Lanier Estate Public Archaeology Site
Interpretive Design Project

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This project would not have been possible without the help of many people and I would like to take this page to offer my thanks and appreciation for their aid and inspiration. The technical information included herein would have been hopelessly confusing were it not for the patience and enthusiasm of William Wepler. Likewise, the project would have gotten completely bogged down in this technical detail if my advisors, Ron Spangler and Anne Henderson had not kept me on track by reminding me that I did have a deadline to meet. My classmates, despite helping me to procrastinate upon occasion, also helped me to keep that deadline firmly in mind.

Of course, a project like this is dependent upon the support of family as well because no one can keep you sane quite like your mother. So, I would like to thank my family for supporting me even though they didn’t know what I was doing.

Lastly, I would like to dedicate this project to my beloved grandmother Jane Schmidt who died during the spring semester of 1999. I know she would have loved to see what I have done.
This project is based upon the work that I have done for three years on an archaeological site for the Department of Natural Resources and the Indiana State Historic Museum. The site is in Madison, Indiana, at the Lanier State Historic Site and has been run since 1992 by William Wepler, the Curator of Anthropology at the museum. The specific focus of the project is an interpretive design for the archaeological site in order to better interpret to visitors and best present the archaeological evidence. The purpose of the dig is to find enough evidence to reconstruct buildings that used to be connected to the mansion and the surrounding grounds. The questions that they find before them now are: "How much should be completely reconstructed, if any?" and "If reconstruction is not possible, then what are the alternatives?" Those are the questions that I answered by utilizing historic preservation guidelines and applying them to the archaeological site and the historic grounds of the property.

Analysis of the archaeological data along with comparison to case studies discovered in a review of literature led to the formulation of four different interpretative schemes. Each one of these options was explored in a conceptual design. The four options were complete reconstruction, partial reconstruction, ghosting, and a no-touch policy.

The options were all compared and their relative merits were examined in order to produce the final master plan which utilizes elements from each of the four conceptual plans. The main focus of the site is the completely reconstructed greenhouse, but connected to this is the frame structure of the carriage house with partially reconstructed walls. The other elements of the site were partially reconstructed in order to interpret them best to site visitors.

Note on Formatting: Throughout this book, all italicized words are defined in Appendix A.
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I. Introduction
Introduction:

In 1809, Madison, Indiana was beginning its life as a typical frontier town along the Ohio River, but by the time that Indiana became a state in 1816 it was already establishing its importance. Over the years it became a thriving river town where land speculators, investors, trappers, merchants, riverboat men, bankers, and farmers commonly shared the streets. By 1840, the town had become industrialized due to the availability of local coal which could be used in industry as well as in private residences. At times, a thick layer of coal smoke smog would hang over the city and its river valley. This is what the town was like when J.F.D. Lanier began building his mansion in 1844 with the aid of architect Francis Costigan. The river lots that he bought for this project were surrounded by industrial buildings that belched out coal smoke, but the home that he built remains one of the best examples of the Greek Revival style of architecture. Archaeological evidence shows that the site of these buildings are riddled with slag metal melted in the industrial process and fused to chunks of coal.

The Lanier Estate served as J.F.D.’s home for only a short time before he moved to New York in pursuit of business dealings in 1850. Like many wealthy men of his time, Lanier was interested in a variety of business opportunities including everything from banking to land speculation to railroad investment (see Appendix B for a chronology of Lanier’s life). He even loaned over a million dollars to the Union during the Civil War in order to feed and clothe the soldiers and to transport them to the battlefields. Despite his financial and political importance, the more important Lanier in connection with the mansion was his son, Alexander. Alexander received the deed to the property in November of 1861. He is responsible for the addition of multiple greenhouses, and outbuildings over the course of his years living at the mansion. These outbuildings are the features being excavated on the archaeological dig that is the focus of this project.

Since 1992, William Wepler and the Indiana State Historic Museum in conjunction with the Department of Natural Resources have been conducting an archaeological dig on the Lanier grounds in the hopes of discovering the remains of the outbuildings that were built by Alexander Lanier and torn down in the early 1900’s. The exact chronology of the destruction of these buildings is part of the question that the dig is hoping to answer. The dig began in the lower yard, but has been concentrating solely on the area of the outbuildings since 1994. This is where the majority of artifacts have been discovered and where the most information has been found.
Through the use of artifact dating techniques and *stratigraphic analysis* of soil layers, the relative sequence of building development and destruction can be deciphered. This is necessary because there are no written records that have been found to tell when the buildings were built, when they were removed, and what their uses were.

Due to the fact that these buildings have been reduced to surface and sub-surface elements of their foundations, they are now part of the landscape, as such, it becomes the job of the landscape architect working with the archaeologist and historic preservationist to make recommendations as to the best way to present them to the public. These recommendations would be impossible without the valuable knowledge gained from the archaeological process. Not only has the excavation unearthed the footprint of the buildings which can be seen in figure 3.16, but it has also provided artifacts that give clues as to the uses for the buildings. The analysis techniques of archaeology also give invaluable data about the historical sequence of the site that is needed in order to properly interpret the site to visitors.

At present, the exterior of the mansion is not interpreted except on special occasions when the mansion employees don period dress and give tours through the gardens. On most days, the only part of the site that is interpreted to the public is the interior of the mansion, and this only through tours, not through signage or personal explorations. The grounds are left for the public to explore on their own with little or no guidance at all, either from guides or from signage. The only exceptions to this are a couple of plaques announcing the name and basic history of the estate, and the interpretive board put up during the summer when the dig is underway. This board demonstrates the process of archaeology and shows some of the historic background images and plans of the estate, including Sanborn fire insurance maps (see Appendix D). The interpretive board has proved to be effective, but the information included is basic background information, so in order to find out detailed data about the process and the artifacts, visitors must speak with the site crew or with one of the two designated site interpreters. When several hundred people come by the site on one day, this can be disruptive to the archaeological process, so more effective signage is a definite necessity. Also, the crew and interpretive board are only available to visitors for two months out of the year, so a more permanent source of information is necessary to properly meet the needs of the visitor. These resources could be coordinated with the proposed visitor center to the west of the property.
The Archaeological Process

The activities on the excavation can seem very chaotic to the uninitiated observer, but there really is a method to the madness. The basic operation of the site is the excavating itself. This is done with small, flat, diamond-shaped shovels called trowels in small units and with large shovels in larger units. These units are generally dug 10 centimeters at a time and every 10 cm. the floor and walls of the unit are leveled using a trowel and the color patterns of the soil and the position of any embedded artifacts are located on a unit map and photographed. All of the soil that is removed from the unit is put into buckets and taken to large tripods set up on another part of the site. These tripods hold wooden squares with chicken wire stretched across the bottom. These squares are called screens and the dirt is dumped into them and sifted through the wire mesh in order to separate out any artifacts.

These artifacts are then put into bags labeled with the date, unit number, level number, and the initials of the crew members who dug in that unit. These bags are then taken to the museum where the artifacts are washed and cataloged for future study and reference. Study of these artifacts provide the archaeologist with an idea as to the age of the level.

Figure 1.1 Photo of the unit mapping process at Lanier

Figure 1.2 Photo of the screening process at Lanier
For example, if a piece of china with a distinctive pattern is found in a level, that pattern can be traced and the archaeologist can figure out a maximum age for the level based upon the years when that china pattern was produced. By using this process on numerous artifacts from the same level, a range of age can be decided for that level.

A visitor might also see someone using a transit or builder’s level on the site as well. These instruments are used in order to guarantee the proper location of the units on the established site grid. They are also used to determine the elevation of different artifacts and units so that they can be properly mapped. The most important thing to remember is that once a site has been dug it has been destroyed, so every detail must be recorded accurately so that the maximum amount of data can be collected from the site while it is possible to do so.
Figure 1.6 Photo of the south facade of the Lanier Estate in 1850
Figure 1.7 Lithograph of the Lanier Estate in 1876: The lithograph shows the Lanier Mansion and grounds after Alexander had taken over the operation of the house and had added the formal gardens and outbuildings. The site of the archaeology dig is in the upper right corner. The greenhouse and mansion addition are clearly visible, but the carriage house is obscured by the greenhouse so that only the peak of the roof and the chimney can be seen.
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Figure 1.13 Aerial photo of Madison from 1940, the Lanier Estate is highlighted in blue.
Data Sources and Research Methodology

Data Sources:

The raw data necessary for this project came from a variety of sources, but most of them were available through the State Museum. Mr. Wepler has compiled an extensive archive of site data that includes the following:

- Archaeology Site Maps
- Artifact data
- Photo log
- Historic Photos and Lithographs
- Historic Documents

Research Methodology:

The basic research methodology that was used to study and collect data is the historic method which is the most efficient for dealing with documentary information. The above sources were sorted through and each item of importance was judged in relation to how it could help to answer the main problem. Other data for this project relied upon contemporary information for site inventory and analysis. This data was collected through the use of the descriptive survey method based upon personal observation and study.

Definition of the Problem

Problem Statement:

How best to design alternative interpretive plans for the Lanier State Historic Archaeological Site based upon archaeological evidence and national historic preservation guidelines that educate the public about archaeology and the historic site?
II. Background
Literature Review

The interpretation of archaeology sites to the public has become more and more popular in the past few decades as the general public has become increasingly interested in the archaeological process and what it can tell us about our past. A result of this new interest is the pressing need for improved ways to interpret these sites in a manner that is clear to people not involved in archaeology. Public interpretation has been defined as a process that "involves the development of communication strategies between the technical scientist-archaeologist and nonspecialists such as park interpreters, whose job is to deliver the 'message' of archaeology to a variety of public audiences." Many strategies have been proposed and implemented with differing degrees of success. Some of these strategies include: interpretive signage; guided tours of the site; public participation in excavation; and site reconstruction. Each of these techniques offers different levels of interaction for the visitor and a different perspective on archaeology.

The use of interpretive signage, the first of these strategies, is often the easiest way to get information across to the public. Unfortunately, signs are also not very interactive, as this statement from the National Park Service (NPS) shows: "Signs are only second-best at contacting visitors. Personal interaction is the preferred method of getting our message across. But we seldom have the opportunity to speak directly with all visitors, nor do all visitors attend our interpretive programs. Therefore, we must resort to signs." Despite the shortcomings of signs, they are the most common way of presenting information to the public, but they should not be allowed to be the only source of information. Instead, signage should be coupled with one or more of the other strategies that are available for interpretation.

2. Ryan, pp. 23.
The use of guided tours in conjunction with interpretive signage is a common practice because it allows for two types of information transfer, auditory and visual. Also, tours are truly interactive experiences in which questions not answered by signs can be answered by trained interpretive staff. This process is preferable to reliance upon signs alone, but it is also much more labor intensive as it requires the training of an interpretive staff and the creation of a schedule for tours which is unnecessary if the site relies upon signage and self-directed tours. Therefore, for larger sites, the introduction of a schedule of guided tours is advisable, but at smaller sites, interpretive signage is often relied upon simply for its economic feasibility.

Along the same lines as the guided tours, public participation in archaeological excavation is a very interactive process which goes much further toward answering questions than simple signage. Also, public participation in the actually archaeological process has much more educational value than a guided tour. The NPS sees the educational value of this kind of program and emphasizes the respect that this approach instills in the public for the artifacts and for what archaeology can teach us. “Participatory archaeology allows the public to experience scientific discovery, analysis, and preservation first hand.”3 This statement from the NPS shows the benefits of allowing the public to take a hand in the excavation process. It allows them to see what archaeology is all about and at them same time, it gives them a new perspective on history. This type of participation also works well with children, in fact, “professionals from this field agree that introducing children to participatory archaeology and history aids greatly in developing appreciation and stewardship ethics.”4 Thus, allowing the public to participate benefits children as well as adults in their attempts to understand both archaeology and history on a personal level.

Another way of making the archaeology more tangible is through reconstruction of the site unearthed during excavation. The NPS has guidelines for the preservation and restoration of cultural landscapes which are defined as “a geographic including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.”5

4. Ryan, pp. 18.
Often, archaeological excavation is utilized in order to evaluate a cultural landscape in order to see if it fits the criteria necessary to have it designated as an historic site. Therefore, the guidelines for preservation and restoration can be applied to archaeological sites, even ones which include buildings. One of the options that the guidelines give for structures included within a cultural landscape is that of reconstruction. "Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location." 6 Through this type of strategy, the public is shown what the site looked like at the time of habitation, thereby placing them within a very tangible representation of history. This could again be used in conjunction with other strategies, such as interpretive signage or guided tours in order to enhance the experience for the public.

There are dangers inherent in reconstruction, however, key among these being the presentation of false history through idealized reconstructions not based upon sufficient evidence. J.T. Smith stated the following in 1982: "In the last decade or so there has been a spate of reconstructions of buildings found in the course of excavation, whether in the form of a drawing or occasionally as standing structures, and one conclusion to be drawn is that a good many of them are, from a scientific standpoint, absolutely useless. The reason for this is painfully simple; it is not that the wrong inferences are drawn from the archaeological evidence, merely that the evidence itself is flatly disregarded." 7 Clearly, this statement shows that complete reconstruction based solely upon archaeological evidence is problematic at best. Peter J. Reynolds, who, like J.T. Smith is a British archaeologist, agrees, he states: "Any building which is based on archaeological evidence, and such evidence that we have from the classical authorities, is bound to be an exercise of the imagination." 8 In order to justify complete reconstruction, there must be other corroborating evidence which suggests what the building looked like, otherwise, other interpretation techniques need to be followed. These options include partial reconstruction and ghosting which do not present a complete building to the public, but rather represents the basic form and space of the structure.

The task of educating the public about archaeological sites is not an easy one and it must be done conscientiously in order to avoid the pitfall of false history which endangers such interpretive strategies as reconstruction. It is also important to present that history without the ever present danger of personal bias. Care must be taken to present history as accurately as possible so as to educate the public. Archaeological sites are an excellent resource to utilize in this education process. These sites should be treated like museum exhibits in that they can tell the story of the archaeological process as well as give information about social and natural history through the interpretation of found artifacts.
III. Setting, Context & Site
Madison is a study in contrasts. The part of town that is considered the downtown is located at the bottom of a ridge in the Ohio River valley. This area is made up predominantly of historic homes and businesses and antique shops abound. The area on top of the ridge consists of contemporary buildings like Wal-Mart and various fast food restaurants and strip malls. Due to this separation, the integrity of the downtown historic district is very important and this had an impact upon the final design decision.
Context:

The Historic District of Madison contains numerous homes like the Lanier Mansion that all date from roughly the same time period, several even had the same architect, Francis Costigan. As a result, it is very important that the design implemented at the Lanier house not impact negatively on the rest of the neighborhood. The historic fabric must be maintained.

Figure 3.3 Downtown Madison map with the Lanier Estate highlighted in blue.

Figure 3.4 Photo of Main Street facing East

Figure 3.5 Photo of Main Street facing West

Figure 3.6 Photo of Broadway Fountain
At the same time, however, the extensive archaeology done at the Lanier Estate serves to set it apart from all the rest of the historic homes and provides it with a point of interest that the final design emphasizes and utilizes in order to show its difference from the surrounding homes.

Figure 3.7 Photo of Main Street Facades

Figure 3.8 Photo of a side yard on Main Street

Figure 3.10 Photo of an historic home

Figure 3.9 Photo of an historic bed and breakfast
Site:

The Lanier site is situated on three city blocks in downtown Madison, Indiana where it overlooks the Ohio River and has an unimpeded view of Kentucky. The archaeology site is located near the middle of the site level with the mansion on a slight rise. This location on high ground has protected the dig and the estate from all but the worst of the floods of the Ohio River. The grounds consist of open grass lawns and brick pathways set in geometric shapes that are primarily ellipses and curves. There is no vehicular access to the Lanier grounds due to the fact that the archaeological dig occupies what used to be a circular driveway. Thus, all vehicular traffic is limited to the neighboring streets.

Figure 3.11 Historic district map with the Lanier Estate highlighted in blue.

Figure 3.15 Photo of the sunken garden at the Lanier Estate

Figure 3.12 Photo of Lanier Estate sign

Figure 3.13 Photo of south facade of the Lanier Mansion

Figure 3.14 Photo of view from south porch of the Lanier Mansion
Figure 3.16 Aerial photo of the archaeology site at the Lanier Estate: Birds-eye view of the archaeological site from summer of 1997. The remains of the 1950's circular driveway can be seen clearly around the main portion of the site.
IV. Project Requirements
Goals and Objectives:

Main Project Goal:
To develop an interpretive design that informs the public about archaeology in general and specifically about the Lanier Historic Site while remaining true to historic preservation ideals.

Objectives:
   a. Provide examples of interpretive signage about the site and about archaeology.
   b. Provide clear pathways for circulation to facilitate the interpretive process.

Goal: To present conceptual alternative design solutions to the problem of interpretation of the archaeology site.

Objectives:
   a. Provide designs that have different focal elements, one being archaeology and another history.
   b. Combine elements from each design in order to attain optimal blend of both focal elements.

Goal: To present archaeological evidence in a clearly understandable way to people not involved in the profession of archaeology.

Objectives:
   a. Provide an explanation of archaeological terms and processes used in this type of work.
   b. Demonstrate examples of archaeological processes used on the Lanier Site through diagrams, photos, and drawings.
   c. Provide background information about the dig at Lanier so as to explain the process involved in this kind of project.
Client/User Profile

The client base is a universal one. Visitors to the site are of all ages and ethnic backgrounds. This is a state historic site, therefore, it must be prepared to accommodate all people, as a result, interpretive displays should be designed to appeal to a wide variety of user. One aspect that must be remembered is that this dig is a public, volunteer dig, therefore, the tourist is not the only person that needs to be considered as a client of the site. Many of these volunteers know little or nothing about archaeology or the Lanier site, therefore, the interpretive system should contain enough detail that those interested and involved in the archaeology like the volunteers, can glean enough information to be able to function on the site.
Assumptions and Delimits

Assumptions:

Certain ideas and personal knowledge have been taken for granted about the site through the course of the project, these concepts need to be discussed in order for the project to be understood. Three major assumptions are:

1. There is enough archaeological evidence to make critical design decisions.
2. The present guidelines are the best source for design recommendations and regulations for this site.
3. The site is improperly interpreted at present and needs a new design.

Delimits:

The delimits focus the scale of the project and the four major delimits are:

1. The site in question does not include the south garden due to lack of archaeological and historical evidence.
2. The problem does not deal with the surrounding context like the area north of First St.
3. *Historic viewsheds* are beyond the scope of the project.
4. Cost estimates are not a concern.
V. Program Requirements
Program:

The core of the project is the interpretation of the elements listed below. This interpretation will be accomplished in two ways. The first way is through the physical representation of the elements. This will allow the visitor to walk through the site and attain an understanding of the spatial relationships between the buildings in the site. This physical manifestation will also show how the site buildings relate to the mansion itself through direct connections and through the treatment of the ground plane.

The second way that the site will be interpreted is through the introduction of interpretive signage which will focus on not only the process of archaeology, but also on the history of the property. These signs are key because they will provide the visitor with information about the site year round when tours may not be possible, thereby facilitating the main purpose of the site which is the interpretation of the site to visitors. The signage will also provide an orderly path for the visitor by directing them from one element to the next.

These two main features will work together to give the visitor a physical and intellectual tour of the site. Signage will also give information about the process by which the physical environment was researched and built. This provides the visitor with details about the preservation process as well as information about how to use archaeological evidence to decipher the past.

Program List

Interpretation of:
  First Street
  Carriage House
  Greenhouse
  Cisterns
  Mansion Addition

Introduction of Interpretive Signage
VI. Design Process
Site Inventory and Analysis
Figure 6.1 Basic site plan for the three block Lanier Estate

Figure 6.2 Context map for the historic district indicating the location of the Lanier Estate in relation to Main Street.