal that explains the existence, use, and abandonment of historic properties and towards which historic research is directed. These topics are defined in the State Plan for both prehistoric and historic period properties on a very broad basis. More focused themes can be defined within

	each of these broader topics based on the results of particular research. (See Bibliography of Plans and Developed Historic Contexts, p. 68.)
Integrity	the degree to which an historic or prehistoric property retains those physical characteristics that identify it as a particular property type significant to an historic context
Management Plan	a written plan that documents what kind of resources exist in a specific area and how that area will be developed or preserved to manage those resources for the future.
National Register	the list of buildings, sites, structures, objects, and districts deemed worthy of preservation based on an analysis of their history and representation of property types important to our history; maintained by the Keeper of the National Register at the National Park Service in Washington, D.C.
Physical Geography	the broad physical characteristics of the land, including topography (degree of flatness, steepness of slope, or rolling quality of the land surface), water systems, ground cover (forest, cultivated fields, or fallow), and degree of development (road systems, buildings, and so on).
Principal Investigator	the individual in overall charge of a project, who must meet the National Park Service's Professional Standards Qualifications for the particular kind of project being carried out. (See Appendix I.)
Property Type	a generic kind of historic property which represents and is defined by an historic context; actual examples of the type may or may not survive.
Property	an historic building, site, structure, object, or district with its associated setting, which may include subsidiary buildings, site components, structures, or other landscape features; used interchangeably with resource.
Repository	a facility that provides a secure, climate-controlled environment for the storage of archaeological collections, including artifacts, photographs, slides, field drawings,

	and other documentation. (See Appendix III for an outline of the requirements for a federally approved repository.)
Research Design	a written plan for conducting research, including objectives, methods, and expected results.
Resource	an historic building, site, structure, object, or district with its associated setting, which may include subsidiary buildings, site components, structures, or other landscape features; used interchangeably with property.
Sampling Design	a special kind of research method, involving statistical sampling of a project area rather than a comprehensive survey or site excavation; must be fully described and justified in the research design.
Section 106	a section of the National Historic Preservation Act of 1966, as amended, which requires that all federal undertakings consider their effect upon historic properties. (See Appendix VII for an outline of the process to consider effects.)
Significance	the historical importance or research value of a property, measured against the criteria for that type of property within its historic context.
Site Predictive Model	a model of past land use and development used to predict archaeological site locations in the field. Generally the most intensive testing is done in the highest probability areas.
State Plan	the various documents that together provide background historic and prehistoric information, historic context definitions and development, research goals and priorities, management goals and priorities, and courses of action for the DE SHPO and its partners in historic preservation. (See Bibliography of Plans and Developed Historic Contexts, p. 68.)
Stratigraphy	the sequence of soil layers on an archaeological site or within an archaeological feature, distinguished by color, texture, and inclusions.

Survey Documentation

full range of information collected for a survey, including forms, photographs, negatives, maps, the report, background historical data collected but not necessarily used in the report. The report must note where this information is stored.

BIBLIOGRAPHY OF DELAWARE MANAGEMENT PLANS AND DEVELOPED HISTORIC CONTEXTS

- Ames, David L., Mary Helen Callahan, Bernard L. Herman, and Rebecca J. Siders.
1989 **Delaware Comprehensive Historic Preservation Plan.** University of Delaware Center for Historic Architecture and Engineering, Newark, DE.
- Ames, David L., and Rebecca J. Siders
1987 **The Computerization of the National Register of Historic Places in Delaware and Its Application to Defining Property Types in the Comprehensive Historic Preservation Plan.** University of Delaware Center for Historic Architecture and Engineering, Newark, DE.
- Blume, Cara L., and Cherie A. Clark
1992 **A Cultural Resources Management Plan for Thompson Island Preserve.** Department of Natural Resources and Environmental Control, Dover, DE.
- Bower, Mark A., and Martin B. Abbott.
to be **Appendix A: Country House Movement.** In: Lancaster Pike (Rte. 48)
pub. **Between Rte. 141 & 41, New Castle County, Delaware.** Delaware Department of Transportation Archaeology Series No. nn, Dover, DE.
- Catts, Wade P., Ellis P. Coleman, and Jay F. Custer
1983 **Cultural Resources Study and Management Plan for Fort Delaware State Park.** Monograph No. 1, University of Delaware Center for Archaeological Research, Newark, DE.
- Chase, Susan Mulchahey, David L. Ames, and Rebecca J. Siders
1992 **Suburbanization in the Vicinity of Wilmington, Delaware, 1880-1950+/-: A Historic Context.** University of Delaware Center for Historic Architecture and Engineering, Newark, DE.
- Custer, Jay F.
1986 **A Management Plan for Delaware's Prehistoric Cultural Resources.** Monograph No. 2, University of Delaware Center for Archaeological Research, Newark, DE.
1987 **A Management Plan for the Prehistoric Archaeological Resources of Delaware's Atlantic Coastal Region.** Monograph No. 4, University of Delaware Center for Archaeological Research, Newark, DE.
1989 **Archaeological Resource Potential of the Piedmont Flood Plains of Delaware.** University of Delaware Center for Archaeological Research, Newark, DE.

- 1989 **A Management Plan for the Prehistoric Archaeological Resources of Southwestern Delaware.** Monograph No. 6, University of Delaware Center for Archaeological Research, Newark, DE.
- Custer, Jay F., and Colleen DeSantis.
 1986 **A Management Plan for the Prehistoric Archaeological Resources of Northern Delaware.** Monograph No. 5, University of Delaware Center for Archaeological Research, Newark, DE.
- De Cunzo, Lu Ann, and Wade P. Catts
 1990 **Management Plan for Delaware's Historical Archaeological Resources.** University of Delaware Center for Archaeological Research, Newark, DE.
- De Cunzo, Lu Ann, and Ann Marie Garcia
 1992 **Historic Context: The Archaeology of Agriculture and Rural Life, New Castle and Kent Counties, Delaware, 1830-1940.** University of Delaware Center for Archaeological Research, Newark, DE.
- Doerrfeld, Dean, and David L. Ames
 1993 **The Canning Industry in Delaware: 1860 to 1940. A Historic Context.** (draft) University of Delaware Center for Historic Architecture and Engineering, Newark, DE.
- Fisher, Caroline C., with Allison W. Elterich, Bernard L. Herman, and Rebecca J. Siders
 1993 **Marshland Resources in the Delaware Estuary, 1830 to 1950+/-: A Historic Context.** (draft) University of Delaware Center for Historic Architecture and Engineering, Newark, DE.
- Goodwin, Conrad M.
 1986 **"Not a Bad Measure of a Man": An Archaeological Resources Management Plan for Wilmington, Delaware.** Office of the Mayor, Wilmington, DE.
- Gredel & Paul
 1989 **Historic Context for Aids to Navigation in Delaware.** Gredell & Paul, Wilmington, DE.
- Heite, Louise B. and Edward F. Heite
 1989 **Saving New Amstel: A Proposed City of New Castle Archaeological Preservation Plan.** Trustees of the New Castle Commons, New Castle, DE.
- Herman, Bernard L., and Rebecca J. Siders
 1989 **Historic Context Master Reference and Summary.** University of Delaware Center for Historic Architecture and Engineering, Newark, DE.

LeeDecker, Charles H., Martha H. Bowers, Amy Friedlander, Elizabeth Rosin, Ingrid Wuebber, and John W. Martin.
to be **Appendix F: Historic Context for Evaluation of Commercial Roadside**
pub. **Architecture.** In: Cultural Resources Survey of U.S. Route 113, Milford-Georgetown, Sussex County, Delaware. Delaware Department of Transportation Archaeology Series, No. nn, Dover, DE.

Siders, Rebecca J., et al.

1991 **Agricultural Tenancy in Central Delaware, 1770 - 1900 +/-: A Historic Context.** University of Delaware Center for Historic Architecture and Engineering, Newark, DE.

Wise, Cara L.

1983 **Development of a Cultural Resource Management Plan for Lums Pond State Park.** Delaware Division of Natural Resources and Environmental Control, Dover, DE.

1984 **Cultural Resources Management Plan for Killens Pond State Park.** Delaware Division of Natural Resources and Environmental Control, Dover, DE.

1985 **Cultural Resources Management Plan for Four Seashore State Parks and Other Coastal Properties.** Delaware Division of Natural Resources and Environmental Control, Dover, DE.

1985 **Cultural Resources Management Plan for Walter S. Carpenter Jr. State Park.** Delaware Division of Natural Resources and Environmental Control, Dover, DE.

1987 **Cultural Resources Management Plan for Bellevue State Park.** Delaware Division of Natural Resources and Environmental Control, Dover, DE.

Wise, Cara L., Cherie A. Clark, and Meril Dunn

1989 **A Cultural Resources Management Plan for Trap Pond State Park.** Delaware Division of Natural Resources and Environmental Control, Dover, DE.

1990 **Cultural Resources Management Plan for Brandywine Creek State Park.** Delaware Division of Natural Resources and Environmental Control, Dover, DE.

BIBLIOGRAPHY OF SURVEY REFERENCE MATERIAL

(government publications available from U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328; NR Bulletins available from National Register of Historic Places, National Park Service, U. S. Department of the Interior, P.O. Box 37127, Washington, DC 20013-7127)

Advisory Council on Historic Preservation http://www.cr.nps.gov/local-law/FHPL_HistPrsvt.pdf
1993 **National Historic Preservation Act of 1966, as amended.** Washington, D.C.

Association for Preservation Technology [back issues available on-line to members; http://www.apti.org/publications/jstor.cfm](http://www.apti.org/publications/jstor.cfm)
1992 **APT Bulletin.** Conserving Historic Landscapes. Vol. XXIV, Nos. 3-4.

Blumenthal, Sara K., compiler [http://www.cr.nps.gov/linklaws.](http://www.cr.nps.gov/linklaws)
1989 **Federal Historic Preservation Laws.** U.S. Department of the Interior, National Park Service, Washington, D.C.

Curry, George W., Regina M. Bellavia, and David Uschold
1993 **Landscape Features: Character-defining Features for Documentation of Cultural Landscapes.** Paper developed under cooperative agreement between NPS North Atlantic Regional Office and SUNY College of Environmental Science & Forestry, Faculty of Landscape Architecture, Syracuse, NY.

Derry, Anne, H. Ward Jandl, Carol D. Shull, and Jan Thorman; Patricia L. Parker (reviser)
1985 **Guidelines for Local Surveys: A Basis for Preservation Planning.** National Register Bulletin 24. U.S. Department of the Interior, National Park Service, Washington, D.C.

NPS National Register Branch

1991 **How to Complete the National Register Registration Form.** National Register Bulletin 16A. U.S. Department of the Interior, National Park Service, Washington, D.C.

NPS National Register Branch

n.d. **How to Apply the National Register Criteria for Evaluation.** National Register Bulletin 15. U.S. Department of the Interior, National Park Service, Washington, D.C.

NPS National Register Branch

n.d. **Definition of National Register Boundaries for Archeological Properties.** National Register Bulletin 12. U.S. Department of the Interior, National Park Service, Washington, D.C.

NPS National Register Branch

n.d. **How to Identify, Evaluate, and Register Rural Historic Landscapes.** National Register Bulletin 30. U.S. Department of the Interior, National Park Service, Washington, D.C.

NPS National Register Branch

n.d. **Guidelines for Evaluating and Documenting Properties Associated with Significant Persons.** National Register Bulletin 32. U.S. Department of the Interior, National Park Service, Washington, D.C.

NPS National Register Branch

n.d. **Guidelines for Evaluating and Documenting Historic Aids to Navigation.** National Register Bulletin 34. U.S. Department of the Interior, National Park Service, Washington, D.C.

NPS National Register Branch

n.d. **Historic Archeological Sites: Guidelines for Evaluation.** National Register Bulletin 34. U.S. Department of the Interior, National Park Service, Washington, D.C.

National Trust for Historic Preservation.

1993 **Historic Preservation Forum.** Focus on Landscape Preservation. Vol. 7, no. 3. May/June 1993.

not available on-line; for
more current issues, see
<http://nationaltrust.org>

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APPENDIX I. The Secretary of the Interior's Standards and Guidelines for Historic Preservation

omitted; available at:
http://www.cr.nps.gov/local-law/arch_stnds_0.htm

APPENDIX II. Outline of the Secretary's Standards and Guidelines:

- A. Preservation Planning
- B. Identification
- C. Evaluation
- D. Historic Documentation
- E. Archeological Documentation

STANDARDS FOR PLANNING

Page Two



B. Rank goals based on:

- <> 1. General social, economic, political, and environmental conditions
- <> 2. Major cost or technical considerations
- <> 3. Identification, evaluation, registration, and treatment activities previously carried out within context

STANDARD III.

Results Made Available for Integration Into Broader Planning Processes



A. Integrate individual contexts to create plan

- <> 1. Reconcile goals to ensure recommendations do not contradict each other
- <> 2. Produce overall set of priorities and list of activities to be performed
- <> 3. Explicitly consider potential for shared property type membership by individual properties



B. Integrate into other planning processes at all levels affecting land units within contexts

OUTLINE OF NATIONAL PARK SERVICE STANDARDS FOR PRESERVATION PLANNING

STANDARD I.

Establishes Historic Contexts

- A. Organizes information to define relationships between properties
 - <> 1. Identify concept, time period, and geographic limits
 - <> 2. Assemble existing information
 - <> a. History of area, including known historic properties
 - <> b. Check variety of sources, tailoring methods to usefulness of information, expense of obtaining it, and expertise required
 - <> c. Identify groups important to establishing context and values
 - <> d. Existing planning data relative to goals and priorities
 - <> e. Review information to identify biases in values, methods, or area of coverage
 - <> 3. Synthesize information into written narrative
 - <> a. Trends in area settlement and development, if relevant
 - <> b. Aesthetic and artistic values
 - <> c. Research values or problems
 - <> d. Intangible cultural values
- B. Define property types
 - <> 1. Identify kinds of properties expected within geographic limits of context and group into types most useful in representing trends within the context
 - <> 2. Characterize locational patterns based on testable models
 - <> 3. Characterize current condition
 - <> a. Inherent characteristics that either contribute to or detract from its physical preservation
 - <> b. Aspects of social and natural environment that may affect preservation or visibility
- C. Identify information needs

STANDARD II.

Uses Contexts to Develop Goals and Priorities for Identification, Evaluation, Registration, and Treatment

- A. Statement of preferred preservation activities, usually by property type
 - <> 1. Identify goal, including context, property types, and geographical area
 - <> 2. List activities required to achieve goal
 - <> 3. Identify most appropriate methods
 - <> 4. Give a schedule within which activities should be completed
 - <> 5. Determine amount of effort required, including way to evaluate progress

OUTLINE OF NATIONAL PARK SERVICE STANDARDS FOR IDENTIFICATION

Standard I.

Undertaken to Degree Required to Make Decisions

- A. Objectives, chosen methods, and expected results specified in a Research Design consistent with management needs and character of the area
 - <> 1. Objectives
 - <> a. Current knowledge of contexts or property types
 - <> b. Physical extent of area
 - <> c. Amount and kinds of information to be gathered (research goals)
 - <> 2. Methods
 - <> a. Clearly related to research goals
 - <> b. Possible limitations or biases evident
 - <> c. Compatible with area and properties expected
 - <> 3. Expected results
 - <> a. Predicted kind, number, location, character, and condition of historic properties

Standard II.

Integrated into the Preservation Planning Process

- A. Review effects of survey/archival research on contexts, previously established goals and priorities
- B. Make recommendations on changes to contexts or overall plan

Standard III.

Explicit Procedures for Recordkeeping and Information Distribution

- A. Systematically gathered and recorded information (i.e. use local or state standards)
- B. Report documenting research design and results available to preservation planners
 - <> 1. Objectives
 - <> 2. Area researched or surveyed
 - <> 3. Research design
 - <> 4. Methods used, including intensity of coverage and reasons if different methods substituted
 - <> 5. Results
 - <> a. How results met objectives
 - <> b. Analysis, implications, and recommendations
 - <> c. Where compiled information located

OUTLINE OF NATIONAL PARK SERVICE STANDARDS FOR EVALUATION

STANDARD I.

Evaluation of Significance Uses Established Criteria

- A. Based on professional values rather than treatment
 - <> 1. Purpose of criteria should be clear
 - <> 2. Appropriate in scale to purpose of evaluation
 - <> 3. Categorical, not detailed
 - <> 4. Outline discipline of concern
 - <> 5. Explain excluded properties and reasons for exclusion
 - <> 6. Define how levels of significance are measured, if included in criteria
 - <> 7. Relate criteria to NR criteria
- B. Statement of information needed to evaluate properties
 - <> 1. Adequately developed historic context
 - <> 2. Sufficient information on appearance, condition, and associative values
 - <> a. Classify as to property type
 - <> b. Compare characteristics with expected ones for property type
 - <> c. Define physical extent and accurately locate the property
 - <> 3. When information is missing
 - <> a. Identify information gap
 - <> b. Detail specific activities needed to gather information
- C. Performed by qualified person in relevant field

STANDARD II.

Applies Criteria Within Historic Contexts

- A. Identify and review applicable contexts
- B. Determine how criteria apply to property types
 - <> 1. Identify which criteria each property type might meet
 - <> 2. Identify how integrity is to be evaluated for each property type
 - <> 3. Outline and justify specific physical characteristics or data requirements needed to retain integrity
 - <> 4. Define how revisions or additions can be made

STANDARD III.

Results in a List or Inventory of Significant Properties

- A. Inventory content
 - <> 1. Summaries of important contexts (as defined in State Plan)
 - <> 2. Descriptions of significant property types within these contexts
 - <> 3. Results of surveys, even if not sufficient for evaluation

STANDARDS FOR EVALUATION

Page Two

A. Inventory Content (continued)

- <> 4. Information on individual properties used in evaluation
 - <> a. Description, including photographs
 - <> b. Justification of significance in relation to context, including analysis of integrity
 - <> c. Boundaries
 - <> d. Record of when evaluated and included in inventory, and by whom
- <> 5. Information should be updated continuously

STANDARD IV.

Results Are Made Available to the Public



A. Uses and Availability to the Public

- <> 1. Information is organized and retrievable by locality or context
- <> 2. Summary lists of eligible properties or historic contexts should be available and distributed.

**OUTLINE OF NATIONAL PARK SERVICE
STANDARDS FOR HISTORIC DOCUMENTATION**

Standard I.

Follows a Research Design Responding to Needs Identified in Planning Process

- A. Detailed record of context(s) and significance of a property incorporating earlier findings; including
 - <> 1. Evaluated significance of properties being studied
 - <> 2. Research issues relevant to properties' significance
 - <> 3. Previous research and how current research relates
 - <> 4. Amount and kinds of information required
 - <> 5. Methods to be used
 - <> 6. Types of sources and types of personnel required
 - <> 7. Expected results
 - <> 8. Relationship to other proposed treatment

Standard II.

Employs an Appropriate Methodology

- A. Based on information needs
- B. Capable of replication and confirmation by other researchers
- C. Measures accuracy and biases of sources
- D. Analyzes adequacy of methods against results

Standard III.

Results Assessed Against the Research Design and Integrated Into the Planning Process

- A. Determine whether gathered information met the research objectives
- B. Recommend changes to historic contexts and/or overall goals and priorities

Standard IV.

Reported and Made Available to the Public

- A. Summary of purpose, research design, and methods
- B. Sources of facts and/or analyses, including notes on conflicting sources and interpretation of conflicts
- C. Sources consulted, including those that were found to have no information

STANDARDS FOR HISTORIC DOCUMENTATION

Page Two.

- D. Assessment of accuracy, biases, and perspective of all sources (may be in an annotated bibliography)
- E. Major analyses and results, addressing research design and any unexpected issues, including summary of impact on properties' significance and on the relevant contexts
- F. Interpretations of events or trends
- G. Location of notes and analyses
- H. Made available to preservation planners and the public

**OUTLINE OF NATIONAL PARK SERVICE
STANDARDS FOR ARCHEOLOGICAL DOCUMENTATION**

STANDARD I.

Follows a Research Design Responding to Planning Needs

- A. Objectives follow goals of preservation plan and specific needs identified for contexts
 - <> 1. Evaluated significance of properties to be studied
 - <> 2. Research issues relevant to their significance
 - <> 3. Prior research on topic and property type and how proposed is related to existing knowledge
 - <> 4. Amount and kinds of data needed to address objectives,
 - <> 5. Methods to be used
 - <> 6. Relationship to anticipated historical or structural documentation or other treatments

STANDARD II.

Methods Selected to Obtain Information Required by Research Design

- A. Background review
- B. Field Studies
 - <> 1. Able to accommodate new or unexpected data classes or property types, or changed field conditions
 - <> 2. Able to recover information specific to research goals
 - <> 3. Standardized recordkeeping
 - <> 4. Conducted by qualified professional in relevant field
- C. Analysis
 - <> 1. Addresses research goals

STANDARD III.

Results Assessed Against the Statement of Objectives and Integrated Into the Planning Process

- A. Evaluate results against the research design, including discussion of how well needs of planning process were served and utility of survey and analysis methods
- B. Recommend changes to contexts and planning goals and priorities, including new or revised information needs

STANDARDS FOR ARCHEOLOGICAL DOCUMENTATION

Page Two

STANDARD IV.

Results Reported and Made Available to the Public



A. Report Guidelines

- <> 1. Description of study area
- <> 2. Background research and historical documentation
- <> 3. Research design, including objectives and methods
- <> 4. Field studies, including any changes from research design and reason for changes
- <> 5. All field observations
- <> 6. Analyses and results, with appropriate illustrations (tables, charts, graphs)
- <> 7. Evaluation in terms of goals and objectives (see III A above)
- <> 8. Recommendations for updating contexts and planning goals and priorities (see III B above)
- <> 9. Reference to related treatment activities
- <> 10. Location of artifacts, field notes, photographs, etc.



B. Available to preservation planners, professionals, and the general public

- <> 1. Separate report without locational information may be prepared for public



C. Curation sufficient to preserve artifacts, specimens, and records

- <> 1. Facilities with adequate space and personnel
- <> 2. Specimens and records maintained without deterioration
- <> 3. Collections accessible to qualified researchers
- <> 4. Collections available for interpretive purposes

APPENDIX III. Federal Curation Standards

omitted; available at:
<http://www.cr.nps.gov/archeology/tools/36cfr79.htm>

APPENDIX IV. Delaware State Museums: Interim Guidelines for
Sampling and Curation of Archaeological Collections

replaced by draft Standards and Guidelines for the Curation of Archaeological Collections;
see following

DRAFT VERSION

***GUIDELINES AND STANDARDS FOR THE CURATION OF
ARCHAEOLOGICAL COLLECTIONS***

Delaware Division of Historical and Cultural Affairs

Delaware State Museums

Charles H. Fithian
Archaeologist

INTRODUCTION

The Delaware Division of Historical and Cultural Affairs (henceforth referred to as the Division) is the principal organization charged with the proper preservation and management of Delaware's cultural legacy. As a part of the Division, Delaware State Museums (henceforth referred to as Museums) is one of two established repositories responsible for the long-term curation of archaeological collections recovered from the State of Delaware. Museums' has served as an archaeological repository and provided archaeological curation services beginning in the 1950s to the present day.

As a part of the Delaware Division of Historical and Cultural Affairs, the curatorial responsibilities and authority of Museums are established through provisions in the Delaware Code, Federal legislation and regulations, and standards within the archaeological profession. State of Delaware provisions are as follows: Chapter 53, *Archaeological Sites In The State*, Section 5303, *Qualified Museums*, establishes Museums as a qualified museum and scientific institution; Section 5304, *Place of deposit of objects and records for permanent preservation*, further establishes Museums as one of two official repositories for the curation of archaeological materials within the state of Delaware. The responsibilities and authorities of Museums were established in Chapter 54, *Archaeological Activities*, Subchapter 1, Section 5401, *Duties of the Department of State*. In addition to the curation of state collections, Museums is also a recognized facility for the curation of collections derived from compliance projects located on Federal properties. These collections are curated and administered according *36 CFR Part 79: Curation of Federally-Owned and Administered Archaeological Collections*.

The collections curated and administered by Museums are known as the Delaware State Archaeological Collections, and consist of collections derived from Section 106 compliance projects, activities on state owned and managed lands, two Federal wildlife refuges and one military installation, and appropriate avocational activities.

Archaeological collections, including the smallest, are the most complex groupings of cultural materials found in repositories and museums. They comprise a wide range of materials, the number of which continue to expand as research vectors include an increasing number of questions, issues, and

directions. These collections include the artifacts, environmental samples, biological materials, and a wide range of associated records. In this group are field documentation, laboratory documentation, photographic materials, electronic data, project correspondence, historical documentation, analytical, technical, and conservation reports, and submitted/published report(s) and publications. Human remains may also be present pending legal and legislative requirements, institutional directives, and stakeholder interests.

Archaeological investigation by its nature removes portions of, or complete sites, from a locale's cultural record. The information within a collection becomes the only material means to understand the human behaviors present at that site, and the larger contexts of which the site was a part. For the compliance with Section 106 to be complete, the proper handling and curation of collections must be included among its requirements. Archaeologists have an ethical and professional obligation to preserve these remains in such a way that ensures their integrity, and that the future research and interpretational potential of these material are retained and preserved. Towards the accomplishment of that goal, Museums has established and formulated these basic guidelines and standards for the care, handling, and preservation of archaeological collections.

1.00 ARTIFACT CLEANING

1.01. Cleaning is necessary for the accurate identification and study of many artifact types. All artifacts should be cleaned unless this will harm the object, or result in the loss of artifactual data. Appropriate cleaning procedures depend upon the type and condition of the material. Due care must be exercised during the cleaning process to insure that the integrity and information value of the object are maintained.

1.02. Generally, cleaning with straight tap water is appropriate. Good judgment should be exercised in the cleaning of soft materials. Examples of soft materials would include, but are not limited to, artifacts such as bone, some Native American ceramics, tin-glazed earthenwares.

1.03. Metals such as copper alloy, iron, pewter, tin, etc. should be dry brushed only. Dry brushing should be performed with soft-bristled (soft toothbrush, narrow width paintbrush, etc.), or fiber-bristled brushes.

1.04. Any cleaning of organic materials should proceed with great caution. These include, but are not limited to, artifacts composed of leather, textiles, paper, wood, floral remains, and faunal materials. The cleaning of some these materials can be performed simply by rinsing in fresh tap water. In most cases, however, this artifact group should be examined by a conservator, or someone familiar with conservation assessment. With the exception of faunal remains, provisions to keep these artifacts types wet or moist should be made until conservation assessments or treatments can be made.

1.05. Artifacts that have visible residues, which are of research potential, such as char on ceramic vessels or smoking equipment, and coatings, such as tinning on copper alloy artifacts, should be approached with caution. Because some of these residues and coatings can be subtle, close inspection and good judgment are requisite for the proper processing of these materials

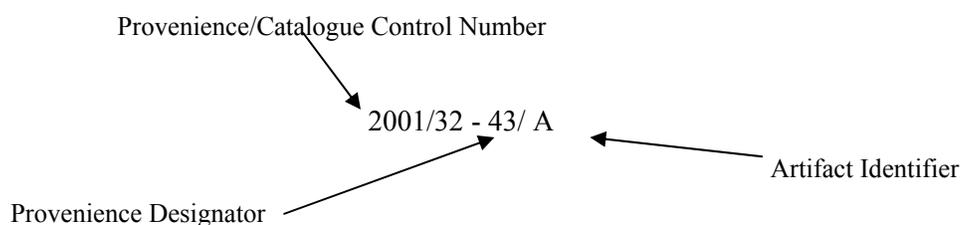
1.06. Under no conditions are samples intended for C-14, blood residue analysis to be washed or marked. Samples intended for these analyses must be containerized (described in section 4) only.

2.00 ARTIFACT NUMBERING AND LABELING

2.01. The first step in this process is acquiring a **provenience/catalogue number** for the defined site, or sites, within the project/study area immediately after the DE SHPO has assigned a specific site number. **Do not wait until later in the course of a project to get a numbers for a site or sites.** These binomial and /or alpha-numeric numbers provide a means of maintaining specific proveniences within a site as well as maintaining intersite relationships. The numbers are issued by Museums' archaeologist, and are kept in a centralized listing of all these numbers extending back to 1965. This number must be included in the number that is to be placed on the artifacts.

2.02. Artifacts from non-sites, or "findspots," that occur within a project area, will be assigned a provenience/catalogue control number(s) after consultation has occurred between the qualified professional, DE SHPO, and Museums' archaeologist.

2.03. The number applied to the artifacts must have three basic components. They are to include the following:



The Provenience/Catalogue Control Number:

This composite number is a unique designator for a specific archaeological site and serves as the basic means for identifying materials from a specific site or area.

The Provenience Designator:

This number is to be assigned to each discrete provenience established and /or recognized at a site. These numbers provide a means of maintaining intrasite patterns and provide a simple, but flexible, means of controlling a variety of data. For example, this number could be used to designate a specific area, or loci, within a site, or to identify a specific level within a feature or feature section. The numbers are to be drawn from a sequential list that is to be established and maintained only by the principal investigator, and are to be assigned only by this person, or his or her designate. Provenience designators can also serve as an index and processing log for the laboratory staff. The provenience designator list can be used to assist in preventing the loss of materials during the transfer of materials from the field, and can be used as a log during the laboratory processing. Should materials be collected from a site without strict provenience or areal control, they will receive a “General site” designation. This will be identified through the use of the delta symbol (Δ). For example, artifacts collected from a site with this designation would be marked 89.42. Δ . An artifact identifier should be added after the delta symbol.

The Artifact Identifier:

The last portion of the number is to be a letter that identifies a specific artifact. The letters are to proceed in the following fashion: A to Z, AA to AZ, BA to BZ, CA to CZ and so forth to ZA to ZZ. At this point the numbers would resume as AAA to AAZ, BAA to BAZ and so forth. The practice of

omitting certain letters for archaeological purposes is to be maintained. The letters to be omitted are I, J, O, Z.

2.04. Artifacts must be labeled using permanent archival materials. The numbers placed on the artifact must be written in black ink directly on the artifact's surface. A clear or opaque white foundation coat may be applied, if necessary, provided that important information on the artifact is not obscured or covered. After the number has been applied, a second clear finish coat must be then applied over the number or number and foundation coat. The recommended materials for this are included in the supplies section.

2.05. Where direct labeling on the object is not feasible, the artifacts may be placed in an archival quality resealable bag with the provenience data placed on the exterior of the bag, and on a mylar or tyvec strip inserted inside the bag. All artifacts, which can not be labeled, must also be separated by material, class or type.

2.06. All diagnostic artifacts must be labeled whenever physically possible. If not appropriate, or feasible, the artifact(s), must be packaged in archival materials which are permanently labeled. The provenience/catalogue control number and provenience information must be placed on a mylar, or tyvec, tag that is to be inserted into the bag/container.

2.07. When certain less diagnostic artifact types occur in large quantities within a specific provenience, all specimens need not be individually labeled. Examples include, but are not limited to, shell, fire cracked rocks, flakes, window glass, nails, brick, mortar, plaster, slag, and coal. Exceptions to this general rule would include unusual specimens, or those determined to possess a particular research potential. These artifacts should be grouped by material, type, or class, and placed in a resealable plastic bag with the exterior permanently labeled with the provenience data. A mylar or tyvec slip label with the provenience information must be placed inside the bag containing these materials.

2.08. It is necessary that faunal remains from a specific provenience be bagged separately by zoological class, and in such a way as to prevent crushing of fragile remains. All faunal material which can be physically labeled should be labeled. Bones too small for individual labeling should be placed in

an archival resealable plastic bag, and the bag labeled with all required provenience data. A mylar or tyvec label, with all required provenience data, will also be inserted inside the bag.

2.09. Other material classes not appropriate for individual labeling, including, but not limited to, floral remains, soil samples, should be stored in suitable labeled containers and with a labeled mylar or tyvec strip placed inside.

3.00. DOCUMENTATION:

Associated Records

3.01. The associated records are integral components of an archaeological site collection. **All original associated records must be submitted with the artifact collection for permanent curation.** Computer generated records, such artifact catalogues, vessel lists, etc., must be first generation printouts and not photocopies of those documents. The submitted documentation must include, but is not limited to, the following record types:

Maps: Includes, but are limited to, survey maps, project area map, overall site maps

Unit and Feature Plans and Profiles

Field Records: Includes, but are not limited to, field journals, survey log books, notes, field observations

Field Catalogue Register: This sequential list records the provenience catalogue number(s) that have been applied to each specific provenience.

Laboratory Records: Includes, but are not limited to, processing logs, internal tracking documents, etc.

Analyses and Specialized Studies: This group includes analytical studies and reports, whether or not the data was used in the final report, and would include, but are not limited to, lithic analyses, ceramic minimum vessel estimates, soil chemistry reports, and oral history interviews.

Artifact Catalogue: The catalogue must include a listing of the artifacts by provenience/catalogue number with it specific provenience description. It is recognized that there are different levels of

cataloguing. At a minimum, catalogues must include an identification of the object, appropriate measurements, its material of manufacture, and quantification (count and/or by weight), and a description of the artifact according to the best current levels of professional knowledge. Additional listings of artifacts which have been removed from and stored separately from the rest of the materials from their provenience unit need to be included.

Box Contents Index: This index records the number of the box which contains the artifacts from each provenience.

Conservation Records: Must include a statement indicating whether conservation treatment was performed, a list of those objects treated, the name of the conservator(s), and a complete description of the treatments employed. If the total artifact conservation was not completed, a list of those artifact(s) requiring immediate or further attention must be included.

Administrative Records and Correspondence: Includes modern, contemporary documentation relevant to the site/project, such as research design, scope of work, permissions, ownership documents, curatorial agreements, etc.

Historical Documentation: Copies of all historical research used in site documentation and analyses.

Final Report: Two bound copies of the final report must be submitted.

Illustrations

3.01.10. Quality copies of all artifact illustrations used in the report must be submitted.

Photography

3.01.10. A master set of permanent black and white photographs with negatives must be submitted. Grouped images on contact sheets are not acceptable as permanent record. This material must be on the best current standard films and archival papers.

3.01.11. Color slides should be unprojected originals. This material must be on the best current standard films.

3.01.12. All photographic materials should be minimally labeled with the site, provenience, and subject. This information must be placed on the on the back and written only in #2 pencil or in an archival ink. Do not use commercial felt tip or rollerball pen types.

3.01.13. A catalogue of all photographic materials with basic descriptions of each of the images must be included.

Electronic Media

3.01.15. Because electronic media is not a permanent record at the present time, it is to be included only as a compliment to the hard copy data that have been described above. All associated records and photography must deposited in human readable form.

3.01.16. Electronic data (tape, disks, etc.) are appropriate for use in recording site and collection data. If used, they must be accompanied by a statement describing the computer system, software used, and the contents of each disk, tape, or CD. Standardized methods for the storage of electronic data will likely be developed in the near future.

4.00 CONTAINERIZATION

4.01. All artifacts must be placed in archival quality stable storage containers for receipt by Delaware State Museums. The first, and most basic of these are polyethylene bags. These polyethylene bags must be reclosable and of **no less** than 4ml in thickness. Exceptionally large or unusually shaped artifacts may require different methods, but should be stored using only archival quality stable materials. Unusual situations must be brought to the attention of Museums' archaeologist for a determination of materials to be used.

4.02. The bags used for permanent storage must be clean, unused bags. Do not use bags previously used in the field, or for other purposes. Because bags used in the field have important provenience data on them, do not discard these bags. Instead, cut out the section with the provenience data, and place in side a clean archival bag, and then place inside the box, or first box, that contains the materials from that particular provenience.

4.03. All artifacts must be ordered first by provenience and then sorted and bagged according to artifact material and class, or type. For example, all ceramics should be kept together, or all of the projectile points should be together, etc. Do not mix different types of metallic artifacts together. Separate each into their respective groups and bag separately.

4.03. Plastic bags should be perforated to allow air exchange and to inhibit the development of unwanted microenvironments. Use of non-perforated bags, however, may sometimes be appropriate for very climate sensitive artifacts that need special storage conditions, such as artifacts made of ferrous metals. Perforation, as intended here, is a small hole in the center of the bag about the diameter of a dissecting needle. This small diameter is adequate for the allowance of air exchange and the prevention of microenvironments. Do not use a hole punch of the type used on notebook paper. These holes may be too big and allow some artifacts to fall through.

4.04. All bags must be permanently labeled with the appropriate site number and provenience information. Bags are to be labeled with black permanent marker only. Do not use ball point or pencil for bag labeling.

Bags are to be labeled in the upper left hand corner with the following information in sequential order:

site number

provenience/catalogue control number

provenience description

See attached example page. Additional information can be added after these if, and when, necessary.

4.05. These same data must be also placed on a mylar or tyvec tag and placed inside the polyethylene bag.

4.06. For fragile or sensitive materials (i.e. C-14 samples, faunal and floral remains, etc.), standard sized glass or other archival containers labeled with the site and provenience data are to be used. Either clear or amber colored glass is permitted, but it is preferred that the caps be teflon (TFE) lined for extra security against contamination. In the case of C-14 samples, they must be kept in the foil wrappers

used during the recovery of the sample in the field, but these must be placed inside of a glass container to prevent crushing and contamination from exposure.

4.07. Artifact storage boxes must conform to the types established by Museums. The two principal types are:

1. Archaeological Flat, 20" x 20" x 3"
2. Paige/Hollenger Box, 15 1/2" x 10" x 12 1/2"
3. Human Remains Box, 31" x 24" x 6"

4.08. For large artifacts that will not fit into the above containers, other types of archival containers can be employed after consultation with Museums' archaeologist. There are several other types of archival containers that are available from conservation supply firms. The selection of an appropriate container will be based on the artifact type(s) and storage considerations.

4.09. The archaeological flats must be compartmentalized for the maintenance of provenience data and to prevent crushing. This is to be accomplished by the use of boxes of the following four sizes:

4.75 x 4.75 x 3

4.75 x 2.5 x 3

9.5 x 4.75 x 3

9.5 x 9.5 x 3.0

4.10. All archaeological flats and boxes must be labeled with the site and provenience information. Rather than direct marking of the box, an archival adhesive label or a transparent label holder with card should be affixed to the container is required. If it is found that some materials are higher than what can be accommodated by the archaeological flat, but rising no more than two inches above the box's edge, then angled props can be placed in each of the four corners to elevate the box lid over the artifact(s). These angled props must be made of an archival material and of the same durability and strength as the main box that is used to house the collection.

4.11. The collection must be ordered and boxed according to sequential provenience/catalogue control numbers. Proper ordering will aid in the retrieval of specific data. A listing of the specific proveniences and their numbers and their box location(s) must be included with the artifact catalogue.

4.12. Artifacts that have been placed into analytical groups (minimum vessels, smoking pipes, beads, projectile points, etc.) can be retained in their analytic groups and not returned to their original proveniences for storage. Notation should be made in the artifact catalogue that these artifacts are stored separately, and a separate inventory of these groupings should be placed on file in the associated records.

4.13. In ordering and packing storage boxes, good judgment needs to be exercised as to weight. A weight of twenty pounds (20 lbs.) per box should not be exceeded.

4.14. Materials used in specialized analyses must be bagged separately, but kept within their specific provenience location. Examples include, but are not limited to, projectile points used in blood residue analysis, ceramics sampled for sourcing studies, and charcoal utilized in species identification for paleoecological studies. This practice will aid in retrieval of samples for new and additional studies. The exception to this would be if these analyses are sizable or numerous. In which case they can be stored separately provided documentation has been provided which records their removal, separation, and location.

4.15. Flotation samples that have been sorted must be kept by taxonomic class, packed according to section , and placed with its provenience unit. If deemed appropriate, and present in a high volume, sorted flotation samples can be stored as group in separate containers. Information Flotation samples that are unprocessed will be stored separately. These samples must be stored in archival containers. Proper containers can be determined on an individual basis. Processed samples and analyzed samples can be stored with their specific provenience in a proper container.

4.16. Soil samples are to be stored in boxes separate from the main collection. These samples must be stored in archival containers. Proper containers can be determined on case by case basis, pending a curation assessment. The approved containers must be permanently marked with in archival marker and all required provenience information.

5.00. PREPARATION, SHIPPING, AND ACCEPTANCE OF COLLECTIONS

5.01. After the submission of the final report to the DE SHPO, Museums' archaeologist must be contacted to begin the preparations for transport of the site collection, or site collections, to an official repository. The initiation of the process of the transfer of site collections must begin within two weeks (ten working days) of the submission of the final report.

The first step in this process is to request a copy of the Archaeological Collection Resource Checklist. The checklist sheets are used as a guide to ensure that all required materials related to a site's collection are present and in order. Upon request, this checklist will be mailed by Museums' archaeologist.

5.02. Once the checklist has been completed, it must be **mailed** back to Museums' archaeologist for review. Museums' archaeologist will have no more than two weeks (ten working days) from the date of receipt to respond. Any questions or other issues will be addressed to the consultant during the review period. Museum's archaeologist will contact the consultant to make shipment arrangements and select a date of shipment.

5.03. On the day of delivery, boxes containing site materials must arrive clean, dry, and free of any and all contamination. All boxes must be clearly marked and of the proper weight described above. The associated records must be organized, but not placed in archival materials. Museums' curatorial staff is responsible for that task.

5.04. At the time of delivery, an audit will be performed that will include an examination of all associated records, and a random selection of the boxes containing the artifact collection. Site collections found lacking associated records and documentation, portions of the collection, or improperly ordered and boxed will not be accepted and will be returned for remedial processing by the qualified professional.

5.05. Site collections must be physically transported to Museums' storage facility by the consultant. In some circumstances, Museums' curatorial staff may pick them up. Under **no** conditions are site collections and associated records to be sent through the United States postal system or delivered by commercial delivery systems.

6.00 SOURCES

6.01. Museums' archaeologist maintains an active file on curation supplies and suppliers. Files are also maintained on conservation and curation procedures and the many developments and changes that occur in those fields. Information on recommended items and materials can be provided.

6.02. It is recommended that, prior to purchase of any materials, consultants check with Museums' archaeologist to verify if a particular item, or product, meets Museums' curation requirements.

7.00 CONTACT FOR INFORMATION

7.01. Notification of changes and revisions will be addressed through the periodic issue of *Curation Circulars*. These circulars will apprise consulting firms of any changes in the *Guidelines and Standards*, new methods in archaeological curation, or other issues relevant to the proper care and management of Delaware archaeological collections in particular and archaeological collections in general.

7.02. Questions regarding curation policies and procedures, and transfer of collections should be directed to the archaeologist for Delaware State Museums.

ARCHAEOLOGICAL SITE COLLECTION INVENTORY

Site No./Name: _____

Project: _____

Agency/Firm: _____

Field/Excavation Records:

Survey Maps _____

Site Maps _____

Excavation Units: Plans _____ Profiles _____

Feature Drawings: Plans _____ Profiles _____

Field Notes _____

Field Journal _____

Photographic Resources:

B/W Prints _____

Negatives _____

Color Slides (unprojected originals) _____

Video Tape _____

Electronic Media: _____

Other Documentation: _____

1.

Artifact Collection/Collection Records (Original):

Artifact Catalogue _____

Laboratory Records _____

Analyses _____

Conservation Records _____

Special Conditions _____

Other _____

Artifact Illustrations _____

Final Report (2 copies: 1 bound, 1 unbound) _____

Volume: Flats _____ Storage Boxes _____ Non-Standard Boxes _____

Estimated Cubic Footage: Records _____ Collection _____

(Staff use only)

Collection Inspection and Audit

Date of Delivery _____

Associated Records _____

Sample of Collection _____

Notes/Comments:

Agency/Firm Representative: _____ **Date** _____

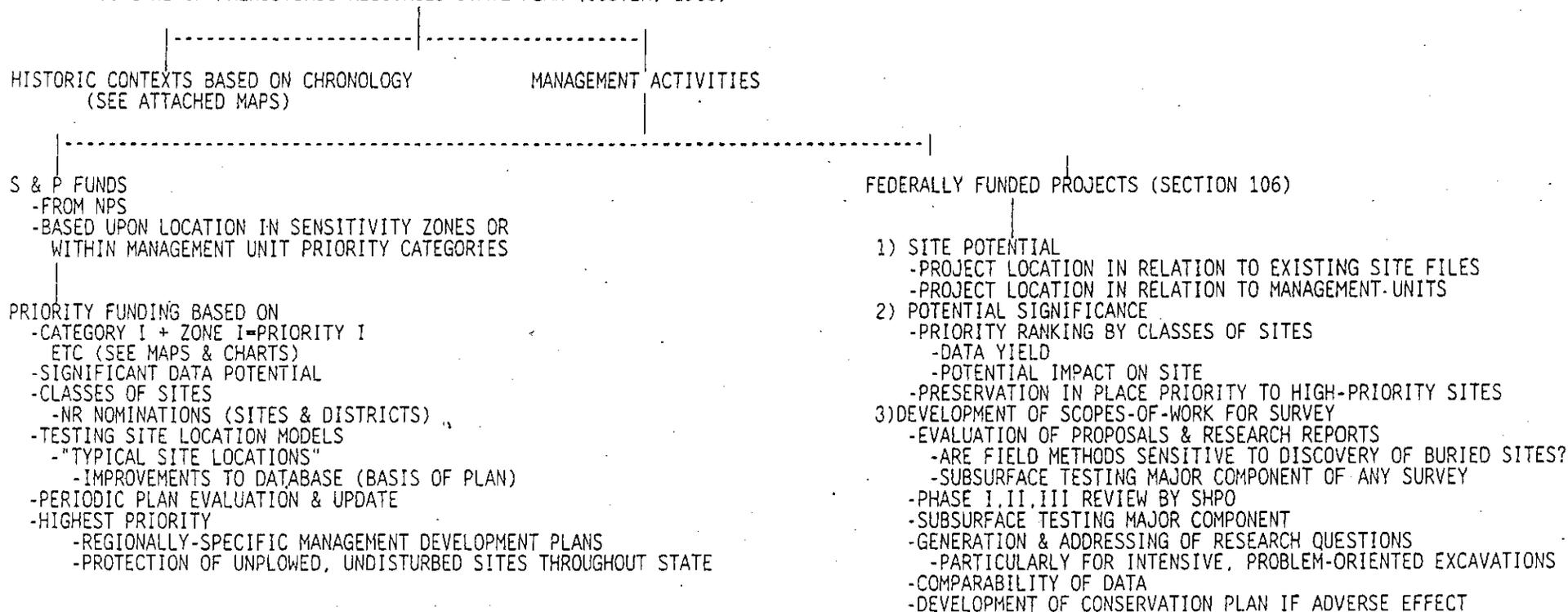
DSM Archaeologist: _____ **Date** _____

APPENDIX V. Defined State Plan Historic Contexts:

- A. Prehistoric Period**
- B. Historic Period**

June 3, 1993

OUTLINE OF PREHISTORIC RESOURCES STATE PLAN (CUSTER, 1983)



OUTLINE OF STATE PLAN FOR PREHISTORIC RESOURCES: GOALS & PRIORITIES

Survey & Planning Grant Funding

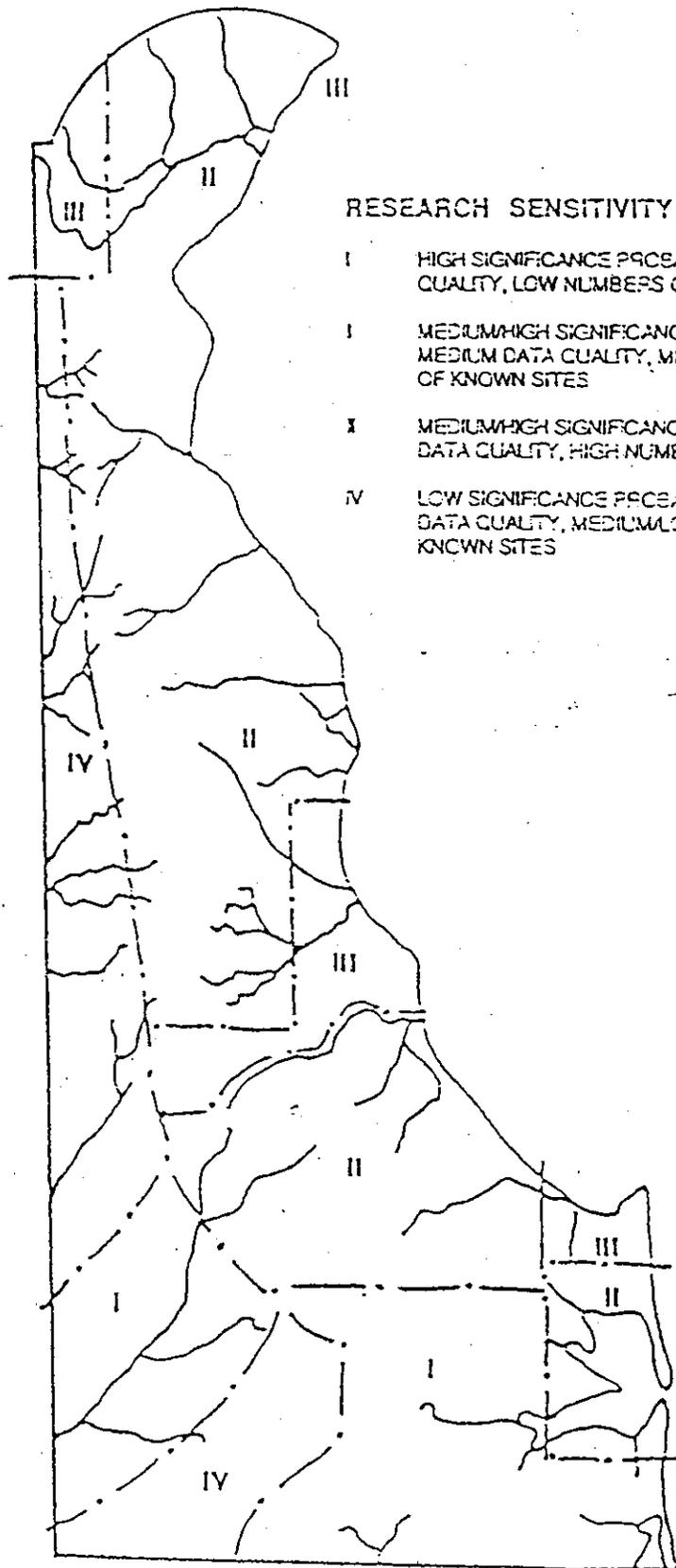
Priorities based on:

Priority Areas:

- Category I: Fall Line
 Churchmans Marsh
 Atlantic Coast
 South Bay
- Category II: Piedmont Uplands
 Upper Pocomoke
 Mid-Peninsular Drainage Divide
 Nanticoke
- Category III: Delaware Chalcedony Complex
 Delaware Mid-Drainage
 North Bay
- Category IV: Interior

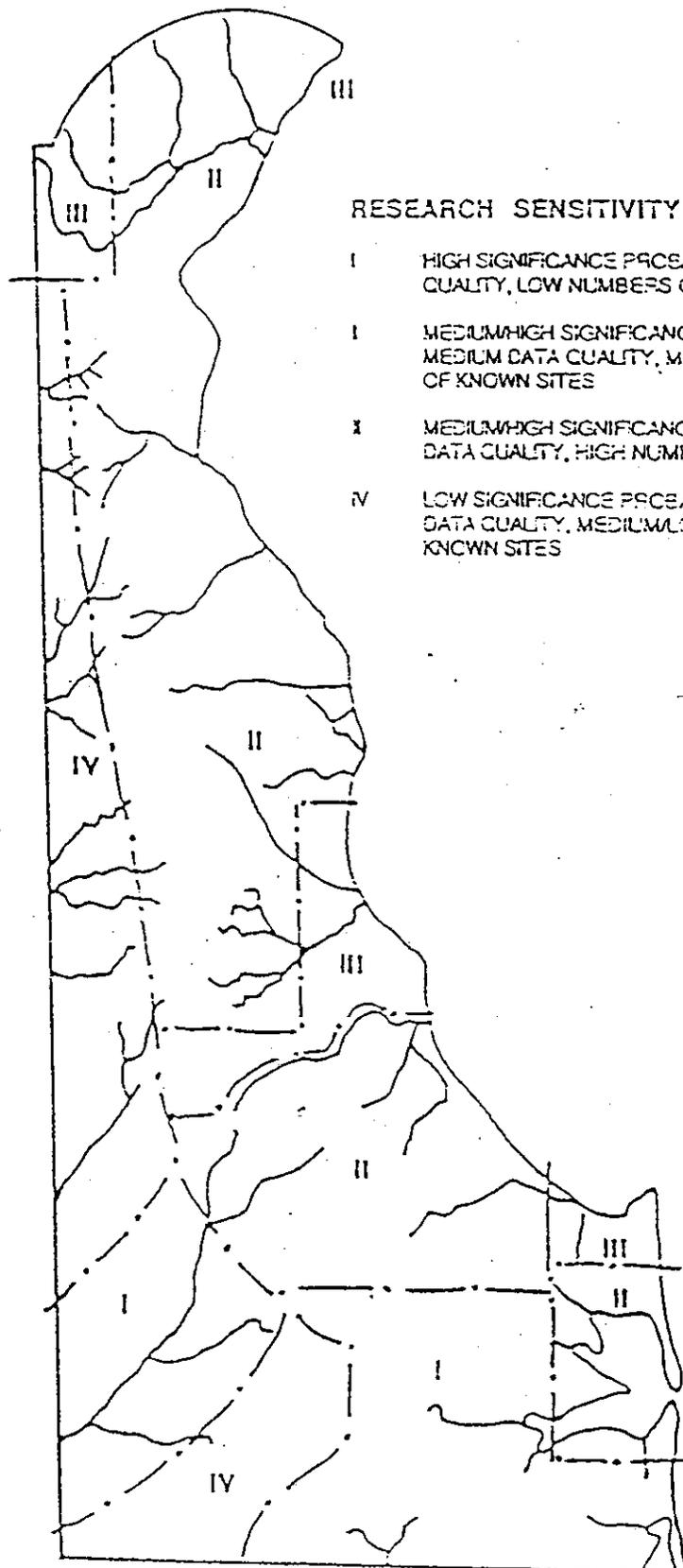
Priority Research Topics:

1. Significant data potential, based on classes of sites (i.e., property types) generate NR nominations
2. Tests of site location models
3. Periodic Plan evaluation & update
 development of regionally-specific management plans
4. Predictive model for unplowed, undisturbed sites throughout state



RESEARCH SENSITIVITY ZONES

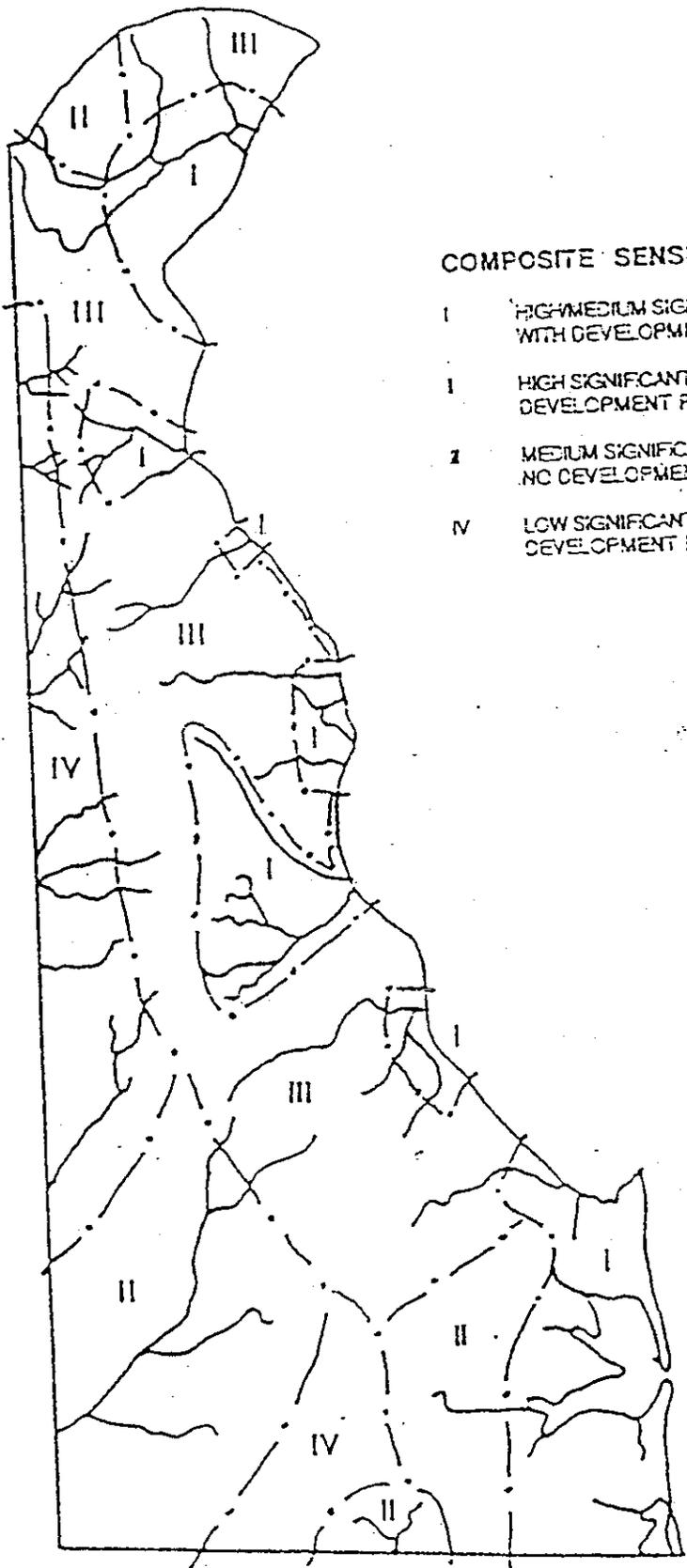
- I HIGH SIGNIFICANCE PROBABILITY, LOW DATA QUALITY, LOW NUMBERS OF KNOWN SITES
- II MEDIUM-HIGH SIGNIFICANCE PROBABILITY, MEDIUM DATA QUALITY, MEDIUM-LOW NUMBERS OF KNOWN SITES
- III MEDIUM-HIGH SIGNIFICANCE PROBABILITY, HIGH DATA QUALITY, HIGH NUMBERS OF KNOWN SITES
- IV LOW SIGNIFICANCE PROBABILITY, MEDIUM-LOW DATA QUALITY, MEDIUM-LOW NUMBERS OF KNOWN SITES



RESEARCH SENSITIVITY ZONES

- I HIGH SIGNIFICANCE PROBABILITY, LOW DATA QUALITY, LOW NUMBERS OF KNOWN SITES
- II MEDIUM-HIGH SIGNIFICANCE PROBABILITY, MEDIUM DATA QUALITY, MEDIUM-LOW NUMBERS OF KNOWN SITES
- III MEDIUM-HIGH SIGNIFICANCE PROBABILITY, HIGH DATA QUALITY, HIGH NUMBERS OF KNOWN SITES
- IV LOW SIGNIFICANCE PROBABILITY, MEDIUM-LOW DATA QUALITY, MEDIUM-LOW NUMBERS OF KNOWN SITES

Appendix D

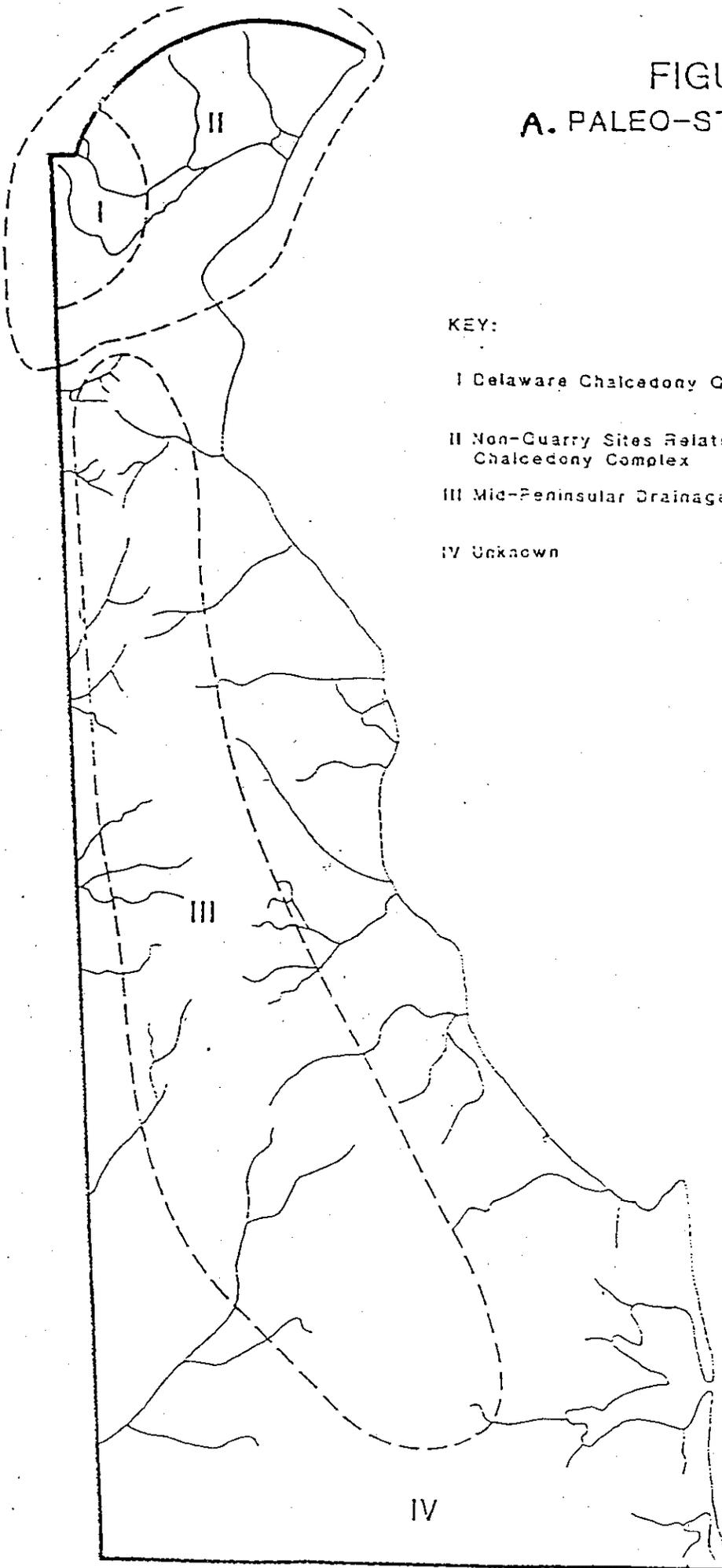


COMPOSITE SENSITIVITY ZONE

- I HIGH/MEDIUM SIGNIFICANT SITE POTENTIAL WITH DEVELOPMENT PRESSURE
- I HIGH SIGNIFICANT SITE POTENTIAL WITH NO DEVELOPMENT PRESSURE
- II MEDIUM SIGNIFICANT SITE POTENTIAL WITH NO DEVELOPMENT PRESSURE
- IV LOW SIGNIFICANT SITE POTENTIAL WITH NO DEVELOPMENT PRESSURE

FIGURE 8

A. PALEO-STUDY UNITS



KEY:

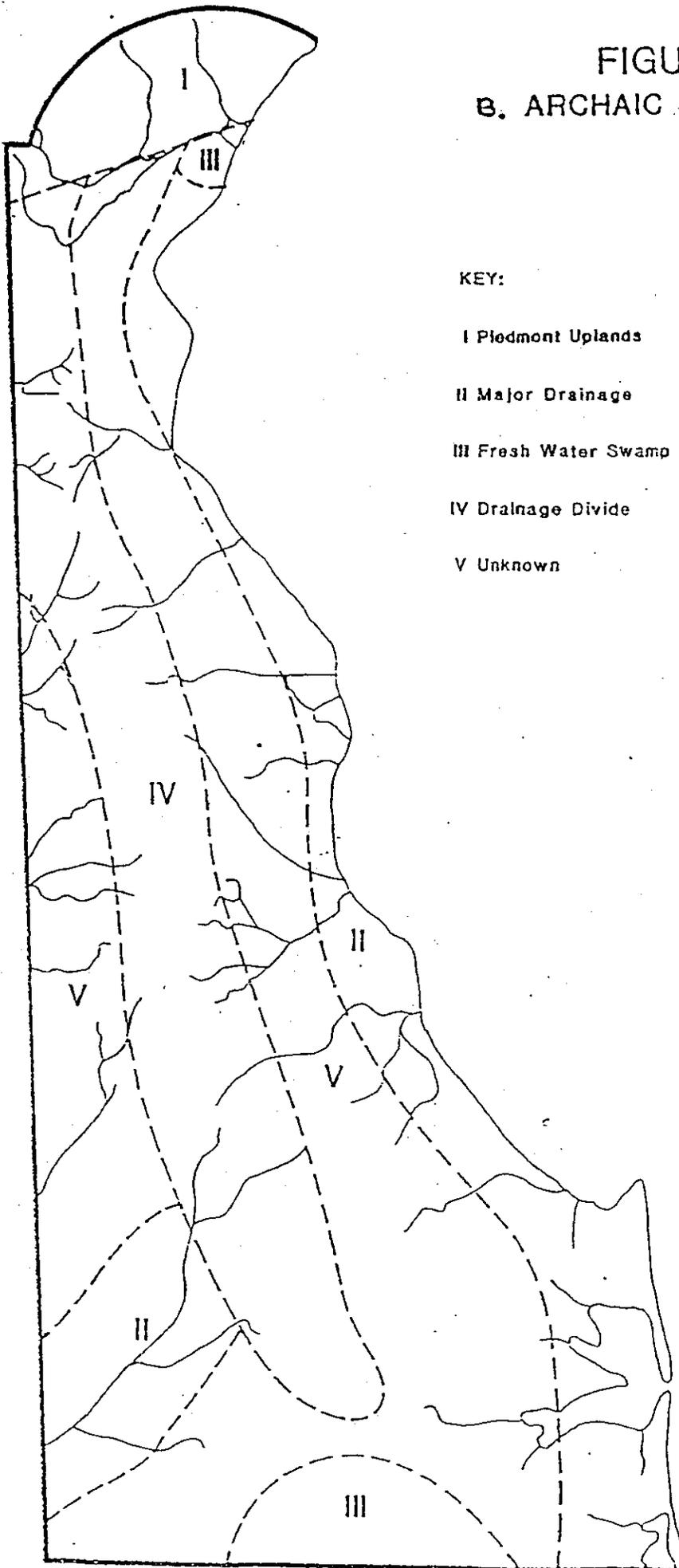
I Delaware Chalcedony Quarry Complex

II Non-Quarry Sites Related to Delaware Chalcedony Complex

III Mid-Peninsular Drainage Divide Non-Quarry Complex

IV Unknown

FIGURE 14
B. ARCHAIC STUDY UNITS



KEY:

I Piedmont Uplands

II Major Drainage

III Fresh Water Swamp

IV Drainage Divide

V Unknown

FIGURE 26
C. WOODLAND I STUDY UNITS

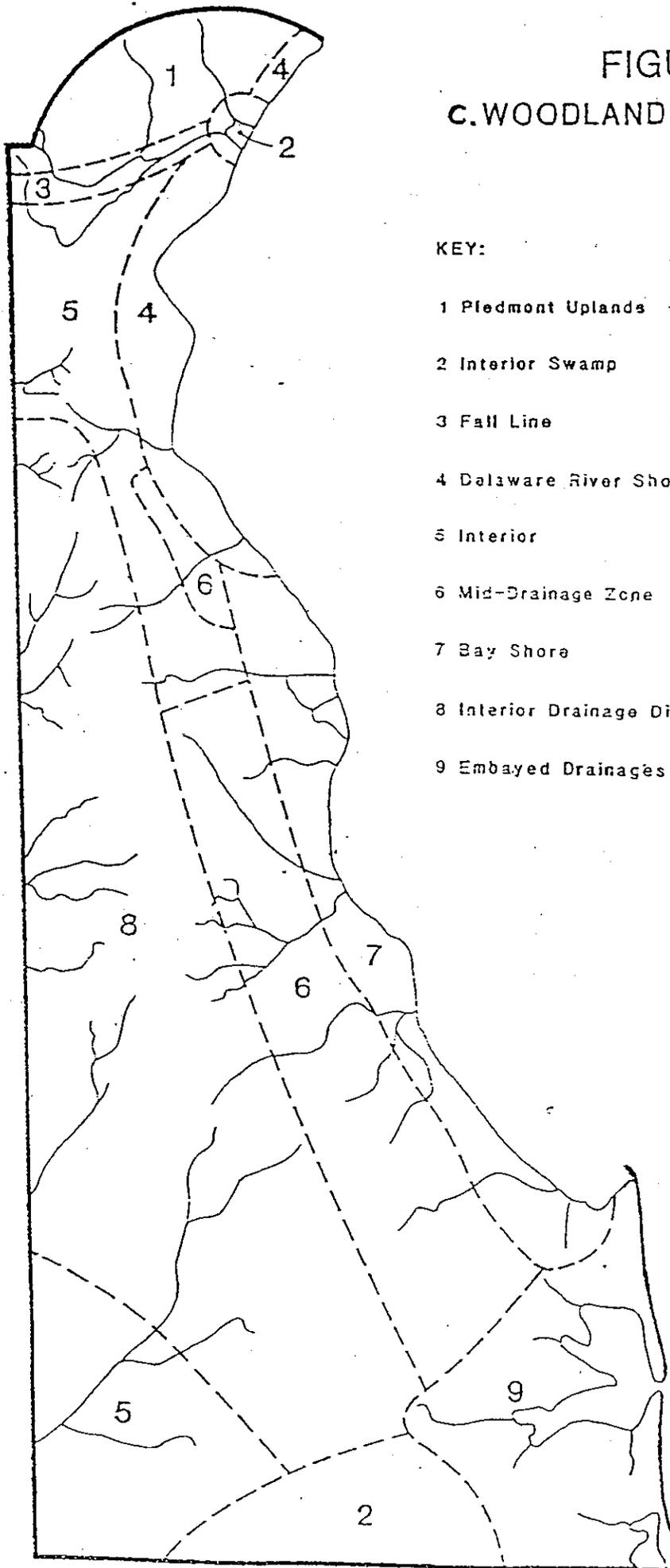


FIGURE 31
D. WOODLAND II STUDY UNITS

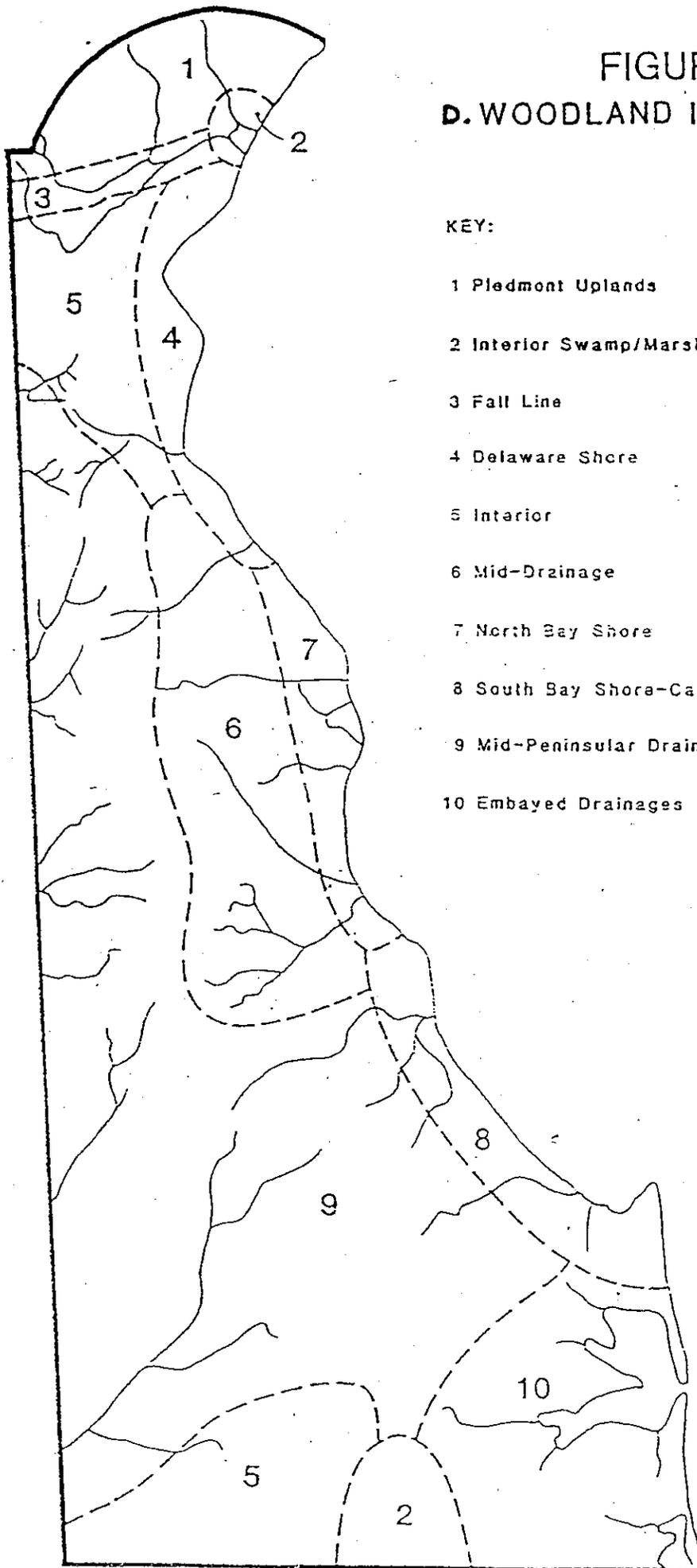
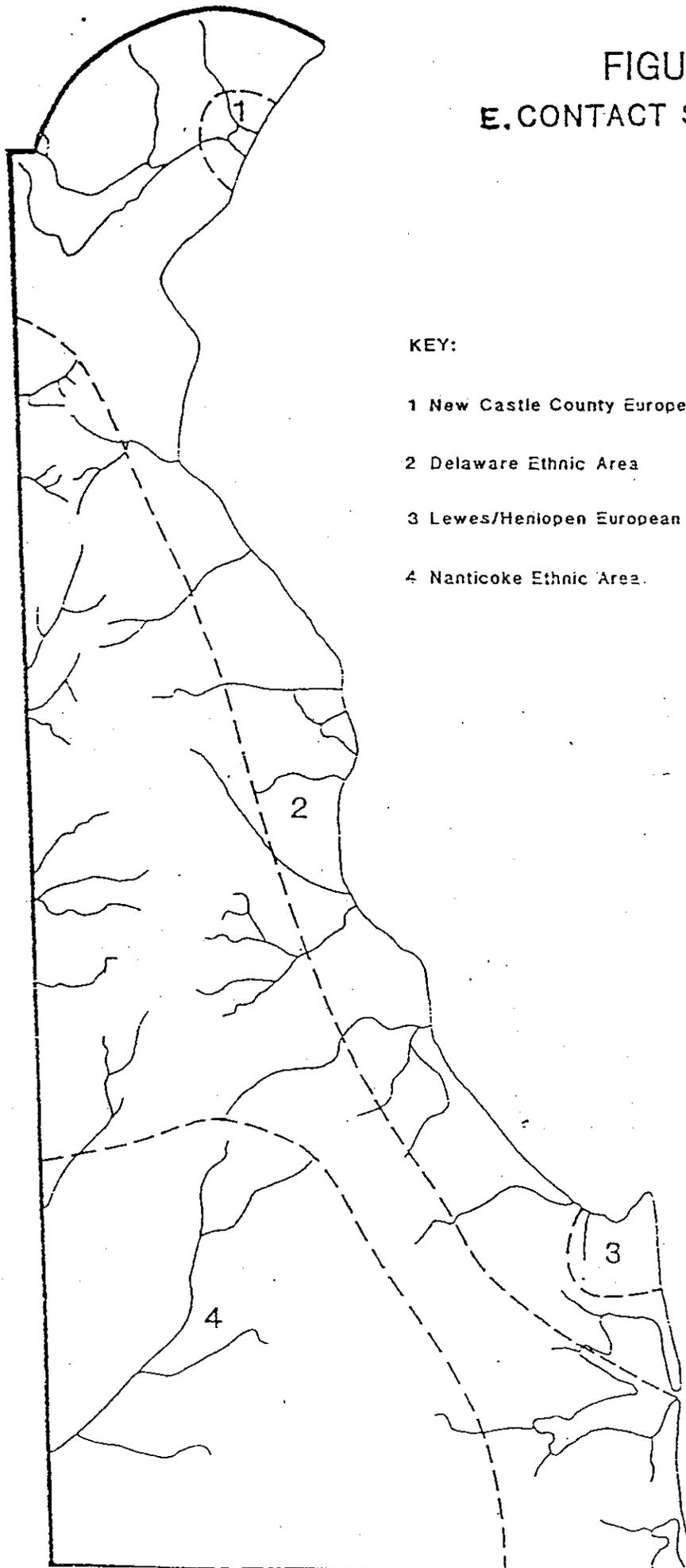


FIGURE 32
E. CONTACT STUDY UNITS



KEY:

1 New Castle County European Settlement Area

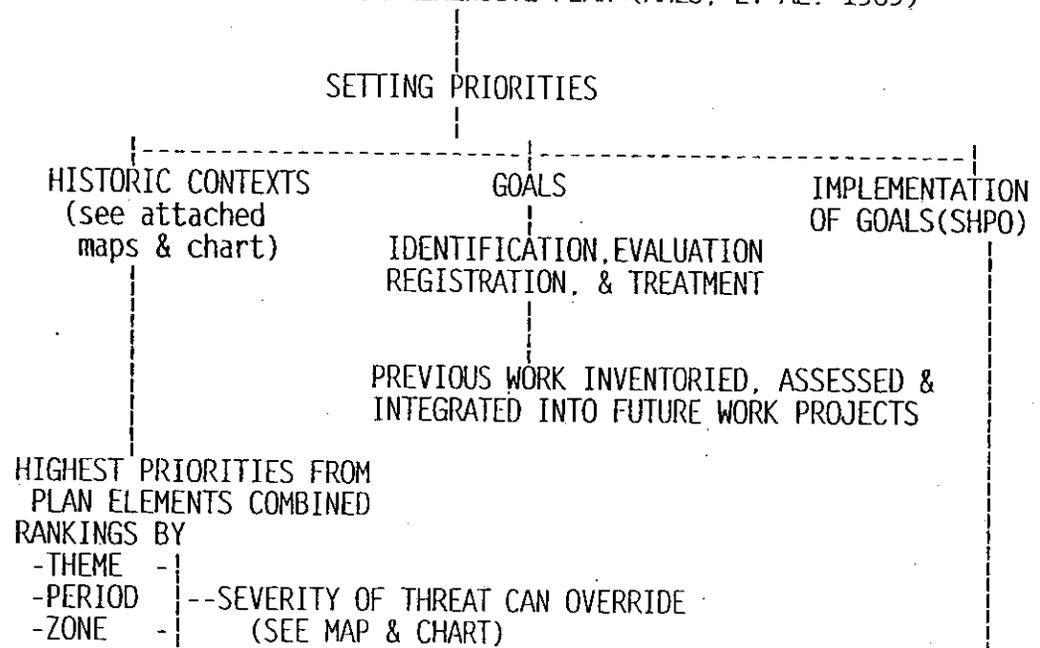
2 Delaware Ethnic Area

3 Lewes/Henlopen European Settlement Area

4 Nanticoke Ethnic Area.

June 2, 1993

OUTLINE OF COMPREHENSIVE PLAN (AMES, ET AL. 1989)



- 2 LEVELS OF CONTEXT DEVELOPMENT
 - STATEWIDE
 - CONTEXT SPECIFIC BASED ON SIGNIFICANCE & THREAT
- MULTI-YEAR WORK PROGRAMS
 - STAFF SUPPORTED
 - CONSTITUENCY INITIATED
- TRANSLATE PLAN PRIORITIES INTO WORK PROGRAM PRIORITIES
- SURVEY DATABASES
 - INTERFACE WITH NPS NR DATABASE
- ROLE OF SHPO
 - PROVIDE LEADERSHIP IN DELAWARE HISTORIC PRESERVATION
 - MUST NOT BE TOTALLY DEPENDENT UPON FEDERAL PRIORITIES & FUNDING SCHEDULES
 - PROVIDE STATEWIDE PLANS, POLICY & STANDARDS
 - POINT OF CONTACT FOR STATE & LOCAL LAND USE COORDINATORS
 - AUTOMATED PLANNING DATA SYSTEMS
 - PROGRAM ADMINISTRATION & OVERSIGHT
 - PARTICIPATION IN STATE DEVELOPMENT ADVISORY SERVICE
 - ACT TO STRENGTHEN PROTECTION OF STATE-OWNED OR STATE-CONTROLLED HISTORIC RESOURCES

STATE HISTORIC RESOURCES COMPREHENSIVE PLAN--GOALS (AMES, ET AL. 1989)

SHORT TERM GOALS

- A1. Produce fully developed contexts for all priority contexts
(Geographic, Temporal, Theme)

Above-ground

- a. Agriculture/1770-1830, Early Industrialization/Upper Peninsula
/1830-1880, Industrialization & /Lower Peninsula
Early Urbanization Cypress Swamp
/Coastal

- b. Settlement Patterns &/1830-1880, Industrialization & /Urban
Demographic Change Early Urbanization
/1880-1940, Urbanization & Early
Suburbanization

- c. Settlement Patterns &/1730-1830, Early /Piedmont
Demographic Change Industrialization /Upper Peninsula
/1830-1880, Industrialization & /Lower Peninsula
Early Urbanization Cypress Swamp

Below-ground

- d. Settlement Patterns &/1630-1730, Exploration & Frontier/Coastal
Demographic Change Settlement

LONG RANGE CONTEXT GOALS

- A2. Close gaps in knowledge of material cultural resources in Delaware
A3. Increase and diversify informational bases
A4. More comprehensive approach to documentation and analysis of
historic settlement patterns
A5. Build on current information on regional economics
A6. Integration of existing data on historic town planning into broad
overview
A7. Systematic review and synthesis of data

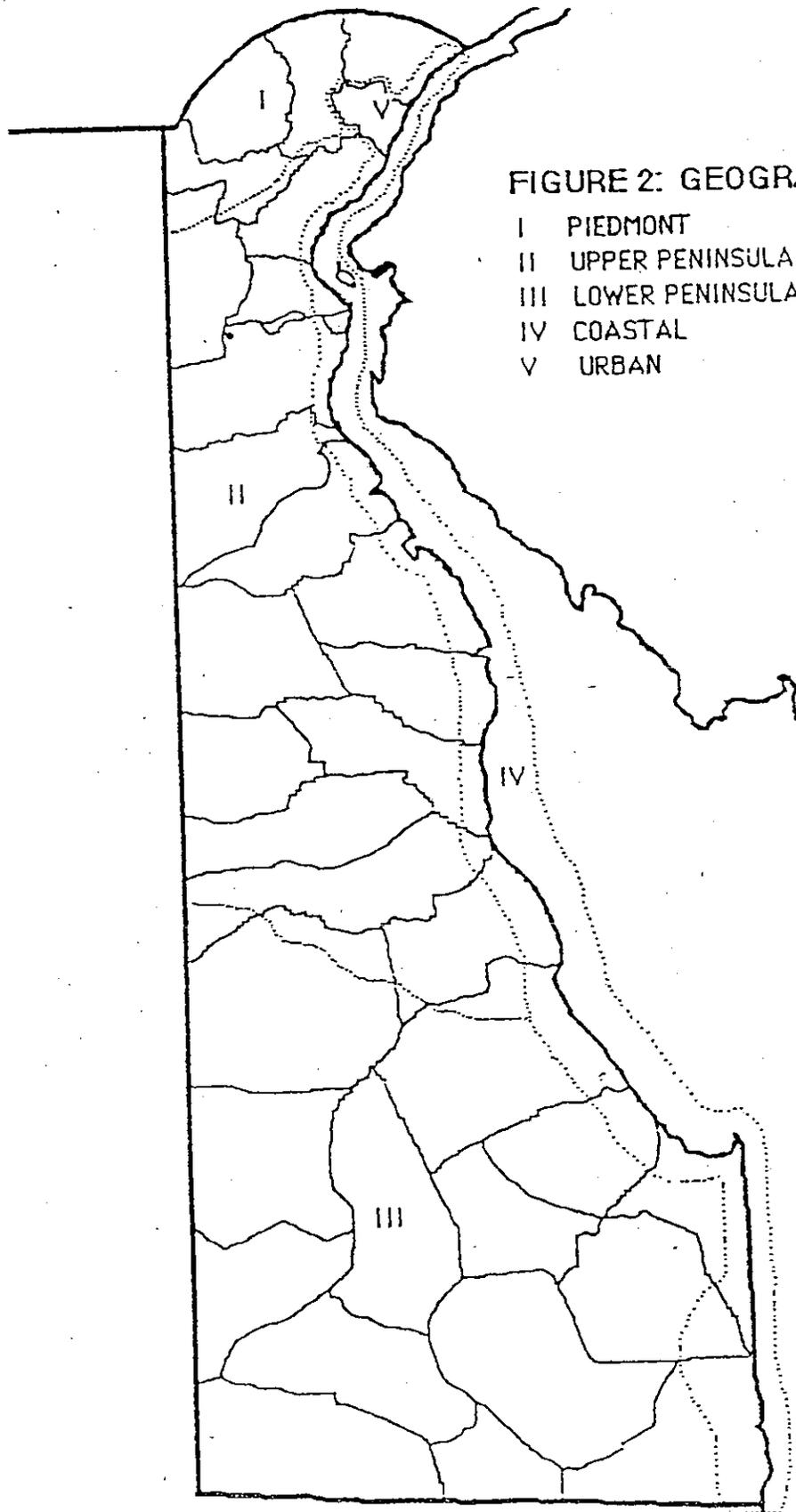


FIGURE 2: GEOGRAPHIC ZONES

- I PIEDMONT
- II UPPER PENINSULA
- III LOWER PENINSULA/CYPRESS SWAMP
- IV COASTAL
- V URBAN

FIGURE 1: FRAMEWORK OF HISTORIC CONTEXT ELEMENTS

HISTORIC THEMES	CHRONOLOGICAL PERIODS AND THEMES				
	A. 1630-1730 +/- EXPLORATION AND FRONTIER SETTLEMENT	B. 1730-1770 +/- INTENSIFIED AND DURABLE OCCUPATION	C. 1770-1830 +/- EARLY INDUSTRIALIZATION	D. 1830-1880 +/- INDUSTRIALIZATION AND EARLY SUBURBANIZATION	E. 1880-1940 +/- SUBURBANIZATION AND EARLY SUBURBANIZATION
01. AGRICULTURE					
02. FORESTRY					
03. TRAPPING/HUNTING					
04. MINING/QUARRYING					
05. FISHING/OYSTERING					
06. MANUFACTURING					
07. RETAILING/WHOLESALE					
08. FINANCE					
09. PROFESSIONAL SERVICES					
10. TRANSPORTATION AND COMMUNICATION					
11. SETTLEMENT PATTERNS & DEMOGRAPHIC CHANGES					
12. ARCHITECTURE, ENGINEERING, AND DECORATIVE ARTS					
13. GOVERNMENT					
14. RELIGION					
15. EDUCATION					
16. COMMUNITY ORGANIZATIONS					
17. OCCUPATIONAL ORGANIZATIONS					
18. MAJOR FAMILIES, INDIVIDUALS, AND EVENTS					

14

HISTORICAL ARCHAEOLOGICAL RESOURCE MANAGEMENT GOALS

- C1) DEVELOP CONTEXTS RELEVANT TO DELAWARE HISTORICAL ARCHAEOLOGICAL RESOURCES AT CORE OF PRESERVATION PROCESS
- C2) DEVELOP PRIORITY CONTEXTS (GEOGRAPHIC, TEMPORAL, THEME)
 - a. PLANNING
 - 1. STATEWIDE
1830-1940
AGRICULTURE & RURAL LIFE
 - 2. STATE
1630-1940
MARITIME
 - 3. STATE
1630-1730
ALL
 - 4. STATE
1630-1940
NUCLEATED COMMUNITIES
 - 5. STATE
1770-1830
IMPACT OF TECHNOLOGICAL REVOLUTION
INCIPIENT INDUSTRIALIZATION & SCIENTIFIC AGRICULTURE
 - b. IDENTIFICATION
 - 1. STATE
1630-1730
ALL
 - 2. STATE
1630-1940
MARITIME
 - 3. STATE
EACH PERIOD
NUCLEATED COMMUNITIES
 - 4. STATE
1770-1830
IMPACT OF TECHNOLOGICAL REVOLUTION
 - c. EVALUATION
 - 1. STATE
1630-1730
ALL
 - d. REGISTRATION
 - 1. STATE
1630-1730
ALL
 - e. TREATMENT
 - 1. STATE
1630-1730
ALL
- C3) EXTENSION OF RECONNAISSANCE SURVEY PROGRAM SUPPORTED BY S & P FUNDS
 - DEVELOPMENT OF CONTEXTS UNABLE TO KEEP UP WITH RATE OF DEVELOPMENT
 - MUST BEGIN IDENTIFICATION, EVALUATION & PRESERVATION OF RESOURCES NOW
- C4) IMPLEMENTATION OF INTENSIVE LEVEL SURVEY AS FOLLOW-UP ON SITES PREVIOUSLY SURVEYED

June 2, 1993

MANAGEMENT PLAN FOR DELAWARE'S HISTORICAL ARCHAEOLOGICAL RESOURCES
(DECUNZO & CATTS, 1990)

HISTORIC CONTEXTS

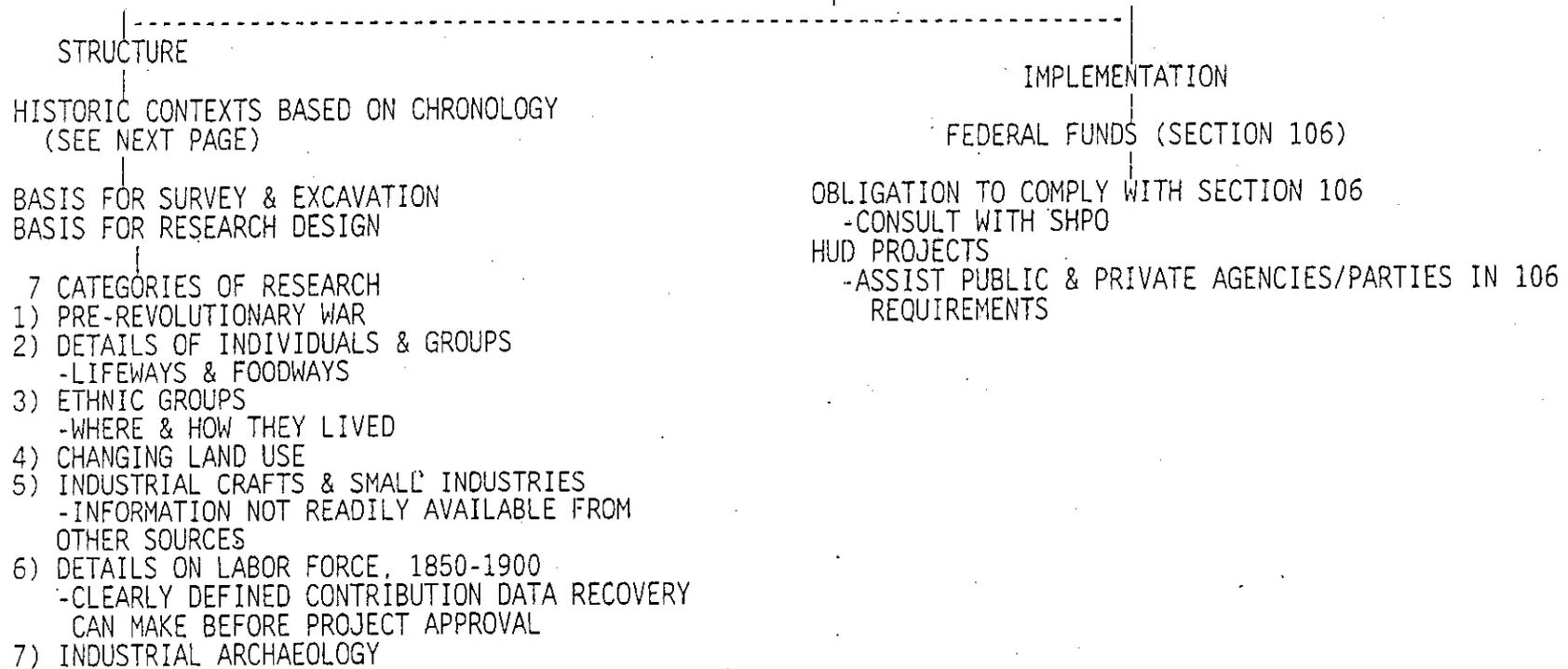
- 1) CORRELATED WITH STATE HISTORIC CONTEXT FRAMEWORK
- 2) INTEGRATION OF RESEARCH FROM ALL CULTURAL HISTORIC PERIOD RESOURCES

RESEARCH DOMAINS

- 1) DOMESTIC ECONOMY
 - SPACIAL COMPARISONS WITHIN/AMONG COMMUNITIES & WITHIN/AMONG REGIONS
 - RELATIONSHIPS OF SIMILARITIES & DIFFERENCES TO GEOGRAPHIC, OCCUPATIONAL FACTORS ETC
 - ACHIEVE BROADER CULTURAL INTERPRETATIONS BASED ON ALL AVAILABLE DATA SOURCES
- 2) MANUFACTURING & TRADE
 - RECONSTRUCT STRUCTURE, FUNCTIONING & EVOLUTION OF DELAWARE'S PRODUCTION, DISTRIBUTION & CONSUMPTION SYSTEMS
- 3) LANDSCAPE (SEE COMPREHENSIVE PLAN, AMES, ET AL. 1989)
- 4) SOCIAL GROUP IDENTITY, BEHAVIOR & INTERACTION

June 3, 1993

OUTLINE OF WILMINGTON ARCHAEOLOGICAL RESOURCES MANAGEMENT PLAN (GOODWIN, 1986)



WILMINGTON ARCHAEOLOGICAL RESOURCES MANAGEMENT PLAN CONTEXTS (GOODWIN, 1986)

HISTORIC CONTEXTS (ZONE V)

- WA) PREHISTORIC--VERY LIMITED IF PRESENT
- WB) SETTLEMENT, 1630-1730
- WC) MERCHANT MILLING, 1730-1830
- WD) INDUSTRIAL PHASE, 1830-1880
- WE) URBAN GROWTH, 1880-1930
- WF) METROPOLITAN DISPERSION, 1930-PRESENT

HISTORIC RESEARCH THEMES

MAIN THEME: ORIGIN, GROWTH, DEVELOPMENT

- W1) ADAPTION TO NEW ECOLOGY
 - DEFINING RESOURCES SELECTED
 - WHY SELECTED
 - HOW USED
 - POWER SOURCES & USES
 - RELATIONSHIP TO SURROUNDING AREA & URBAN ECOLOGY
- W2) ORIGINS OF GROWTH OF CITY
 - ELEMENTS THAT DEFINE WHAT A CITY IS
 - MAJOR GEOPOLITICAL & ECONOMIC MANIFESTATIONS OF WILMINGTON
 - TAKING ON ASPECTS OF URBAN PLACE, 1740-1790
 - PUBLIC & PRIVATE INSTITUTIONAL DEVELOPMENT
 - ECONOMIC COMPOSITION
 - KINDS & CHANGING FORMS OF BUSINESSES
 - IMPACT OF INDUSTRIALIZATION
 - RELATIONSHIP BETWEEN MANAGEMENT, LABOR & GOVERNMENT
- W3) USE OF SPACE
 - LAND USE
 - TURN OF CENTURY PRIVIES
 - COMPARATIVE DATA--MORE COMPLETE PICTURE OF LATE 19TH/EARLY 20TH CENTURIES
 - SIGNIFICANT DATA ON IMMIGRANTS, ACCULTURATION, ETHNIC COMMUNITIES
 - INTERIOR SPACE
- W4) PEOPLE WHO CREATED WILMINGTON
 - INDIVIDUAL & PARTICULAR
 - WHERE INDIVIDUALS LIVED & WORKED
 - NAMELESS INDIVIDUALS
 - CRAFTSMEN
 - THE GROUP
 - STATUS (CLASSES)
 - POPULATION TRENDS
 - SETTLEMENT PATTERNS
 - HOUSEHOLDS
 - ETHNICITY
- W5) REGIONAL CONTEXT
 - RELATIONSHIP WITH STATE & PHILADELPHIA
 - RELATIONSHIP WITHIN--MID-ATLANTIC NATIONAL & INTERNATIONAL SPHERES
 - MAJOR HISTORIC EVENTS--WILMINGTON'S ROLE
- W6) PREHISTORY
 - LITTLE KNOWN--ALL TIME FRAMES LACK DATA
 - PARTICULARLY SENSITIVE AREA
 - RESOURCE PRESENT=NR ELIGIBILITY

WILMINGTON ARCHAEOLOGICAL RESOURCES MANAGEMENT PLAN CONTEXTS (GOODWIN, 1986)
GOALS & OBJECTIVES

- B1) To locate, identify and rank by research potential the archaeological resources within Wilmington's "core" city that meet the significance and integrity criteria of the National Register
- B2) To fill gaps in Wilmington's historical data
- B3) To prepare annual grant applications for federal survey and planning funds, and to seek alternative sources of funding to further archaeological research, analysis, duration and exhibition of artifacts in the city
- B4) To analyze and integrate the 18th and 19th century artifact collections recovered from Wilmington sites
- B5) To locate and nominate any NR eligible industrial archaeological sites of districts in the city
- B6) To complete the historical land use study for the rest of the city
- B7) To create more specific standards and guidelines for the design review commission in those instances when they have to consider archaeological resources and exploration within a city historic district
- B8) To establish public outreach programs: lectures exhibits, digs and volunteer organizations
- B9) To establish cooperative relationships with developers and construction firms in the city
- B10) To develop cooperation with bottle collectors and demolition contractors who "loot" archaeological sites in the city

APPENDIX VI. State Antiquities Legislation:

7 Del. C. ch. 53 Archaeological Sites in the State

7 Del. C. ch. 54 Archaeological Activities

omitted; current laws available at:
<http://www.delcode.state.de.us/title7/c053/index.htm>
<http://www.delcode.state.de.us/title7/c054/index.htm>

APPENDIX VII. Outline of Section 106 Process

Refer to: www.achp.gov

omitted; current regulations available at:
<http://www.achp.gov/regs-rev04.pdf>

APPENDIX VIII. Blank CRS Forms

*Forms have been revised.
obtain via SHPO website
or call the office for more
information.*

omitted; current forms available at:
<http://history.delaware.gov/preservation/surveys.shtml>