Landmarks Preservation Commission Guidelines for Archaeological Work in New York City
April 12, 2002

1.0 Introduction

Urban Archaeology is the systematic recovery and examination of material evidence from the city’s past. Remnants of human activity -- structures, artifacts, and other remains -- which are often buried under subsequent layers of development, illuminate and augment the information already available through historical documents. Archaeology is often the only source of knowledge about prehistory and the largely undocumented lives of women, children, immigrants and the poor.

Because of the irreplaceable nature and historic value of archaeological resources, they are protected by city, state and federal laws. In certain situations, government agencies, individuals or other entities are required by these laws to identify archaeological resources, assess their significance, and mitigate the potential damage their project may do to these resources.

1.1 Purpose of Guidelines

This document has been developed as reference guidelines for applicants and professional archaeologists to:

C Help applicants navigate the process of Landmarks Preservation Commission (“LPC”) archaeological review by:

C explaining the review process;
C outlining what information must be submitted so that the review can proceed in a timely manner;
C helping applicants anticipate time and budget considerations related to any archaeological work that may be required;

C Assure that archaeological resources discovered in this process are tested, studied and handled in a manner that meets established professional standards, for example, those described in the Secretary of the Interior’s Standards and Guidelines and in New York Archaeological Council’s Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State (see www.nysm.nysed.gov/arccrsp/nyachb.html).
1.2 Laws and Regulations that Require Archaeological Review:

Archaeological review may be required under the Landmarks Law or as part of an environmental review mandated by other city, state, or federal laws. The LPC uses the same review process for both, although the authority of the LPC is different. Pursuant to local New York City law (the "landmarks law") the LPC is the regulatory agency (New York City Charter Sections 3020 et seq., Administrative Code of the City of New York Sections 25-301 et seq., and 63 Rules of the City of New York Sections 1-01 et seq.). As the local New York City agency that has archaeological expertise, under the environmental assessment process the LPC is consulted by other government agencies to help them fulfill their obligations under relevant environmental assessment laws. The laws discussed below govern when archaeological work is necessary, and how it is to be carried out within New York City.

1.21 Landmarks Review:

The Landmarks Law of 1965 (New York City Charter Section 3020; Title 25, Chapter 3 of the New York City Administrative Code) established the LPC. The mission of the agency is to protect the City's architectural and historic resources through designation and regulation of individual landmarks, scenic landmarks, and historic districts. Although there are many such districts, The African Burial Ground and Commons Historic District is the only archaeological historic district, where the LPC regulates all sub-surface work that occurs (see Appendix A). LPC also regulates projects requiring in-ground construction at other landmark sites. These guidelines must be adhered to for projects reviewed under this law.

1.22 Environmental Review:

The environmental review process as described under the laws outlined below, requires government agencies about to engage in certain types of actions to assess, disclose, and mitigate the impacts of their construction projects upon archaeological resources. The LPC may be consulted to assist with this process.

City Regulations:
City agencies must satisfy the City Environmental Quality Review (CEQR) (Executive Order No. 91 of 1977), which requires city agencies to assess, disclose, and mitigate the environmental impacts, including impacts to historic resources, of their projects This includes projects requiring discretionary action by a city agency. Please see www.nyc.gov/html/moec(html/resource.html for more information about this process. The CEQR Technical Manual (2001) delineates the procedure for CEQR review. Copies may be purchased at the City Bookstore (Municipal Building, 1 Centre St, North
Lobby) or may be downloaded from: www.nyc.gov/dcp/html/ceqrman.html. The LPC is the city’s expert agency for historic resources (buildings, structures, sites, or objects that can provide important information about the past) and should be consulted by other city agencies. The largest number of archaeological projects reviewed by the LPC come to the agency through the CEQR process.

State Regulations:
The State Environmental Quality Review Act (SEQRA) (EL 8-0101 et seq.) of 1975 requires that all state and local governmental agencies assess the environmental effects– including impacts to historic resources-- of certain discretionary actions. Projects receiving state funding are also covered by this law (for more information, see www.dec.state.ny.us/website/dcs/seqr). The New York Office of Parks, Recreation and Historic Preservation (ORPHP) also sometimes known as the State Historic Preservation Office (SHPO) must review these projects and should be consulted about their review process. The LPC may also be consulted.

Federal Regulations:
Federal agencies must adhere to several laws regarding potential effects to archaeological resources including:

• The National Environmental Policy Act of 1969 (NEPA) Section 102(2)(c) requires federal agencies, as well as projects receiving federal funding, to consider the environmental impacts of their proposed projects and to consider alternatives.

• Section 106 of the National Preservation Act of 1966 requires that federal agencies, and those requesting a federal permit, take into account the effect of any undertaking on significant historic resources (for more information, see www.achp.gov/work106.html).

ORPHP, also known as the SHPO, and the Advisory Council for Historic Preservation must review these federal projects and should be consulted about their review processes. The LPC is often consulted. The LPC must be consulted for projects with HUD and Community Development Block Grant funds.

The guidelines outlined below must be adhered to in the event that the LPC is consulted.

2.0 Significance
Archaeological resources are significant if they provide new insight about the past. The actual significance of an archaeological site cannot be known until the site is archaeologically tested. Up to that point, archaeologists can only assess the site’s
potential significance. The LPC decides whether to require further archaeological work -- archaeological documentary studies, field testing and mitigation -- based upon this assessment. As the stages of archaeological review proceed, the information that is yielded indicates whether significant resources are present at a specific site. If there is reason to believe the resources are significant, further work may be required.

The following criteria have been adopted to evaluate whether sites are eligible for inclusion on the National Register of Historic Places (for more information please see www.nationalregisterofhistoricplaces.com). These criteria also serve as the LPC’s basis for determining archaeological significance. To meet this standard for significance, resources must:

a. Be associated with events that have made a significant contribution to the broad patterns of history and/or

b. Be associated with the lives of persons significant in the past and/or

c. Embody distinctive characteristics of a type, period, or method of construction or that represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction and/or

d. Have yielded or have the potential to yield information important in prehistory or history.

Archaeological significance is most often determined by criterion d, but may also be defined by the other criteria. The most significant resources are those which tell us something that materially adds to our knowledge of a particular time or place. The extent to which the site has such potential, determines the amount of archaeological work LPC will deem necessary for that project.

Note that for state and federal projects, the ORPHP will determine whether a site meets the criteria to be considered eligible for inclusion in the State and National Registers of Historic Places.

3.0 Overview of the Review Process

As discussed above, the need to undertake archaeological work may arise in different contexts and under different laws. However, the LPC uses the same review process regardless of what triggered the requirement for archaeological work. The archaeological review progresses in stages, as shown in Figure 1. At any point, the applicant may redesign the project to avoid damage to potential resources and thus
obviate further review. Applicants requesting federal or state funding may ask the LPC to review their projects; however, the OPRHP is the primary reviewing agency. The following is a brief overview of the review process. Each step in the process is then documented more fully in later sections.

3.1 Initial LPC Review

The initial review is conducted by the LPC to determine if any archaeological work will be necessary at all. For this review, LPC’s staff archaeologists examine documentation such as deeds and maps to assess whether archaeological resources are likely to be present in the project area. For more details on the requirements of this stage, see section 4.0 below.

3.2 Archaeological Documentary Study

On the basis of this initial review, the LPC’s archaeologists may determine that the proposed work could disturb or destroy potentially significant archaeological resources. If this is the case, the LPC will require an archaeological documentary study. This must be written by a qualified archaeologist (See Section 5.0 for Professional Standards). The documentary study helps the LPC locate archaeological resources; it also assesses the potential significance of these resources. This process is fully detailed in Section 6.1.

3.3 Archaeological Field Testing

If the documentary study concludes that potentially significant archaeological resources may be found at the site in question and that proposed construction might disturb or destroy them, and the LPC agrees, the process moves onto the next step -- archaeological field testing. The only way to discover what resources are present, and how significant they are, is by testing. This may involve various methods of field testing, described in detail in Section 6.2. If field testing indicates that significant resources are not present, the review process ends and no further work is necessary. If testing proves that resources are present, and examination shows them to be significant, the next step is to find a means to preserve or mitigate the damage.

3.4 Mitigation

Sites that contain significant archaeological resources that will be impacted by proposed construction must be mitigated. Mitigation may consist of scientific excavation including conservation and stabilization, curation and storage of artifacts, project redesign, or a combination of both. These options are detailed in Section 6.5.

Agencies and applicants should understand that archaeological testing and mitigation may take time. It is best to begin the process early to avoid incurring project delays.
Figure 1
LC ARCHAEOLeGICAL REVIEW PROCESS
4.0 Initial Review

It is not necessary to hire an archaeological consultant at this point. The LPC’s staff archaeologists will determine whether archaeology will be required based on information submitted to the agency. To assist in this review, the lead agency or their consultants must submit the following information:

- Project address including Block and Lot;
- Clear plans of area that will be affected, showing existing and proposed conditions;
- Photos of the site showing existing conditions;
- Sanborn map detail;
- Project identification number (CEQR #, SEQRA #, etc);
- Description of project which clearly describes all proposed sub-surface work. If there is no subsurface work this should be clearly stated in the application;
- Projected time-frame of project.

A critical fact, for archaeological review purposes, is whether the proposed work will involve subsurface disturbance. If it will not, then the archaeological review process ends. If the proposed action will cause subsurface disturbance, then the staff archaeologist must determine whether there could be potential archaeological resources that may be affected. This is done by reviewing maps which trace the land use and development of that particular parcel. LPC also refers to sensitivity maps, which represent cumulative archaeological information about specific sites and indicate areas with a high potential for archaeological resources of specific time periods. Tax records, water/sewer history, and site photographs on file are also used in making this assessment.

If the LPC archaeologist finds that the subsurface disturbance may have an impact upon potentially significant archaeological resources, the project is flagged for further study. If not, the review process ends here. This stage of the review process usually takes no more than a week.

Over 85% of projects reviewed do not trigger archaeological concerns. Below are examples of some findings from initial reviews:

- Proposed: Slab construction in an area that presently has a standing structure. Finding: No archaeological concerns.
- Proposed: Subsurface construction work to build a deep basement on a property that has already been significantly disturbed to bedrock.
Finding: No archaeological concerns.

- Proposed: Change of use for existing building.
  Finding: No archaeological concerns.

- Proposed: Building on undeveloped land in Staten Island that may have been used by Native Americans.
  Finding: Flagged for further archaeological study.

- Proposed: Developing entire lot of site with an existing early 19th century building in the East Village and a rear yard.
  Finding: Flagged for further archaeological study as there is potential that the development might disturb 19th Century historic resources in the undisturbed rear yard of the lot.

It is highly recommended that the LPC be consulted as early as possible so that projects may be appropriately scheduled and budgeted.

5.0 Professional Qualifications

If the Initial Review concludes that more archaeological research is required, all further archaeological research or field work must be directed by a professional archaeologist or archaeologists. These professionals must be registered by the Register of Professional Archaeologists (ROPA), and/or qualified for such registration (for more information, see www.rpanet.org). Some projects may need staff with additional qualifications (e.g. physical anthropologists, hazardous materials certification, remote sensing specialists). These specialists may either be staff members of an archaeological firm or contracted as needed for specific projects. Section 7.0 describes the qualifications for physical anthropologists. Appendix D provides a checklist that may be used when contracting a professional archaeologist.

An archaeologist who has the qualifications delineated above must be designated as the Principal Investigator (who will be referred to in this document as the archaeologist). That individual, and all supervisory staff, must have current resumes on file with the LPC. The resumes must be updated at least every two years to maintain eligibility for projects mandated under this review process. The LPC will notify archaeologists when they need to update their resumes. The archaeologist designated as Principal Investigator must be the primary author of all reports submitted to LPC for review and should use the New York Archaeological Council Standards as a guideline for fieldwork and ethical standards. The Principal Investigator, or a suitably credentialed substitute (as determined by LPC), must supervise all field work. The LPC can supply a list of archaeological contractors and firms that have the required qualifications listed above.
6.0 The Phases of Investigation

6.1 Documentary Study:

If the Initial LPC Review determines that archaeological concerns exist, an archaeological consultant must be engaged by the applicant to research and write a documentary study (this document is sometimes referred to as a Phase 1A). The purpose of the study is to determine whether intact archaeological resources might exist on the site and what they may tell us about the past. The findings provide a basis for deciding whether archaeological field work is needed.

The documentary study must:
C Document the site’s use and occupation;
C Assess whether the site has been so disturbed in the past that it no longer has potential;
• Assess the probability that potential archaeological resources will be disturbed by the proposed project;
C Explain why further archaeological work should or should not be required.

To accomplish this, the archaeological consultant must research all available documentary and archaeological evidence. The report must include discussion of the possible significance of the potential resources as defined by the National Register (see Section 2.0). The study should also include sensitivity maps showing which areas of the site, according to the research, are most likely to contain archaeological resources.

Sources to be consulted:

• Sanborn map showing project location and planned construction work so that potential impacts may be estimated;
• Archaeological reports from sites in the vicinity;
• Historic maps and atlases (e.g. Robinson 1885);
• Building records to determine basement depths of buildings on the site;
• Publications on local history;
• Public utilities installation records to document initial connections;
• Soil borings and Rockline data (e.g. WPA Rockline Data maps);
• Archaeological sensitivity maps available from NYC-LPC and NY OPRHP;
• Census records;
• Conveyance Records;
• Tax assessment records;
• Deeds and Titles;
• Street directories;
• Historic diaries;
• Oral history including interviews with people knowledgeable about local history;
• Historic photographs;
• Church records;
• Wills and probates;
• Other sources (e.g. newspaper articles, guide books).

The consultant should explain which resources are not relevant to the specific project. Appendix B provides many resource locations.

The applicant must insure that the documentary study is submitted to the LPC for review. The LPC may ask that additional work be done before the study can be accepted. Once the LPC accepts the study, it may find that no additional archaeology need be done, or it may stipulate that archaeological field testing occur. The LPC review takes two to three weeks. Documentary studies are kept on file by the LPC and may be reviewed.

Construction work may not proceed until the LPC has concurred with the applicant’s archaeologist that there are no further archaeological concerns for the project site and issues a final sign-off letter.

6.2 Archaeological Field Testing

If the documentary study concludes that potentially significant archaeological resources may be present on the project site and that the project may have an impact on these resources, and the LPC concurs with that finding, then the project must go to the next phase of archaeological work; field testing.

The purpose of archaeological testing is to determine whether the site actually contains significant archaeological resources, as opposed to whether such resources may potentially exist on the site. (Under state and federal environmental review laws this is referred to as a Phase 1B which determines whether archaeological resources are present and a Phase II which determines the significance of those resources). Prior to beginning any site work, the archaeological consultant must submit a Scope of Work to the LPC for approval. This document must describe the explicit methodology that will be used to determine whether resources are present, intact, and significant. The area to be tested must be large enough to provide the answers to these questions. Archaeologists may wish to consult the LPC or the OPRHP as well as the New York Archaeological Council’s standards when developing their methodology. Once the LPC approves the Scope of Work, the archaeological work may begin.

There are several basic types of field testing that may be employed depending upon site conditions and desired results. These include mechanical testing, shovel tests, hand
excavation, and remote sensing. It should be noted that in many cases, no matter what testing method is used, it may be necessary to mechanically remove any overburden, such as asphalt.

6.21 Mechanical Testing

Mechanical testing uses backhoes, corers or augers to investigate part of the site to determine what is under the ground. These methods can destroy the integrity of the archaeological resources of the site if not done carefully. They are often used to find structures and features buried deep beneath the modern surface in urban areas. For example, this is the method that would most likely be used to test for cisterns and privies. Once the overburden has been removed, the archaeologists can confirm the presence of intact resources through hand excavation, and then determine the need for more complete excavation.

6.22 Shovel Testing

Shovel testing consists of hand excavating a series of small test pits throughout the potentially sensitive portions of the site. These test pits can indicate whether there are artifacts present from specific time periods, and the extent to which the resources have been preserved. However, this method exposes very little. Thus, while it is useful in confirming initial assessments, it does not provide a comprehensive picture of the archaeological resources. This method is most successfully applied to rural areas where development has been minimal such as testing for the presence of a Native American campsite in an area of Staten Island that has not been previously developed.

6.23 Hand Excavation

At times, the most appropriate testing method might be hand excavation, in which archaeologists excavate trenches to ascertain site integrity. This method yields more information for analysis than does shovel testing and it is less likely to damage the resources than is mechanical testing. This is the method most often employed once archaeological deposits are located.

6.24 Remote Sensing

Remote sensing covers a range of non-invasive techniques using electronic, magnetic, radar, or other technologies to “look” under the soil without digging. This method may be ideal for sites such as burial grounds where one may wish to know the probable locations of burials without disturbing them in any way. However, to be certain of what is actually beneath the ground, excavation may be needed to confirm what resources are present. And remote sensing is not well suited to areas where extensive development has occurred because the results may be compromised by the presence of utility lines,
etc. It requires the services of specialists, who are usually subcontracted by the archaeologist.

6.3 Responsibilities of the Archaeologist

The archaeologist engaged by the applicant is responsible for proposing and executing a Scope of Work for Field Testing, which must be submitted in writing to the LPC for approval before any work may begin. This document must detail:

- The purpose of the testing;
- The methodology to be used;
- The testing locations and site plan;
- Assessment of what potential findings would indicate the need for further work.

LPC assesses whether the strategy described in the Scope of Work can succeed in indicating the presence of intact, significant archaeological resources. If the Scope of Work meets that standard, it is approved. However, for some sites, specific aspects of the field testing may give rise to additional requirements. For example, a physical anthropologist may be required to be “on-call” if there is any likelihood that human burials may be encountered during the testing.

Unclear plans, imprecise delineation of possible positive or negative results, or inappropriate methodology are reasons the LPC may reject a Scope of Work. After consulting with LPC to revise and correct these deficiencies, the applicant may resubmit the plan.

6.3.1 Assessing Archaeological Costs

The applicant is responsible for paying for all archaeological work, which includes field testing, analysis, the stabilization and conservation of artifacts, and the repository. The cost of the work can vary widely. One variable is time. Field testing may take a few days to a few weeks, depending on the site size and the testing method selected. What and how much are actually found are other variables. For example, the costs to analyze, stabilize, and conserve a few lithic tools found on a site in Staten Island will be a fraction of those to process thousands and thousands of sherds (pottery fragments) found in City Hall Park as the time needed to process the two collections will be very different and because more work will be needed to stabilize the ceramics than would be needed to treat the stone tools. Professional documentation of all archaeological work done at the site must be provided. An integral part of all archaeological work is analysis and reporting. During and after fieldwork, artifacts must be conserved according to the standards delineated in Section 8.0. All of these factors are additional cost variables.

LPC recommends that a Memorandum of Agreement be drawn up between the archaeologist and the contractor. This MOA should stipulate both parties’ responsibilities.
regarding worker safety as defined by the relevant legislation. It should clarify the organizational structure in the field, and -- in cases in which archaeological monitoring is conducted -- it should set criteria for stopping the construction work.

The LPC also recommends that the archaeologist include cost estimates for all steps of work that may be needed as part of field testing, including: field work, analysis, artifact conservation, publication of the results and repository costs. This should be part of the contract between the archaeologist and the client. As it may be difficult to estimate exact costs beforehand, the post-field work costs may be included as a percentage of total cost or as a separate estimated budget item which can be amended as the project progresses. The actual costs should be provided as soon as possible. It is also recommended that the archaeologist inform their client what might be entailed should mitigation be required as a further phase. For example, excavation of a 19th century privy and cistern is a common project. Archaeologists should be able to provide a comprehensive cost estimate for such projects.

6.4 Field Testing Reports

Upon completion of field testing, the archaeologist must submit a Field Testing Report to the LPC for approval. This report must fully document the field testing and analysis of the artifacts and, based upon the research design, recommend whether further archaeological work is necessary.

In one specific situation, a Letter from the Field may be substituted at this stage for the full Field Testing Report. This occurs when the field testing results unambiguously show that further mitigation is needed, and time or budgetary constraints strongly support moving directly to the mitigation phase (see below). The Letter from the Field is essentially an abbreviated Field Testing Report. It describes the work completed, preliminary results, and the Scope of Work for Mitigation (see below). This letter must be approved by LPC before further work begins. A full Field Testing Report should be included with the final mitigation report.

In all other circumstances, a separate Field Testing Report must be submitted for LPC approval at the end of the field testing phase. LPC requires four bound copies of the Field Testing Report. Three should be sent to the LPC; one is kept on file at LPC, and the other two are sent to repositories. The fourth should be sent to the OPRHP for their library (OPRHP; Historic Preservation Bureau; Peebles Island; P.O. Box 189; Waterford, NY 12188-0189). The report must meet professional standards of publication and illustration, including tables, maps, and drawings.

LPC review of a final Field Testing Report takes two to three weeks. Archaeological Field Testing Reports are kept on file by the LPC and may be reviewed.
6.5 Archaeological Monitoring

Archaeological monitoring is the supervision by an archaeologist of a construction project’s excavation. The purpose is to insure that archaeological resources are not disturbed or that unforeseen discoveries are handled properly. Monitoring is used in cases where there is a possibility that the excavation might uncover archaeological resources but there is no satisfactory way to sample the site, and consequently, no valid way to determine where the resources might be. For example, a new sewer line is to be built under an existing streetbed in an area known to contain archaeological resources. The Department of Transportation will only permit the street to be closed during the actual fieldwork, therefore the construction project must be monitored as there is no way to test the actual project site before the construction work begins. In very sensitive areas, monitoring may be used as a further step after field testing to insure that archaeological resources are not destroyed by construction.

As in mechanical testing (described above), construction machinery may be employed in the excavation that is being monitored. However, in archaeological monitoring, no separate test units are excavated by the archaeologist. Rather, the archaeologist closely observes and should sample the earth from the construction-related excavation of sensitive areas while work is in progress, scrutinizing the earth and the excavation area for signs of archaeological features and artifacts. If resources are encountered, the archaeologist must stop the work pending consultation with LPC to determine whether further field testing and/or mitigation are necessary.

Because archaeological monitoring has the potential to allow resources to be disturbed by the construction project before the archaeologist can ascertain what resources may be present and their significance, it is not the preferred method. The archaeological consultant must submit for LPC approval a written Scope of Work which justifies the use of monitoring over other possible field testing techniques.

The Scope of Work must include:

- Rationale for and the purpose of monitoring;
- Methodology to be used;
- Criteria by which the archaeologist will decide when construction must be halted and further archaeological work be done;
- Construction plans.

Approval will be given only if the proposed monitoring is the only appropriate strategy for the site. LPC may require additional protocols for specific aspects of the monitoring.

6.5.1 Assessing Monitoring Costs

The cost of archaeological services for monitoring must take into consideration the time and the professional services required. Monitoring takes as long as the construction
excavation of the archaeologically sensitive portions of the site. Depending on site size, this may take a day to several months. The archaeologist must professionally document all archaeological work done at the site. Artifacts must be conserved (see Section 8.0 on artifact conservation and storage). The site must be protected from looters.

Because monitoring is occurring simultaneously with construction related activities, there is a high potential for conflict between contractors and the archaeologist. For this reason, the LPC recommends that a Memorandum of Agreement be drawn up between the archaeologist and the contractor. This MOA should specify the responsibilities of both parties with respect to: stopping the construction work for archaeological excavation and documentation, detailing what happens if the construction plans change during work, ensuring worker safety, and clarifying the organizational structure in the field.

6.52 Monitoring Reports

The archaeologist must submit a Monitoring Report for LPC approval. This report must fully document the monitoring and analysis of the artifacts and should recommend whether additional work is necessary, based on the project plans (from the Scope of Work) and what has been uncovered.

A Letter from the Field may take the place of a Monitoring Report if results of the monitoring unambiguously support further mitigation, and time or budgetary constraints strongly support proceeding directly to the mitigation phase (see above). This letter is essentially an abbreviated report. This must be approved by LPC before further work begins. The Monitoring Report must be included with the final mitigation report.

LPC requires four bound copies of the Monitoring Report. Three should be sent to the LPC; one is kept on file at LPC, and the other two are sent to repositories. The fourth should be sent to the OPRHP for their library. The report must meet professional standards of publication and illustration, including tables, maps, and drawings.

Approval of a monitoring report takes approximately two to three weeks. Archaeological Monitoring Reports are kept on file by the LPC and may be reviewed.

6.6 Archaeological Mitigation

The purpose of this phase is to mitigate the loss of significant archaeological resources. This phase is sometimes referred to as a Phase III. When a documentary study has indicated that a project may place significant resources at risk, and field testing has confirmed that the resources are present, intact, and significant, mitigation is required. This may be done in four ways: redesign, infill, archaeological excavation, or a combination of these.
6.61 Redesign

Redesign is the preferred method of archaeological mitigation. It means that the construction plan is changed so that the project does not disturb, or minimizes the disturbance of, the archaeological resources. Examples of such changes are: modifying the placement of projected utility lines, or moving a subsidiary structure (such as a garage) from one side of the lot to another (thus avoiding the archaeological remains), or redesigning the entire structure (for example, changing from an excavated foundation to a slab construction). While redesign may be costly, it may cost far less than mitigation by total excavation of the resources.

The LPC must be informed in writing that a project is being redesigned to mitigate the loss of archaeological resources. It must receive detailed plans and a description of the proposed changes. After reviewing the mitigation proposal, the LPC may approve it or require further revision. The archaeological review process is complete once the redesign is approved.

6.62 Infilling

Another method of mitigation is to preserve archaeological resources by covering them with additional earth. This rarely used option succeeds only at a site where the additional deposits of earth, and consequent additional the height above grade, will not cause architectural or construction problems. It may be feasible to infill areas in which proposed landscaping is the problem. In this case, the addition of more soil or fill can raise the ground level so that the holes for planting do not disturb the archaeological resources beneath them.

6.63 Archaeological Excavation:

In less than one percent of all projects reviewed by the LPC, field testing determines the need for partial or total excavation. The purpose of archaeological excavation is to preserve the significant information that the project area contains by removing it from the ground. A complete Scope of Work with detailed research methodology, including the research questions, must be prepared based on the results of the field testing and the documentation discovered during the investigation. This Scope must be submitted to the LPC for review and approval before excavation may commence.

The Scope must include:
- The research design;
- The research questions;
- Description of and justification for chosen field methods;
- Expected results of the excavation;
- Detailed post-excahvation analysis and reporting plans;
• Time-table for all remaining work;
• Senior staff resumes;
• Maps detailing the proposed work locations;
• Conservation protocol (see Section 9.0);
• Temporary and permanent curation plans (see Section 8.0);
• Provisions for a safety/security plan;
• Public outreach protocol;
• Work schedule including estimate of when final report will be completed.

LPC will not approve a scope that lacks sufficient detail, especially with respect to the research design and its implementation.

A memorandum of agreement between the contractor and archaeologist is a required element of the Scope of Work on an excavation plan. It should outline the rights and obligations of each party with regard to workplace safety, stopping the excavation, completing the fieldwork in a timely manner, post-excavation work, and artifact storage.

6.64 Archaeological Mitigation Reports (Final Reports)

The Final Report must be submitted to the LPC for approval within a reasonable period of time after the conclusion of field excavation. This report must fully document the significance of what the archaeological research yielded, by fully describing and integrating the findings from the archaeological excavations and the analysis of the artifacts into the conclusions. It must include: photographs of the site, scaled map of the site showing where field work occurred, profiles of excavation trenches, top-plans of excavation trenches and features, the artifact catalogue, photographs of the significant artifacts, a detailed bibliography of works that were consulted, as well as all the sections listed below.

Sections to be included:
• Title page;
• Table of contents;
• Bibliography;
• Non-technical summary of the project and its findings;
• Synthesis of significance of what was found;
• Synthesis of all previous relevant work;
• Detailed description of excavations, area by area;
• Description of laboratory techniques, including conservation;
• Specialist reports;
• Artifact analysis and conclusions;
• Artifact catalogue;
• Photographs of the significant artifacts;
• Preservation plan (see section 8.0);
• Synthesis of all analysis.

Four bound copies of this report should be submitted to the LPC. The Commission will place two copies in its library and the other copies will be sent to the Municipal Reference Library, and a repository in the relevant borough. A fifth copy should be sent to the New York Office of Parks, Recreation and Historic Preservation [ORPHP]. Approval of a final report takes approximately three weeks. Archaeological Mitigation Reports are kept on file by the LPC and may be reviewed.

7.0 Burials and Human Remains

Human remains should be treated with great care and respect. Human remains are encountered as primary burials or as fragmentary remains. Primary burials are burials which have not been disturbed since interment or which have been only potentially disturbed. They may contain remains of coffins, complete skeletons, and artifacts associated with the burial such as shroud pins, buttons, or jewelry. Disarticulated bones, and fragments of bones, are considered to be fragmentary remains.

Whenever proposed work will occur in an area, such as the African Burial Ground or in a cemetery, where human remains are likely to be encountered, the LPC should be contacted as early as possible in the planning stages so that an appropriate project-specific protocol governing the work can be developed. Projects requiring Federal or State review must contact the OPHRP. They should also be contacted for questions about the Native American Graves Protection and Repatriation Act (NAGPRA).

7.1 Preservation of Primary Burials in Place

As a general policy, the LPC recommends that primary burials be left in place and that projects be redesigned to avoid disturbing them. The project must be planned in a manner that attempts to avoid disturbing primary burials. In the Scope of Work, the archaeologist must document the location of known graves, whether marked or unmarked, using such references as the plans of the cemetery, historic descriptions, photos, and other sources. In cases where documentation does not exist, remote sensing technology may be warranted.
7.2 Professional Archaeological Oversight

Professional archaeological staff must be present for all phases of excavation in an area that may contain human remains. Areas with potential for graves must be hand-excavated by the archaeological staff; all construction work within an area that may contain human remains should be at least monitored.

7.3 Use of a Physical Anthropologist

A physical anthropologist must be available to come to the field as needed to identify and appropriately treat any human remains that may be encountered as defined in the Scope of Work. This individual should have a graduate degree in a relevant field and significant research experience with human remains found in archaeological contexts. The LPC maintains a list of physical anthropologists and will provide it upon request. The LPC will review the qualifications of any individual who is not on the list to ensure that he/she has sufficient experience. Note, that there are some individuals who may be both a qualified archaeologist and a physical anthropologist. In this instance, only one such professional is needed for the project. In all others, at least two professionals, the archaeologist and the physical anthropologist will be needed.

The Scope of Work must describe the type and extent of physical anthropological study. It must also define the reporting obligations of the archaeologist and the physical anthropologist. The physical anthropologist should submit a scope for analysis to the LPC after fragmentary human remains have been found. This analysis should, when possible, identify the minimum number of individuals these bones may represent, sex, age, cause of death, pathology, etc. The Commission recommends that these remains be reinterred in consultation with descendent communities and interested parties.

7.4 Disposition of Human Remains

The project’s Scope of Work must include the applicant’s protocol for temporary and permanent disposition of human remains found in the course of the project. The protocol should designate how and where remains will be temporarily stored, what the consultation process with descendent communities and interested parties will be, plans for curation, and for permanent disposition (e.g., reburial on or off the site). Applicants should note that LPC will need to review and approve any proposal to put an exterior marker or memorial in a designated historic district, scenic landmark, or individual landmark.

7.5 Memorandum of Agreement

The Scope of Work should also include an MOA between the contractor and the archaeologist(s) which outlines the rights and obligations of each party in regard to
stopping the excavation, completing the fieldwork in a timely manner, making changes in the construction work, maintaining workplace safety, and notification.

7.6 Unanticipated discovery of human remains

When human remains are unexpectedly found in the City, the New York Police Department (“NYPD”) and Medical Examiner’s Office (“ME”) must be contacted immediately. They will determine the appropriate action. If the human remains are found on a project which has been reviewed by the LPC, the LPC must be notified as well as the NYPD and ME.

8.0 Archaeological Artifacts and Disposition

The applicant is responsible for budgeting sufficient funds for the analysis, conservation, curation, and temporary and permanent storage of the artifacts as outlined below. To assure that the budget is properly planned from the outset, the archaeological consultant should provide a reasonable estimate of these costs as part of the budget proposal for the project. As the exact cost cannot be known until the site has been excavated, the applicant should be aware that the archaeologist will only be able to provide an estimate based upon their previous experience and that the actual cost may be quite different.

8.1 Analysis (minimum requirements)

Archaeological investigation of a site includes the analysis of the finds. Analysis is the step that reveals what was actually found and whether something new has been learned about the past.

Standard analyses include (at a minimum)

- Identification, composition, and age of material;
- Where, within the site, the materials were found;
- Description and discussion of typical and extraordinary finds;
- A synthesis of how these materials are relevant to the research questions;
- Photographs of significant artifacts.

Specialized analyses may be needed to answer specific research questions and may therefore be required. Examples of such analyses include the study of animal bones to determine what people in the past ate; revealing information about class, ethnicity, and access to markets. Soil analysis and the analysis of parasites are other examples of analyses that may be needed as they can illuminate facts about site use and disease in the past.

The consultant archaeologist should identify what types of analyses will be needed and
should inform the applicant of the cost as soon as possible. In general, applicants should assume that projects that require archaeological excavation as mitigation will need specialized analyses and should be aware, that such analysis may be required for the field testing phase as well.

8.2 Preservation Plan and Curation

The applicant and the consultant archaeologist must make every effort to find a suitable permanent repository in NYC that meets Federal Standards (36 CRF Part 79) for all significant archaeological collections and all related documentation.

In a separate section of the final report, the consultant archaeologist should recommend what portion of the assemblage should be preserved and curated in a permanent repository. The consultant should work with the proposed repository to make this recommendation. The overall criterion is the degree to which a find adds to existing knowledge. Specific determining factors include the:

- Significance of the site;
- Redundancy of the finds in relation to the other finds assembled from that site;
- Condition of the finds in relation to others in the assemblage;
- Significance of their contexts.

The LPC will review the preservation plan as part of the final report.

In some cases, the consultant archaeologist may determine that only a representative sample of the finds should be preserved. If the LPC concurs, the other material must be:

- Documented through photographs, videotape, or drawings;
- Curated for a period of six months and made available to researchers and/or educational non-profit organizations before disposal;
- Duly advertised as a collection available for research or education.

Note that during archaeological field work, all archaeological artifacts must be cleaned, inventoried, and stored under secure climate-controlled conditions, to protect against deterioration until the final disposition of the artifacts (see Section 9.0).

9.0 Conservation and Storage

Archaeological conservation ensures that archaeological collections do not deteriorate. This can include washing, drying, and careful storage in a cool, dry place and should be done simultaneously with the fieldwork or at least within 5-7 days after the excavation has begun. Significant artifacts should be stabilized. This can include chemical and physical treatment to prevent further deterioration. For sites that are archaeologically significant or potentially significant, LPC recommends that the conservation should be
supervised by conservators who meet the standards of the American Institute for Conservation of Historic and Artistic Works (AIC) or who have comparable experience. The conservator should be responsible for the conservation of the collection and should prepare treatment reports that will:
• Document the condition of the object before, during, and after treatment;
• Properly identify the material(s) of the object, the agents of deterioration, and any other problem with the object;
• Recommend a treatment methodology and justify the selection of this treatment.

The conservator should also ensure that the collection is appropriately stored in accordance with current professional standards. This responsibility commences when the finds are removed from the field and extends until the collection is placed in permanent storage. The conservator should also be "on-call" during fieldwork in the event that their expertise is required.

10.0 Repositories

New York City does not have a repository for significant archaeological collections. It is the developer’s responsibility, in conjunction with the consultant archaeologist, to find a suitable permanent repository in NYC that meets Federal Standards (36 CRF Part 79) or, at least, provides curatorial services. Please note that the few repositories in New York City that do accept archaeological collections all charge a fee and may have additional requirements.

All documentation (field notes, lab analysis, drawings, etc.) must be included in a durable format with the archaeological assemblage and stored in the repository.

11.0 Site Documentation at the Landmarks Preservation Commission

The LPC is creating a GIS (Geographic Information System) to track archaeological research in New York City. The system will create an evolving data collection that should reflect current archaeological work. As this system will only be valuable if it is continually updated, we require that archaeologists complete the form found in Appendix C for each site they study. This information will then be added to the system’s database.

12.0 For Further Information:

Landmarks Preservation Commission
Archaeology Department
Municipal Building
1 Centre St, 9th Floor N  
New York, NY 10007

(212) 669-7820/3  
fax (212) 669-7818

abankoff@lpc.nyc.gov  
asutphin@lpc.nyc.gov

Office of Parks, Recreation, and Historic Preservation  
Historic Preservation Field Services Bureau  
Peebles Island  
P.O. Box 189  
Waterford, NY 12188-0189

(518) 237-8643  
fax (518) 233-9049

www.nysparks.state.ny.us/field/

New York City Office of Chief Medical Examiner  
520 First Avenue  
New York, NY 10016

(212) 447-2030
13.0 Glossary of Terms

**Archaeological analysis**: Scientific process of gathering data from archaeologically recovered materials.

**Archaeological conservation**: Scientific process of protecting archaeological materials from disintegration.

**Archaeological documentary study**: A study of all relevant historic documents and maps pertaining to a project site to determine whether significant archaeological resources may be present. Also referred to as a Phase 1A under federal regulations.

**Archaeological field testing**: Scientific probing through borings, hand excavated trenches, mechanical excavation, or other appropriate techniques to determine the presence and integrity of archaeological resources at a project site. It is a multi-step process that includes: a scope of work, the field testing itself, the analysis of what was found, and then the creation of the final report. Under federal procedures archaeological field testing may occur in two phases, the Phase 1B which tests whether archaeological resources are present and the Phase II which determines the significance of those resources. In New York City these phases are generally combined into a single phase.

**Archaeological excavation**: Scientifically controlled removal of earth by an archaeologist and/or archaeological team. This is a multi-step process that includes: a scope of work, the excavation work itself, the analysis of what was found, and then the creation of a final report. Also referred to as mitigation or Phase III.

**Archaeological monitoring**: Archaeological supervision of subsurface construction work to insure that archaeological resources are not disturbed. If such resources are encountered, the archaeologist will stop construction work pending consultation with LPC to determine their significance and whether mitigation is necessary.

**Archaeological potential or sensitivity**: The likelihood that a location contains significant archaeological resources.

**Archaeological resource**: Physical remains that can reveal information about the past.

**Archaeological review**: A phased process of evaluating whether a proposed project may impact significant archaeological resources.

**Artifacts**: any objects made, used, or modified by human action.

**Fill**: Material which is (a) either deliberately brought into a location to raise the ground level or to level irregular topography, or to make new land, or (b) construction/demolition debris which serves as the basis for later construction.

**GIS**: Geographic Information System. A computer database system which organizes and graphically displays spatially organized information.

**Historic resources**: Districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance, including designated resources and eligible resources.

**Human remains**: Physical remains of human bodies. This can include: (a) complete skeletons (burials); (b) single bones or bone fragments; (c) other soft parts of human bodies which may (rarely) be preserved.

**Landmark**: Any building, structure, work of art, or object that is at least 30 years old
which has a special character or special historical or aesthetic interest or value as part of
the development, heritage, or cultural characteristics of the city, state, or nation, and that
has been designated a landmark pursuant to the New York City Landmarks Law.

**Lead agency:** The government agency responsible for performing environmental review
pursuant to the City Environmental Quality Review process, the State Environmental
Quality Review Act, the National Environmental Policy Act, or similar laws or
regulations.

**Memorandum of Agreement:** A written agreement between two parties outlining the
responsibilities and obligations of each to complete archaeology on a project.

**Mitigation:** Actions which may be taken to address the proposed disturbance of
significant archaeological resources. Mitigation may include redesign of the proposed
construction, covering the site with a layer of fill, archaeological excavation, or a
combination of these.

**National Register of Historic Places:** Established by the National Historic Preservation
Act of 1966, this federal register lists the nation’s important historic properties.

**New York Office of Parks, Recreation and Historic Preservation [ORPHP] also
known as the State Historic Preservation Office [SHPO]:** The State agency
responsible for identification, regulation, and oversight of significant archaeological
resources on state and federal funded projects as well as projects that require state or
federal permits.

**Physical anthropologist:** A professional who studies human evolution. On an
archaeological project, physical anthropologists can identify human remains and often
can determine age, sex, and the number of individuals from burials, as well as
developmental anomalies, nutritional deficits, and pathologies of skeletal remains. They
may also study animal remains from archaeological contexts which may reveal
information about diet and seasonality.

**Primary burial:** Human burials which have not been disturbed since the original
interment.

**Repository:** the location where the archaeological collection will be permanently
curated.

**Research design:** systematic planning of archaeological research. This includes the
formulation of a strategy to resolve a particular question, the collection and recording of
evidence, the processing of these data, and the publication of the research.

**Resource:** anything of an archaeological nature which can be of use in reconstructing
the past.

**Scope of Work:** A written plan detailing all work to be undertaken for a particular phase
of an archaeological project. A Scope of Work must be approved before any work may
begin.

**Significant archaeological resources:** those which are determined to be important
using the criteria established by the National Register as outlined in Section 2.0.

**Site:** a distinct spatial clustering of materials representing past human activity
Appendix B. Sources for Documentary Studies

The LPC will periodically update this document.

March 2002

New York City Landmarks Preservation Commission
Municipal Building
1 Centre Street, 9th Floor North
New York, NY 10007
nyc.gov/landmarks
(212) 669-7817 (Public Information Specialist)
hours: by appointment only which must be scheduled through the Public Information Specialist

• Archaeological Reports
• Archaeological Sensitivity Maps
• Designation Reports

New York State Office of Parks, Recreation, and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island
P.O. Box 189
Waterford, NY 12188-0189
(518) 237-8643

• Archaeological Reports
• Maps of Archaeological Site Locations

New York City Department of Records and Information Services
31 Chambers St
New York, NY 10007
http://www.ci.nyc.ny.us/html/doris

Municipal Archives, Suite 103
(212) 788-8585
hours: Monday-Thursday 9-4:30. Friday 9-1 pm.

• Tax assessment records
• Birth and death records.
• Photographs for all improved blocks and lots in the city taken in 1939
Municipal Reference and Research Center (library), Suite 112
(212) 788-8589
Hours: Monday- Friday 10-4.
· Depository for all official reports and studies published by New York City
departments, Commissions, and Repositories.

Old Records Division
31 Chambers, 7th Floor
hrs: Tuesday and Thursday 9-5
· City Condemnation records

Department of Finance, City Register
66 John St
New York, NY 10038
(212) 361-7550
Hours: Monday- Friday 9-4
· Deeds and Titles for Manhattan

Department of Finance
1932 Arthur Ave
Bronx, NY 10457
(718) 579-6820
· Deeds and Titles for the Bronx

Department of Finance
144-06 94th Ave
Jamaica, NY 11435
· Deeds and Titles for Queens

Department of Finance
350 St Marks Place
Staten Island, NY 10301
· Deeds and Titles for Staten Island

Borough Office of the Register of the City of New York
Kings County Municipal Building
210 Joralemon St., 1st and 2nd Floor (Room 203)
Brooklyn, NY
(718) 802-3590

- Resources: deeds and titles for Brooklyn
- Brooklyn - Kings County Land Evidence - 1687 - 1982 Libers of Conveyances of Realty within the County of Kings, State of New York.

Department of Buildings
60 Hudson St, room 505
(212) 312-8500
Hours: Monday-Friday 9-1 pm and 2-3:30 pm

- Resources: Folders on each building (only date to 20th Century, may request three at once) and rolled assessment maps. The assessment maps are self serve and are not organized. Only available during the hours listed above.

New York City Department of Environmental Protection
Bureau of Water and Sewer Operations (BW & SO)
Central Mapping and Records
59-17 Junction Blvd.
Corona, NY 11368
(718) 595-4182 fax (718) 595-4182
- Resources: records of when water and sewer pipes laid

Design and Construction: Subsurface Division
3030 Thomson, 5th Floor (use 30th Place entrance)
Long Island City, NY 11101
(718) 391-1334
hours: Monday-Friday 8:30-3:30
- Soil and Rockline WPA maps officially dated 1933.

National Archives
201 Varick (Varick and Houston)
12th Floor
New York, NY
(212) 337-1300
Hours: Monday-Friday 8 am- 4:30 pm
- Federal census records
New York Public Library
5th Ave and 42nd St
New York, NY 10018
General information: (212)340-0849

- NYC Directories (Manhattan and parts of the Bronx) 1796-1933/34
- Brooklyn Directories 1796, 1802/3, 1811/12, 1822-26, 1829-1910, 1912/13, 1933/34
- Webb's directories of Staten Island 1886, 1888, 1890/91, 1892/2
- Standard directory of Richmond County 1895/6
- Trow's Business and Residential Directory of the Borough of Richmond 1898
- Standard directory of Richmond 1906
- 1855 State Census records for Manhattan, also 1905, etc
- many historic maps in map room

New York County Clerk
60 Centre St
New York, NY
(212) 374-8589
- State census records for Manhattan: 1905, 1915, 1925

Kings County Clerk
New Supreme Court Building,
308 Adams St
Brooklyn, NY
(718) 643-7037
- State census records for Brooklyn: 1855, 1865, 1875, 1892, 1905, 1915, 1925

Bronx County Clerk
851 Grand Concourse
Bronx, NY
(718) 590-3646
- State census records for the Bronx in 1915, and 1925

Queens County Clerk
88-11 Sutphin Blvd
Queens, NY
(718) 520-3136
- State census records for Queens in 1892, 1915, and 1925

Staten Island County Clerk County Court House
Staten Island, NY 10301
State census records for Staten Island in 1915, 1925

Brooklyn Historical Society
128 Pierpont (corner of Pierpont and Clinton)
Brooklyn, NY 11201
(718) 624-0890
closed for renovation

The Bronx County Historical Society
3309 Bainbridge Ave
Bronx, NY 10467
(718) 881-8900

The New York Historical Society
2 West 77th Street
New York, NY 10024
(212) 873-3400

The Queens Historical Society
Kingsland Homestead
143-35 37th Ave
Flushing, NY 11354
(718) 539-9885

Staten Island Historical Society Historic Richmond Town
441 Clarke Ave
Staten Island, NY 10306
(718) 351-1611

Staten Island Institute of Arts and Sciences
75 Stuyvesant St
Staten Island, NY 10301
(718) 727-1135

Other sources:
Museum of the City of New York
Brooklyn Museum
Lower Eastside Tenement Museum
South Street Seaport Museum
State Library in Albany
Brooklyn Public Library
Appendix C. GIS Form

This is the form that the LPC uses to synthesize data gathered from archaeological reviews for GIS. It would be appreciated if archaeological contractors would complete the sections noted and submit the form with their reports so that we may keep the database as up to date as possible.

UNIFORM SITE FILE

LPC STAFF TO ENTER:
1. UNIQUE # IDENTIFIER__________________________
2. ADDRESS________________________________________________
3. BOROUGH_________________________________
4. BLOCK_______ LOT_______ MULTIPLE ADDRESSES?
   ____________________________
5. PROJECT ID#, CEQR# OR ER#______________________________
6. PROJECT NAME___________________________________________

HIGHEST LEVEL OF REVIEW PERFORMED (CHECK)
☐ 1st
☐ 2nd (DOCUMENTARY STUDY)
☐ 3rd (FIELD TESTING SCOPE REVIEWED)
☐ 4th (FIELD TESTING REPORT REVIEWED)
☐ 5th (MITIGATION SCOPE REVIEWED)
☐ 6th (MITIGATION REPORT)

FINDINGS (REASONS FOR NO FURTHER WORK) (CHECK)
☐ NO CONCERNS
☐ PRESUMED RESOURCE IDENTIFICATION INCORRECT
☐ PRESUMED RESOURCE IDENTIFICATION CORRECT, DISTURBED
☐ INCOMPLETE INFORMATION PROVIDED
☐ PROJECT DESIGN REASONS - HOWEVER, ARCHAEOLOGICAL CONCERNS ARE PRESENT
☐ AWAITING NEXT LEVEL OF WORK TO BE COMPLETED

ARCHAEOLOGICAL CONTRACTOR ENCOURAGED TO ENTER:
TIME PERIOD(S) STUDIED
☐ NATIVE AMERICAN POTENTIAL (UNSPECIFIED)
☐ PALEOINDIAN
☐ ARCHAIC
□ WOODLAND
□ CONTACT
□ COLONIAL (17/18 C) TO 1820
□ 19TH C (UNSPECIFIED)
□ 1820-1865
□ 1865-1915
□ 1915-1952

SITE TYPE
□ DOMESTIC STRUCTURE
□ TRANSIENT CAMPSITE/ HUNTING/GATHERING/FARMING
□ PRIVY/WELL/CISTERN FEATURE
□ PUBLIC INSTITUTION
□ CEMETERY/BURIAL GROUND
□ RELIGIOUS SITE OR INSTITUTION
□ SCHOOLS
□ UTILITIES
□ TRANSPORTATION
□ MILITARY
□ LANDFILL

RESEARCH QUESTIONS RELATE TO:

□ Pertinent information recovered? If yes, please check.
  □ IMMIGRATION
  □ ETHNICITY
  □ SOCIO-ECONOMIC STATUS
  □ PROFESSIONS/WORK LIFE
  □ HOUSEHOLD COMPOSITION
  □ ECOLOGY
  □ HEALTH AND MEDICINE
  □ LEISURE
  □ FOOD
  □ OTHER_________________

RELATED BIBLIOGRAPHY?________

COMMENTS? ___________________

COMPILED BY:__________________
DATE:____________
Appendix D: Checklist for Hiring an Archaeologist:

This checklist is designed to help applicants hire archaeological consultants. Please note that the LPC keeps a list of archaeological contractors who have requested to be on the list, and whose principal investigators are Registered Professional Archaeologists.

To solicit proposals you should provide the following information:
- Who are you? How should you be contacted?
- What is the project scope? Where is the site? Provide a map.
- What qualifications must the consultant have?
- What is the deadline for submitting proposals?
- Can potential consultants visit the site?
- How large is the site? What does the site currently look like?
- What type of archaeological work is required?
- What specialized skills and/or equipment is needed?
- How many copies of the reports will be needed?
- Include correspondence with LPC and/or OPRHP.
- What are the deadlines for submissions? Are there required meetings?
- Contract type and sample contract

To evaluate potential consultants you will need the following:
- Technical proposal from bidders that describes each step of work
- Information about key personnel including their qualifications
- Description of experience of firm or individual
- Bidder’s proposed schedule
- Cost estimates (includes hour or daily rates per task and personnel, mileage, per diem, supplies, overhead, and profit)

Factors to use to evaluate the proposals:
- Quality of proposal that demonstrates clear understanding of work and standards
- Schedule that accommodates project
- Key personnel are sufficiently qualified
- Firm has proven record of project completion for similar projects
- Ability to communicate findings
- Cost proposal that provides estimates for all of the proposed tasks (fieldwork, analysis, artifact conservation, publication of the results and repository costs) and is competitive. Note that post-fieldwork costs are gross estimates only. Archaeologists should provide actual costs as soon as possible.