

# City of Alexandria Archaeological Standards

For compliance with  
Alexandria Zoning Ordinance section 11-411



**Alexandria Archaeology  
Office of Historic Alexandria**

January 1996  
Revisions 2007, 2021  
*July 6, 2021*



The background of the slide is a close-up photograph of ancient papyrus. It features a complex, interlocking grid-like pattern of light tan or yellowish-brown lines. Overlaid on this pattern are broad, wavy bands of a deep, earthy red color, likely made of ochre. The texture appears slightly grainy and aged.

**Our program would not be possible without the generous support of City Council, the Alexandria Archaeological Commission, and the public!**

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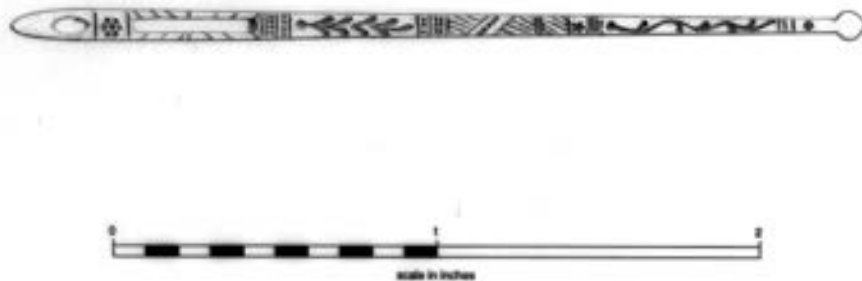


# Introduction

## MISSION

*The Alexandria Archaeology Museum is dedicated to preserving and studying Alexandria's rich archaeological heritage and fostering within residents and visitors a connection between the past and present while inspiring a sense of stewardship and adventure.*

The City of Alexandria is built upon its past. The ground beneath modern Alexandria is a record of this past and contains an array of archaeological sites, features, and artifacts. Recognizing the importance and uniqueness of these historic resources, the City of Alexandria adopted an Archaeological Protection Code in 1989. This has enabled the recovery and preservation of Alexandria's history spanning thousands of years of human occupation that otherwise would have been lost. The Code, incorporated into the City's Zoning Ordinance in 1992, requires that applicants work with City archaeologists to evaluate and sometimes excavate archaeological resources before ground disturbance on construction projects. Beyond the requirements of the Code, City archaeologists also partner with homeowners, realtors, and neighborhood groups to search for, study, and share our rich buried history. Small-scale developments and projects as defined in the [Zoning Ordinance](#) generally are not required to conduct archaeological research before obtaining building permits as the Code does not apply to many of these projects. However, Alexandria Archaeology staff offers preservation assistance before renovation or new construction takes place. Alexandria Archaeology now manages over 2,000,000 artifacts collected from over 230 archaeological sites excavated across the city.



*Copper alloy carved bodkin (44AX180, CN 90).*

## Purpose of Guidelines

This document provides guidance on how to meet the archaeological preservation requirements set forth in Section 11-411 of the City of Alexandria, Virginia Zoning Ordinance for all who apply for building permits, or who submit a DSP or DSUP. Property owners, developers, and their representatives should review this guidance before beginning any project. Section 11-411 outlines an archaeological protection procedure that is required for all construction and development projects in the city that have the potential to cause ground disturbance and entail site plan review. The archaeology protection measures—often referred to hereinafter as “**the Code**”—require site plans to be put through a series of stages that allow for archaeological assessments, evaluations, studies, and management plans prior to beginning construction.

In some cases, a property owner, developer, or City department (hereinafter “**Applicants**”) will need to hire a professional archaeological consultant (hereinafter “**Archaeological Consultant**” or “**Consultant**”) to address potential archaeological work that might arise on a particular permit application or site plan. The Archaeological Consultant may mitigate potential impacts to archaeological resources by conducting some or all the following: background research and recommendations, site evaluations, excavations, analysis, formal reporting, and public interpretation. Alexandria Archaeology, a division of the Office of Historic Alexandria (OHA), crafted this guide to help Applicants and their Consultants successfully comply with the archaeological protection regulations required in the Code. Alexandria’s Archaeological Protection Code requires that City archaeologists review all projects that file a DSP or DSUP to determine the potential for the proposed project to impact significant archaeological resources prior to site development. This includes when the City itself conducts construction work.

The Code can work in tandem with the process outlined under Section 106 of the National Historic Preservation Act of 1966 and other applicable federal requirements. Applicants must determine if the project is a federal undertaking, and if so, coordinate all Section 106 actions with the appropriate agency in conjunction with Alexandria Archaeology. The basis of the Code is similar to Section 106 in that it requires an Applicant to take into account the effects of their undertakings on archaeological resources in the city of Alexandria and to seek out mitigation measures if significant archaeological resources are threatened. One key distinction is that the Code sets a different standard of significance, taking into consideration the site’s value at the local level.

In addition to site plans, parts of the Code apply to grading and demolition plans, building permits, as well as permits reviewed by the Board of Architectural Review and the Board of Zoning Appeals, when those projects involve ground disturbance. For these types of permit applications (i.e. smaller-scale projects pursued by private landowners and not involving developers), Alexandria Archaeology will undertake any required background studies or archaeological research in coordination with the Applicant. City archaeologists determine archaeological significance and potential by examining primary documents, such as historical maps and tax records, and evaluating existing archaeological site data. An extensive database of digitized historical maps called the Digital Atlas of Alexandria allows archaeologists to pinpoint locations of historical sites on the modern landscape and evaluate whether buried resources may be intact.

# Archaeological Protection Code

## **The Zoning Ordinance of the City of Alexandria, Virginia**

### *Section 11-411: Archaeology Protection*

*Adopted June 24, 1992*

#### **(A) Archaeological resource areas.**

A preliminary site plan which includes land designated as a potential resource area on the [City of Alexandria Archaeological Resource Map](#), shall include reasonable archaeological evaluation reports and resource management plans when required under this section 11-411. The archaeological resource map, which is on file in the office of the director of historic Alexandria and the office of the city archaeologist is hereby made a part of this ordinance.

#### **(B) Application.**

This section 11-411 shall apply to all applications for preliminary or combined site plan or other development approval, otherwise subject to its provisions, which are filed subsequent to September 16, 1989.

#### **(C) Administration.**

This section 11-411 shall be administered by the director of the office of historic Alexandria who may adopt reasonable procedures for its administration, consistent with applicable law.

#### **(D) Preliminary archaeological assessment.**

Prior to filing an application for approval of a preliminary site plan to which this section 11-411 applies, the applicant shall confer with the director of the office of historic Alexandria in order for the director to conduct a preliminary assessment of the potential archaeological significance of any site plan area designated on the map, and of the impact of any proposed ground disturbing activities on such area. The applicant shall provide full and accurate information as to all ground disturbing activities proposed to be conducted on the site.

#### **(E) Criteria for preliminary assessment.**

Such preliminary archaeological assessment shall be based upon the following criteria, and shall be conducted consistent with professionally recognized standards for archaeological site evaluation:

- (1) Research value. The extent to which the archaeological data that might be contained on the property would contribute to the expansion of knowledge.
- (2) Rarity. The degree of uniqueness the property's resources possess and their potential for providing archaeological information about a person, structure, event or historical process, for which there are very few examples in Alexandria.
- (3) Public Value. The level of importance the property has to the community as a location associated with a significant person, structure, event or historical process.
- (4) Site integrity. The extent to which soil stratigraphy and original placement and condition of archaeological resources on the property have not been disturbed or altered in

a manner which appreciably reduces their research or public value.

(5) Presence of materials. The extent to which archaeological resources or evidence of historic structures are present on the property.

(6) Impact on resources. The extent to which any proposed ground disturbing activities will alter or destroy resources which the director has determined to have substantial archaeological significance under sections 11-411(E)(1) through (5) above.

(F) Finding of archaeological significance.

(1) If, at the conclusion of the preliminary archaeological assessment, the director of the office of historic Alexandria determines either that the site plan area has no substantial archaeological significance, or that the proposed construction or development will not have a substantial adverse impact on any known or potential archaeological resources, the director of the office of historic Alexandria shall so certify to the planning commission, and no further review under this section 11-411 shall be required.

(2) If, at the conclusion of the preliminary archaeological assessment, the director of the office of historic Alexandria determines that the site plan area has potential archaeological significance, and that the proposed development will have a substantial adverse impact on any known or potential archaeological resources, the applicant shall submit an archaeological evaluation report and a resource management plan as part of the preliminary site plan application.

(3) The director of the office of historic Alexandria shall render a determination in writing, within seven working days after receiving the information, unless written consent to extend such period is given by the applicant.

(G) Archaeological evaluation report and resource management plan.

(1) When required under the provisions of this section 11-411, the applicant shall submit as part of the preliminary site plan application an archaeological evaluation report and a resource management plan, prepared by a qualified archaeologist or historian in conformity with professionally recognized standards for cultural resource management. The applicant or the authorized agent thereof shall confer with the director of the office of historic Alexandria prior to preparing any submission to define and agree upon guidelines for such report and plan.

(2) Such archaeological evaluation report shall include detailed evaluation of the archaeological significance of the site plan area, including but not limited to reasonable measures for historic research, archaeological surveys and test excavations.

(3) Such resource management plan shall include reasonable measures for the study and preservation of archaeological resources found within the site plan area, including but not limited to test and full-scale excavations, site construction monitoring, field recording, photography laboratory analysis, conservation of organic and metal artifacts, curation of the collection (e.g., artifacts, notes, photographs) and preparation of reports.

(4) Such resource management plan may, and if required by the planning commission



or city council shall, also provide reasonable measures for further archaeological study, restoration, reconstruction, disposition of recovered artifacts to an appropriate public or private collection or museum, and in situ preservation of archaeological resources found within the site plan area.

(H) Review of archaeological evaluation report and resource management plan.

(1) The archaeological evaluation report and resource management plan shall be reviewed and approved, disapproved or approved with modifications or conditions or both as part of the site plan review process.

(2) In the event a site plan application and review is required exclusively on account of ground disturbing activities not otherwise subject to such application and review, then and in such an event, notwithstanding any other provisions of this ordinance, the required site plan application and review shall be limited to the purposes and requirements of this section 11-411, and the application fee shall be as prescribed pursuant to section 11-104.

**Section 2-151: Ground Disturbing Activity**

Any movement of earth or substrate, manually or mechanically, including but not limited to any modification of existing grade by dredging, demolition, excavation or fill, grading, scraping, vegetation removal, landscaping, coring, well drilling, pile driving, undergrounding utility lines, trenching, bulldozing, sheeting, shoring and excavation for laying or removing foundations, pilings or other purposes, for which any permit or approval is required under the provisions of the city code.

## History of the Code

Archaeology in Alexandria began with community preservation efforts in the 1960s at Fort Ward and the King Street Urban Renewal projects. City Council established the Alexandria Archaeological Commission (hereinafter “AAC”) – the first of its kind in the United States – in 1975, and City archaeology staff were hired shortly thereafter.

By the late 1980s, development in Alexandria was proceeding at a rapid pace and large open spaces were slated for change. Concern for threatened sites across the city led the AAC to pursue a local protection ordinance to identify and preserve buried resources threatened by development. The Commission sought input from the business community, especially developers and attorneys, bringing new stakeholders into partnership with archaeology. As a direct result of the Commission’s vision and commitment, City Council adopted the Alexandria Archaeology Protection Code on November 18, 1989. As a preamble to introducing the preservation measures, City Council acknowledged:

*There exist within the city archaeological sites and underwater historic sites which have special public value because of prehistoric, historic, archaeological, scientific and educational features, relating to the cultural heritage of the nation, the Commonwealth and city, and which have such significance as to warrant conservation, study and preservation, in order to protect and promote the general welfare and the public interest in the preservation and acquisition of knowledge and learning from the scientific study of such sites and the artifacts and antiquities found therein.*



*Excavating a well, 1977  
(44AX1, Feature CCC).*



*Excavations at Fort Ward Park, 1960s.*

Furthermore, City Council established land development provisions that allow for archaeological evaluation and resource management. In 1992 the Alexandria City Council formally added the archaeological resource protection process into the City zoning code. Over the past 30 years the Code has led to significant discoveries across the city. The Alexandria Archaeology Museum curates sites and collections, illuminating themes, including: the seaport's development, cycles of industry, and enslavement and freedom. The implementation process has led to the integration of history and archaeology into development projects, interpreting the past beyond the museum's walls and into the streets and incorporating history into the very fabric of our community.



*Historic interpretation in the Hotel Indigo lobby. Plan drawing of ship found on the site (44AX229).*



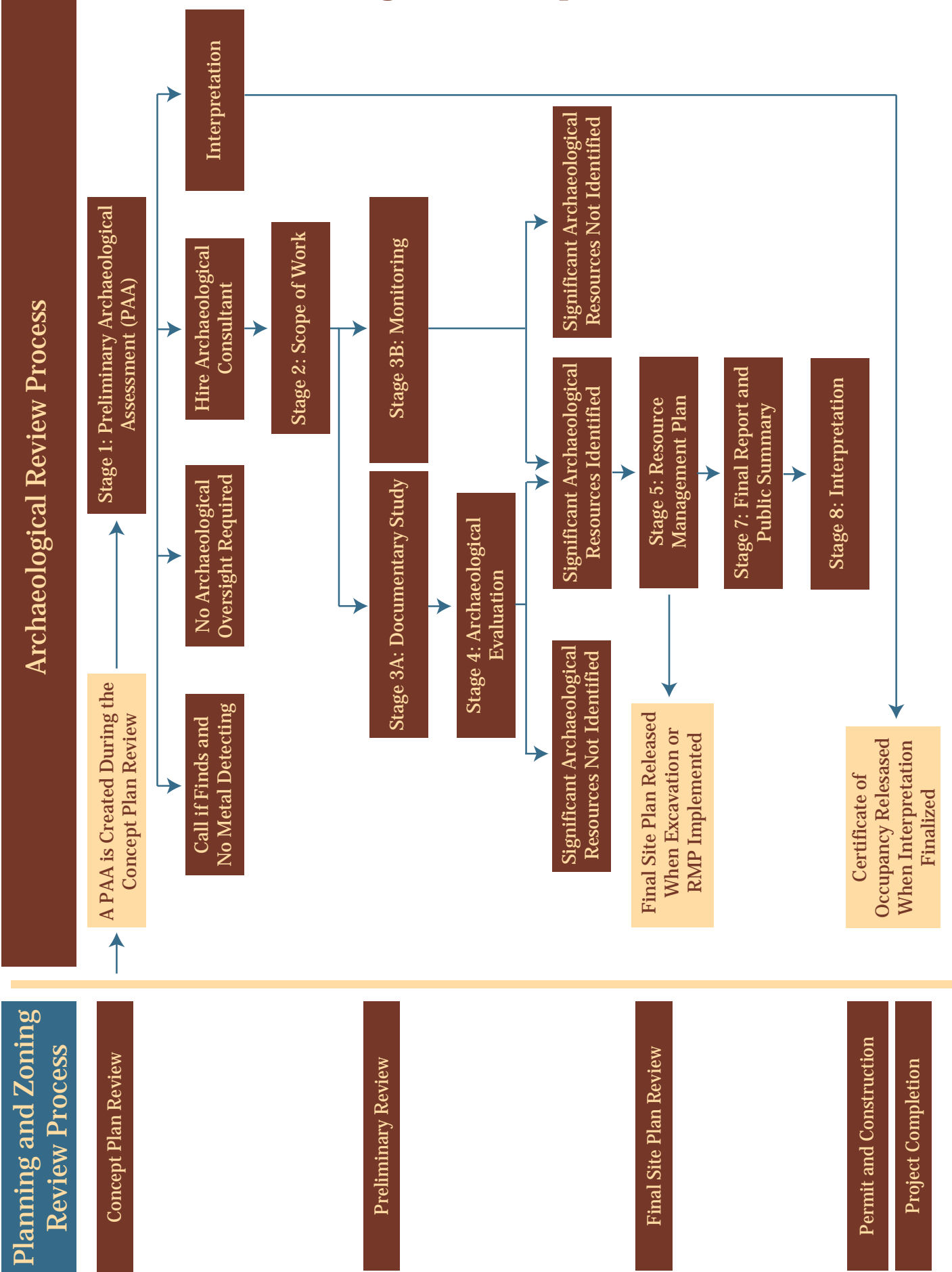


## **Archaeological Review Process**

**This section provides an overview of the archaeological review process. For detailed information on field and lab methodology and specifications for deliverables see the Methods section.**



# Overview of the Archaeological Development Review Process



## Implementing the Process

This section outlines the steps that must be performed in order to comply with Section 11-411 of the Alexandria Zoning Ordinance. The chart on the previous page shows how the Code is integrated into the development review process in the City of Alexandria. The tan boxes are ways in which the archaeological review process interfaces with the broader planning and zoning review process.

Three main entities participate in the process of meeting the requirements of the Code: *Alexandria Archaeology* (the designee of the Director of the Office of Historic Alexandria), *Applicants*, and their *Archaeological Consultants*. Alexandria Archaeology sets the agenda, enforces the Code, and assists Applicants and Consultants through the stages of the Code. Applicants must follow the Code until all requirements have been met and Alexandria Archaeology provides official notice of such. On behalf of the Applicant, Consultants must meet the archaeological requirements described in this document.

We all have unique responsibilities for implementing the Code as listed below.

### **Alexandria Archaeology will:**

- Conduct a Preliminary Archaeological Assessment
- Develop Scopes of Work
- Review Consultant proposals and qualifications
- Monitor the progress of all archaeological work
- Review and approve reports and other products
- Disseminate reports and other products as appropriate
- Curate the collections at the Alexandria Archaeology Repository

### **The Applicant will:**

- Fulfill all Code requirements
- Determine if the project is a federal undertaking, and if so, coordinate all Section 106 actions with the appropriate agency and in conjunction with Alexandria Archaeology
- Provide information to allow for a Preliminary Archaeological Assessment
- Conduct archaeology and related activities as required by comments on Site Plans, Special Use Permits, and other planning, zoning, and code enforcement documents
- Solicit proposals from qualified Archaeological Consultants according to the Scope of Work
- Hire qualified Archaeological Consultants to complete the Scope of Work
- Arrange with the Consultant for curation of collections at Alexandria Archaeology

### **The Archaeological Consultant will:**

- Provide professional archaeological advice to the Applicant
- Regularly update Alexandria Archaeology on the project's progress and facilitate site visits by Alexandria Archaeology as needed

- Complete a Background Documentary Study when necessary
- Complete an Archaeological Evaluation when necessary
- Complete a Resource Management Plan when necessary
- Complete any work specified in a Resource Management Plan
- Arrange for curation of collections at Alexandria Archaeology

Applicants and Consultants will hold meetings (on-site and off-site), as necessary, with the staff of Alexandria Archaeology during every project. In addition to the *City of Alexandria Archaeological Standards and Procedures*, all archaeological work and preservation activities conducted within the city of Alexandria must conform to the *Secretary of Interior's Standards and Guidelines for Archeology and Historic Preservation* as promulgated by the National Park Service and the *Guidelines for Conducting Cultural Resource Survey in Virginia* produced by the Virginia Department of Historic Resources (VDHR). The City of Alexandria Standards supersede these other documents when they differ on particular issues. If questions remain, Applicants and Consultants should consult Alexandria Archaeology directly.

## Stage 1: Initial Plan Review

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**Stage 1 pertains to:** All projects that undergo the permit application process

**Stage 1 produced by:** Applicant

**Stage 1 reviewed by:** Alexandria Archaeology

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The Preliminary Archaeological Assessment (PAA) typically happens at the concept plan review step of the development review process, as seen in the chart on page 9.

To determine the level of effort that might be necessary to mitigate adverse impacts to archaeological resources within the bounds of a proposed project, Alexandria Archaeology will conduct a Preliminary Archaeological Assessment. There are two methods for an Applicant to initiate this assessment.

1. As part of the permit application process, the Applicant can request Alexandria Archaeology to conduct a Preliminary Archaeological Assessment.
2. In lieu of filing a PAA Form, the Applicant will automatically receive a PAA during the first Concept Review of the proposed project.

Whether filing a formal request form (PAA) or waiting until initial Concept Review, Alexandria Archaeology will review the archaeological potential of the Applicant's project location. To do so, City archaeology staff apply the criteria outlined in the Code to determine the level of archaeological oversight required on each development project. City archaeologists consult historic maps and plats, property deeds, tax records, histories of Alexandria, archaeological site reports, studies of prehistoric activity in the region, and any other relevant sources that might pertain to the proposed project area.

The Applicant must submit accurate site plans that clearly illustrate the Limits of Disturbance (LOD) as well as the amount, depth, and type of ground disturbance for this assessment process to work effectively.

At the completion of a PAA or an initial Concept Review, Alexandria Archaeology will provide to the Applicant: a) their initial findings for the project area including the potential significance of any suspected archaeological resources; b) a summary of the proposed development project's archaeological impacts; and c) an explanation of the level of the archaeological undertaking that will likely be required for the project. Alexandria Archaeology will require an Applicant to implement one or more of the conditions explained below.



## Archaeology Conditions:

- 1. No Archaeological Oversight Required:** There is a low potential for significant archaeological resources to be present in the project area or the project involves minimal or no ground disturbance. Therefore, archaeological oversight will not be necessary for the undertaking.

The language an Applicant will see on planning, zoning, and code enforcement documents is:

*“No archaeological oversight is required for this undertaking.”*

As a result, the Applicant: has no further archaeological obligation to consult with Alexandria Archaeology unless the LOD changes.

- 2. Call If Finds and No Metal Detecting:** This directive is given when the proposed ground disturbance is minimal, and/or there is low to moderate potential for the significant archaeological resources to be present, and/or the archaeological integrity of the project area has been previously disturbed. These conditions applied to other projects, including those with a higher archaeological potential, as well.

The language an Applicant will see on planning, zoning, and code enforcement documents is:

*“Call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of historic or prehistoric artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist makes a site visit and records the finds.*

*and*

*“The Applicant shall not allow any metal detecting and/or artifact collecting activities to be conducted on the property, unless authorized by Alexandria Archaeology.”*

As a result, the Applicant:

- Must inform Alexandria Archaeology if and when historic structural remains or artifact concentrations are discovered during the course of the project and allow them to be recorded
- Must not allow metal detecting or artifact collecting without permission from Alexandria Archaeology
- Must include the language noted above on all final site plan sheets involving ground disturbance activities
- Must make sure the General Contractor is aware of this Code requirement and inform all sub-contractors and crew of the stipulation

**3. Hire an Archaeological Consultant:** When Alexandria Archaeology determines that the proposed undertaking will require archaeological oversight to mitigate the impacts to potentially significant archaeological resources, the Applicant must hire a professional Archaeological Consultant to:

3A. Conduct documentary and/or archaeological studies of the project area as defined in an approved Scope of Work before ground disturbance occurs. The Scope(s) of Work will dictate the level of effort which can range from a background research to archaeological testing to archaeological excavation.

3B. Monitor ground disturbing activities as outlined in an approved Monitoring Plan in concert with the construction schedule. The Monitoring Plan will outline the level of monitoring that will be necessary, identify which construction activities will require archaeological monitoring, and outline a monitoring schedule.

The language an Applicant will see on planning, zoning and code enforcement documents consists of several directives:

*“The Applicant shall hire an Archaeological Consultant to complete a Documentary Study and Archaeological Evaluation. If significant resources are identified the Consultant shall complete a Resource Management Plan, as outlined in the City of Alexandria Archaeological Standards and Procedures. Preservation measures presented in the Resource Management Plan, as approved by the City Archaeologist, will be implemented.”*

and/or

*“The Applicant shall hire an Archaeological Consultant to monitor ground disturbing activities based on a Monitoring Plan as approved by Alexandria Archaeology. If significant resources are identified during monitoring the Consultant shall complete a Resource Management Plan, as outlined in the City of Alexandria Archaeological Standards and Procedures. Preservation measures presented in the Resource Management Plan, as approved by the City Archaeologist, will be implemented.”*

and

*“Hire a professional consultant to work with staff and the landscape designers to incorporate and interpret elements of the historical character and archaeological findings into the design of the open space and to prepare interpretive elements, which shall be erected as part of the development project. The site plan shall indicate themes and locations of interpretive elements. Prior to release of the Final Site Plan, the Applicant shall provide text and graphics for the interpretive elements subject to approval by the Office of Historic Alexandria/Alexandria Archaeology.”*

and

*“The Applicant shall not allow any metal detecting and/or artifact collecting activities to be conducted on the property, unless authorized by Alexandria Archaeology.”*

and

*“Call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of historic or prehistoric artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist makes a site visit and records the findings.”*

**and**

*“The Final Site Plan, Grading Plan, or any other permits involving ground disturbing activities (such as coring, grading, filling, vegetation removal, undergrounding utilities, pile driving, landscaping, and other excavations as defined in Section 2-151 of the Zoning Ordinance) shall not be released until the City Archaeologist confirms that all archaeological fieldwork has been completed or that an approved Resource Management Plan is in place to recover significant resources in concert with construction activities.”*

**and**

*“Certificates of Occupancy shall not be issued for this property until interpretive elements have been constructed, interpretive markers have been erected, and the final archaeological report has been received and approved by the City Archaeologist.”*

As a result, the Applicant:

- **Must consult with Alexandria Archaeology regarding the required archaeological and historical scope and scale of the project.**
- **Must procure the services of a qualified Archaeological Consultant to: a) conduct a Documentary Study and Archaeological Recommendations and/or Archaeological Evaluation which may lead to additional fieldwork or requirements, or b) to monitor ground disturbing activities based on a Monitoring Plan as approved by Alexandria Archaeology.**
- **Must fulfill all archaeological requirements, including additional excavation, report preparation and submission, and interpretation, as deemed necessary by Alexandria Archaeology.**
- **Must include the language noted above on all final site plan sheets involving ground disturbance activities.**
- **Must make sure the General Contractor is aware of this code requirement and inform all sub-contractors and crew of the stipulations.**

The Consultant hired by the Applicant:

- **Assumes the responsibility for the Applicant to meet the necessary archaeological requirements as determined by Alexandria Archaeology.**

### **Summary: Initial Plan Review**

To summarize, after conducting a PAA or an initial Concept Review, in most cases Alexandria Archaeology will require an Applicant to carry out one of the below mitigation measures in order to meet the requirements of the Code:

- No archaeological oversight is required.
- Call Alexandria Archaeology if archaeological finds are uncovered and do not permit metal detecting and artifact collecting without Alexandria Archaeology approval.
- Hire an Archaeological Consultant to conduct historical and archaeological studies of the project area, or to archaeologically monitor stages of construction as requested by Alexandria Archaeology.



## Stage 2: Scope of Work

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**Stage 2 pertains to:** All projects deemed by Alexandria Archaeology to require a documentary study, archaeological monitoring, and/or archaeological evaluation

**Stage 2 produced by:** Alexandria Archaeology or Consultant

**Stage 2 reviewed by:** Alexandria Archaeology

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A Scope of Work (SOW) is a step-by-step plan of research that outlines the objectives, methods, and required documentation for a project. A SOW must be written for each project that requires a documentary study, archaeological monitoring, and/or archaeological evaluation. The scope is a statement of documentary or archaeological work to be undertaken by an Archaeological Consultant.

This work happens as a project moves through the development approval process towards the final site plan stage as show on page 9.

It outlines the steps to be taken to determine and document the archaeological significance of the project area. In some cases, a Consultant can assume the responsibility for drafting a Scope of Work that will be reviewed by Alexandria Archaeology. This is especially the case for multistage, long-term projects managed by the same Consultant. Contact Alexandria Archaeology for templates and guidance.

### Requirements

For a Documentary Study, the SOW must:

- Outline the types of documentary sources and the repositories that will be used for the documentary study
- Recommend whether fieldwork will be necessary, and if so, what type (i.e.: soil borings, shovel test pits, test units, mechanical trenching, monitoring, or a combination)

For an Archaeological Evaluation, the SOW must outline:

- The plan and techniques for conducting the archaeological investigations on the property
- The methods for processing, analyzing, and interpreting the archaeological and documentary data collected in the investigation
- For projects requiring deep testing, the plans for shoring and dewatering procedures, if the project area is poorly drained or has a high water table
- The erosion control plan, if needed
- The Health and Safety Plan for Occupational Safety and Health Administration (OSHA) compliance

- The sampling and discard policy for certain classes of artifacts that considers context, research potential, and redundancy
  - the discard policy may apply to: brick fragments, mortar, plaster, slag, shell, coal, concrete/ cement, and large quantities of artifacts less than 50 years old
  - large industrial artifacts should be discarded in consultation with Alexandria Archaeology
  - the discard strategy will clearly define what will be discarded in the field, in the lab, and how this information will be documented
- The chronologically organized schedule of the tasks to be performed in conducting and completing the project, including the submission of a draft technical report and public summary for review by Alexandria Archaeology

***Work may not begin until the SOW is finalized and approved by Alexandria Archaeology.***

## **Procedure**

1. If not already in communication, Consultant informs Alexandria Archaeology of their intent to write a SOW.
2. If not already drafted by Alexandria Archaeology, Consultant will draft a SOW for review by Alexandria Archaeology.
3. Alexandria Archaeology reviews, edits, and approves the SOW.

## Stage 3A: Documentary Study and Archaeological Recommendations

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**Stage 3A pertains to:** All projects when a Scope of Work requires a documentary study

**Stage 3A produced by:** A Historical or Archaeological Consultant

**Stage 3A reviewed by:** Alexandria Archaeology

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A background documentary study is a formal investigation of archival records to determine the history and significance of a property. The results are presented in a report with one or more ground impact maps, illustrating the proposed impact on known cultural and natural features on the property. The documentary study should assess the archaeological potential of the property and provide recommendations for further study, if warranted. The goal of this research is to identify, as precisely as possible, the potential locations of archaeological resources; including foundations, trash pits, and privies, that may be preserved within the project area and to develop a historical context for the interpretation of these potential resources. The documentary study must meet the requirements described in the approved Scope of Work.

In Alexandria, historical documentation is abundant and accessible while field testing can be expensive and complex. It is therefore expected that documentary studies must be robust to ensure field testing only occurs when needed. It is important for documentary research to be conducted prior to archaeological fieldwork so that areas of high significance and high potential to yield resources can be targeted as part of the archaeological fieldwork strategy.



*Plan of Alexandria, Fairfax County Deed Book, 1804.*

## Requirements

- Project areas will be placed within their general environmental, cultural, and historical contexts. Since the general histories of the City, region, and state are well known, a repetition of this information is unnecessary.
- A property history will establish the land's use and occupation from prehistoric times to the present and create an account of the chain of title, a description of the owners and occupants, and a discussion of the land-use history of the property through time.
- The study will assess the potential for Native American sites in the project area based on environmental setting, topographic maps, and predictive models.
- The study will address the relationship between known historical and archaeological sites within the project area and adjoining properties, the historic neighborhood, and any other factors with direct bearing on the project itself.
- The study will develop research questions that could provide a framework for the archaeological work and the development of historic contexts for the interpretation of the site.
- The study will compile research on deeds, plats, title documents, probate, and other court records; tax and census records; business directories, published and unpublished manuscripts of first-hand accounts (such as letters, diaries, biographies, and city and county histories); historical and modern maps; photographs; newspaper articles; previous archeological work; geological and topographic maps; soil boring data; building records to determine basement depths of buildings on site; oral history; and previous construction plans that could show evidence of previous ground disturbance.
- The study will present the potential for the archaeological work to increase our understanding of Alexandria's past and highlight the historical and archaeological significance of the property.
- The presentation of the data gathered in this study must include a map(s) showing the location of historic property lines, structures, cemeteries, etc. For a detailed discussion of map requirements, see "Ground Impact Map" in the "Mapping and GIS section below.
- Concluding recommendations must assess whether the site has been so disturbed in the past that it no longer has potential to yield archaeological resources; assess the probability that potential archaeological resources will be disturbed by the proposed project; and explain why further archaeological work should, or should not, be required.

## **Procedure**

1. Consultant conducts thorough historic background research on the property.
2. Consultant submits documentary study draft to Alexandria Archaeology for review.
  - If the Documentary Study finds that a project location has no archaeological potential, the Consultant may recommend no archaeological work. If Alexandria Archaeology concurs, then they will review the draft and provide edits to the Consultant who then incorporates these and submits a final version to Alexandria Archaeology.
  - If the Documentary Study finds that there is archaeological potential, recommendations for archaeological evaluation must be included. The Consultant will submit a draft documentary study. A final documentary study will be submitted with the Archaeological Evaluation or final archaeological report.



Owners names of Houses & Lots.	By whom occupied when situated	Rents.	Total	
			Rents in fee	Annual rents out of cash
A Robert Allison	Robert Allison King street	30 a c		
do	Robert Boupin do	50		80

Alexandria Land Book excerpt, 1787.

FORM OF THE DECLARATIONS FOR ASSURANCE.

I THE undersigned William H. Adams residing at Alexandria in the county of Stafford do hereby declare for Assurance in the Mutual Assurance Society against fire on buildings of the State of Virginia, established the 20th December, 1796, agreeable to the several Acts of the General Assembly of this State, to wit:

My free buildings on Lower Street at Alexandria are not occupied by any person and that of William H. Adams situated between the house of Capt John Hays and that of William H. Adams in the county of Stafford.

Their dimensions, situation and vicinity to other buildings or wharves, what the walls are built of, and what the buildings are covered with, are specified in the hereto annexed description, of the said buildings on the plan, signed by me and the appraisers, and each valued by them as appears by their certificate hereto, to wit:

The	marked	A.	at	1,111	Dollars, say	one thousand one hundred and eleven	Dollars.
The <u>Chapel</u>	do.	B.	at	1,111	do.	one thousand one hundred and eleven	do.
The <u>Chapel</u>	do.	C.	at	555	do.	five hundred and fifty five	do.
The <u>House</u>	do.	D.	at	555	do.	five hundred and fifty five	do.
The <u>House</u>	do.	E.	at	555	do.	five hundred and fifty five	do.
The	do.	F.	at	555	do.	five hundred and fifty five	do.
The	do.	G.	at	555	Dollars	five hundred and fifty five	do.

So John Thompson appraiser

I do hereby declare and affirm that the above mentioned property is not, nor shall be insured elsewhere, without giving notice thereof, agreeable to the policy that may here be my case, upon the filing of this declaration, and provided the whole sum do not exceed four fifths of the verified value, and that I will abide by, observe, and adhere to the Constitution, Rules and Regulations as are already established, or may hereafter be established by a majority of the insured, present in person, or by representatives, at a general meeting to be agreed upon for the said Assurance Society. Witness my hand and seal at Alexandria this 10th day of March 1796.

WE the undersigned, being each of us House owners, declare and affirm that we have examined the above mentioned property of William H. Adams and that we are of opinion that it would cost in cash one thousand one hundred and eleven dollars to build the same, and is now actually worth one thousand one hundred and eleven dollars in ready money, and will command the same as above specified, to the best of our knowledge and belief.

The foregoing valuation is made before me, a magistrate for the said County of Stafford Given under my hand this 10th day of March in the year 1796.

John Thompson Residing in Alexandria

Mutual Insurance Policy, 1828.

## Stage 3B: Archaeological Monitoring

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**Stage 3B pertains to:** All projects when a Scope of Work requires archaeological monitoring

**Stage 3B produced by:** An Archaeological Consultant

**Stage 3B reviewed by:** Alexandria Archaeology

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Archaeological monitoring is done in an archaeologically sensitive area or in a location with known archaeological deposits to prevent disturbance to these deposits during construction or post-construction activities. It can be used in cases where an excavation might uncover archaeological resources but there is no satisfactory way to sample the site to determine where resources may be located. For example, excavation of utility trenches in a right-of-way may be a project where monitoring is an appropriate mitigating measure. In conjunction with Alexandria Archaeology, the Consultant formulates an Archaeological Monitoring Plan that describes the steps to be taken to monitor ground disturbing activities.

### Requirements

The monitoring plan must:

- Outline the types and locations of construction activities that will require monitoring.
- Provide a rationale for and purpose of monitoring, justifying the use of this methodology.
- Include a monitoring schedule.
- List the names and contact information of the construction personnel responsible for coordinating the monitoring with the Consultant.
- Determine the criteria by which the Archaeological Consultant will decide when construction must be halted, and further archaeological work be done if/when archaeological findings occur during monitoring.

### Procedure

1. Consultant monitors construction as per the Monitoring Plan.
2. If significant resources are identified, Consultant contacts Alexandria Archaeology to determine if further documentation, testing, or a Resource Management Plan (RMP) is necessary.
3. Consultant submits a Management Summary for review by Alexandria Archaeology and implements approved RMP, if necessary.

## Stage 4: Archaeological Evaluation

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**Stage 4 pertains to:** All projects when a Scope of Work requires an archaeological evaluation

**Stage 4 produced by:** An Archaeological Consultant

**Stage 4 reviewed by:** Alexandria Archaeology

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An archaeological evaluation is an archaeological investigation of a property to determine the type and location of archaeological resources and the extent to which they will be impacted by proposed development. The level of effort for the Archaeological Evaluation is determined by the Scope of Work. The evaluation report presents the results of the background documentary study, the archaeological testing, and, if significant archaeological resources are discovered, a Resource Management Plan (RMP).



*Excavations at the Bruin Slave Jail Site  
(44AX172).*

### Logistics

- The timing of fieldwork for the Archaeological Evaluation is intricately tied to the planning and construction process. It is best to complete the evaluation as early as possible, because these results will determine how much archaeological work will be necessary to satisfy the Code requirements.
- In some cases, the Archaeological Evaluation cannot be conducted until after the final site plan has been approved and demolition and construction begin. This often happens in an urban environment where an existing structure must be demolished before archaeological work and construction can proceed. In these instances, the Consultant conducts the Archaeological Evaluation after final site plan approval with acknowledgement by the Applicant that a Consultant has been hired and that they will complete the required archaeological investigation and reporting, as specified in the conditions of the approved site plan.
- On sites with complicated excavation conditions, such as extensive fill and water management, the most feasible procedure to conduct the archaeological evaluation is in concert with construction.
- When background research indicates the potential for encountering unmarked burials or human remains, Alexandria Archaeology should be consulted as early as possible in the planning stages so that methods and protocols can be developed. In Virginia, the archaeological removal of human remains and/or associated grave goods requires a permit issued by the Virginia Department of Historic Resources in accordance with the Code of Virginia 10.1-2305.

## **Requirements**

### **An Archaeological Evaluation:**

- Summarizes the procedures and results of the field investigation and artifact analysis
- Integrates the archaeological data with the historic record
- Discusses the archaeological significance of resources in the project area
- Makes recommendations as to the need for further preservation actions
- Includes a public summary
- Produces maps that readily show:
  - The proposed construction's impacts on identified cultural features
  - The project area's size, shape, and location within the city
  - Notable extant features in and around the project area, including, but not limited to, modern buildings and structures, roads, driveways, parking lots, railroads, bridges, walls, fences, utilities, etc. Care should be given to include elements on this map of the project area that will continue to exist unaltered at the completion of this present project
  - The locations and designations (years, unit numbers, and/or coordinates) of previous archaeology conducted at the site, including locations of all test pits, units, and trenches, as well as relevant significant previous findings, when possible
  - The locations and designations (unit numbers and/or coordinates) of all test pits, units, and trenches excavated as a result of this project to date
  - The locations and designations (feature names and/or numbers) of all significant features encountered archaeologically
  - The location, boundary, and designations (site name and/or number) of potentially significant archaeological resources and areas encountered during survey

## **Procedure**

1. Prior to any fieldwork involving ground disturbance the Consultant must:
  - Determine if the project is a federal undertaking, and if so, coordinate all Section 106 actions with the appropriate agency in conjunction with Alexandria Archaeology.
  - Arrange, with Applicant, to curate any collections produced by the project at Alexandria Archaeology unless otherwise approved. Consultant will have the landowner sign a Deed of Gift, pending execution by Alexandria Archaeology upon delivery of the collection.

- Secure the following certificates (see Appendix):
  - Archaeological Preservation Certificate.pdf
  - Checklist of Supplemental Approvals for Excavation.pdf
  - Supplement Approvals for Excavation Signature Page.pdf
- 2. The Consultant will conduct an archaeological survey and/or test excavation as outlined in the approved SOW.
- 3. The Consultant will:
  - Adhere to all OSHA regulations.
  - Implement all necessary erosion control measures.
  - Follow the approved SOW and report any problems to Alexandria Archaeology. Any deviations from the approved SOW must be approved by Alexandria Archaeology.
  - Keep complete and legible forms and records. Alexandria Archaeology reserves the right to inspect and review all raw field data during the progress of the project and be supplied with scans or photocopies of the data.
  - Maintain the site in a neat and orderly fashion. The Consultant will register and/or update all archaeological sites with the Virginia Department of Historic Resources (VDHR) before processing the collection.
  - Conduct any artifact analysis necessary for evaluating the significance of any archaeological resources discovered.
- 4. If significant resources are discovered based on an initial field and lab evaluation, proceed to the RMP Section.
- 5. If no significant resources are discovered or no further work is recommended the Consultant will:
  - Process and analyze all artifacts.
  - Submit an Archaeological Evaluation Report to Alexandria Archaeology for approval. This report documents the type and location of archaeological resources, the extent to which they will be affected by the proposed development, and the results of the documentary and archaeological investigations.
  - Make any required revisions and additions to the Archaeological Evaluation Report.
  - Proceed to project closeout and collection delivery.



## Stage 5: Resource Management Plan(s)

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**Stage 5 pertains to:** All projects when significant archaeological resources are threatened by ground disturbance

**Stage 5 produced by:** An Archaeological Consultant

**Stage 5 reviewed by:** Alexandria Archaeology

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A Resource Management Plan (RMP) is a scope of work and set of maps that recommend measures for mitigating construction impacts to significant archaeological resources determined, by the Archaeological Evaluation, to be present on a property. The recommendations of the RMP may lead to more extensive archaeological excavations or other preservation measures. A RMP must be in place before a Final Site Plan for a development project is released.



*Excavating an 18th century ship (44AX229, Feature 53).*

### Logistics

- Preservation actions span a range of options including:
  - Site monitoring;
  - In-situ preservation and avoidance of the resource with interpretation;
  - Partial site excavation;
  - Full data recovery from significant site(s).
- The archaeological preservation measures in RMP(s) must be implemented prior to any construction that would destroy or disturb the identified resources.
- If significant resources are discovered during the Archaeological Evaluation fieldwork, completion of the Archaeological Evaluation Report may be deferred until preservation measures in the RMP(s) are implemented, and all archaeological work is completed, with the results incorporated into a Final Report.

## **Requirements**

- Summarizes the results of the archaeological evaluation analysis conducted in the previous stage.
- Outlines a strategy for mitigating impacts to archaeological resources identified during the Archaeological Evaluation.
- Includes processes and procedures for specialized studies and treatment of waterlogged material.
- Presents a research design if further testing is recommended.
- Produces a series of maps.
- Proposes preservation actions that addresses the excavation and recordation methods, including the reasoning for not excavating a feature in its entirety, if such an approach is proposed for each resource.

## **Procedure**

1. The Consultant will submit an RMP to Alexandria Archaeology for review and approval.
2. Alexandria Archaeology will review the proposed RMP and provide feedback to the Consultant.
3. The Consultant will make any necessary changes to the RMP and will only proceed once the plan has been approved by City staff.
4. The Consultant will complete the preservation actions specified in the RMP, following the field requirements outlined in the Archaeological Evaluation section.
5. Once all field work is complete, the Consultant will process and analyze all additional artifacts, incorporating this new information with material found during the Archaeological Evaluation.

## Stage 6: Laboratory Processing and Collections Management

**Stage 6 pertains to:** All projects that produce an archaeological collection (artifacts and/or paperwork)

**Stage 6 produced by:** An Archaeological Consultant

**Stage 6 reviewed by:** Alexandria Archaeology

Laboratory processing and collections management is the analysis and processing of the archaeological collection including all artifacts and associated records. This work can and should happen throughout the project. See the Methods section for more detailed information.

### Requirements

- For all sites excavated in the city, Alexandria Archaeology is the repository, unless otherwise approved.
- Collections must be curated at a facility that meets the federal standards for curation and collections management as outlined in 36CFR part 79, Curation of Federally-Owned and Administered Archaeological Collections, the provisions set forth below, and the appropriate city, state or federal repository standards.



*Biface (44AX240).*



*Fouled anchor glass intaglio (44AX229).*



*Local stoneware cake pot (44AX1, Feature B).*



*Locally made, slip decorated earthenware (44AX91, Feature 15).*

## Procedure

1. Process collected soil samples, flotation samples, etc. Projects proposing or anticipating the recovery of these types of material remains should adequately budget for appropriate processing and specialized analyses. Unprocessed flotation and soil samples will not be accepted.
2. Process, stabilize, catalogue, and analyze all artifacts.
3. Document all laboratory procedures, including any quality control procedures.
4. Prepare all artifacts and associated documentation for final curation.
5. Proceed to final report and project closeout phases.



*Glass intaglio embedded in iron (44AX235, Feature 104).*



## Stage 7: Final Report and Public Summary

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**Stage 7 pertains to:** All projects that entail archaeological studies and excavations

**Stage 7 produced by:** An Archaeological Consultant

**Stage 7 reviewed by:** Alexandria Archaeology

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The Final Report is a comprehensive descriptive and interpretive account of the documentary and archaeological findings. The Public Summary is a brief synopsis of the project that is intended for public distribution.

Once all field work is complete, lab processing and analysis is finished, and any specialized studies are completed, the Consultant will proceed to the report and closeout phase of the project. The Final Report and Public Summary is the culmination of the archaeological preservation process. Certificates of occupancy are contingent upon submission of the Final Report.

All final reports will be included in the Alexandria Archaeology reference library. They will also be made available online as a PDF in the Alexandria Archaeology Bibliography. Additional copies will be transferred to the Alexandria Library/Special Collections and the Virginia Department of Historic Resources.

### Requirements

The Final Report will include:

- All information presented in the Archaeological Evaluation Report plus additional information resulting from preservation actions completed as part of the Resource Management Plan(s)
- Public Summary
- Site Registration Form
- Collections Catalogue/Artifact Inventory

### Procedure

1. The Consultant will prepare a Final Report meeting the above requirements and submit it to Alexandria Archaeology for review.
2. Alexandria Archaeology will provide feedback within 30 days of submission, unless otherwise communicated. The Consultant will make any revisions and additions.
3. Once Alexandria Archaeology has approved the report, the Consultant will submit four physical and one digital version of the final report to Alexandria Archaeology.



## Stage 8: Historic Interpretation

*Many projects will require some form of historic interpretation. This step sometimes occurs after an archaeological evaluation or mitigation, or as an alternative mitigation measure.*

Certificates of occupancy will not be released until historic interpretation elements are finalized and approved by Alexandria Archaeology. Please see [Methods](#) section for more information.

### Procedure

1. The Developer and Consultant will meet with Alexandria Archaeology to determine appropriate historic interpretation. We encourage this happening at as early a stage as possible.
2. The Consultant will prepare a fully cited draft of the sign or other interpretative element and submit it to Alexandria Archaeology for review.
3. Alexandria Archaeology will provide feedback and the Consultant will incorporate the changes.
4. The Consultant will submit the final historic interpretation. Upon approval by Alexandria Archaeology, the certificates of occupancy will be released.

## Stage 9: Project Closeout

*At this stage, an archaeology project in Alexandria is nearly complete! The final step is preparing the collection for curation and delivering the artifacts to Alexandria Archaeology or another approved repository.*

Artifacts recovered from archaeological sites are the property of the landowner at the time of excavation. The donor must have free and clear title to the objects (i.e., be the owner of the property from which the artifacts were excavated, at the time of their excavation).

In the rare instance where Alexandria Archaeology is not the final repository, the disposition of the collections must be approved by Alexandria Archaeology and by the manager of the selected repository. Alexandria Archaeology must be provided with a current address, phone number, and contact for the repository and must be notified of any future changes in the collection's storage location. In addition, Alexandria Archeology will be provided with a full inventory of the collection and a copy of all associated records.

### Procedure

1. The Consultant will facilitate the legal transfer of the collection to Alexandria Archaeology by securing necessary paperwork and signatures. This should be done prior to starting fieldwork.
2. The Consultant will prepare the artifact collection for curation (see Methods).
3. The Consultant will prepare all associated records for curation, even for projects that did not produce associated archaeological collections. See Methods and Checklist for full list of required documentation and acceptable file formats.
4. The Consultant will complete the Transmittal Form and Checklist of Deliverables and will arrange delivery logistics with the Alexandria Archaeology Collections Manager.
5. The Consultant will deliver the collection. If the collection is not curated with Alexandria Archaeology, the Consultant will provide Alexandria Archaeology with written confirmation of the transferal to another approved repository.

## Unanticipated Discoveries

If previously unidentified archaeological resources (concentrations of artifacts, wells, privies, foundations, or other features) are encountered or unanticipated effects to archaeological resources occur during construction, the construction contractor shall immediately halt all activity within the area surrounding the discovery and in any adjacent areas where additional or related resources may reasonably be expected to be present. The construction contractor will notify Alexandria Archaeology of the discovery and implement interim measures to protect the site from looting, vandalism, and other disturbance. Work may continue in other areas of the site not in the vicinity of the find.

### Procedure

1. Upon receiving a notification from the construction contractor, Alexandria Archaeology will inspect the construction site to determine the extent of the discovery and ensure that construction activities have halted.
2. City staff will clearly mark the area of the discovery.
3. The Applicant may be required to hire an Archaeological Consultant to implement additional measures, to the extent deemed necessary by Alexandria Archaeology.
4. A professional Archaeological Consultant will inspect the construction site and coordinate with Alexandria Archaeology to develop a SOW and methods to determine the extent of the discovery and provide recommendations regarding its significance and treatment, which may be limited to sampling and documentation or include full data recovery.
5. When Alexandria Archaeology determines that the appropriate mitigation measures have been implemented, construction activities may proceed in the area of the discovery.

## Human Remains

Human remains (administered by DHR, Code of Virginia 10.1-2305): General cemetery protection laws deem it a felony to remove human remains from a grave without a court order or appropriate permit. The archaeological removal of human remains and associated funerary artifacts requires a permit from DHR. The Native American Graves Protection and Repatriation Act (NAGPRA) applies to Native American remains found on federal land. The regulations governing the state permit process require a detailed research plan and both a qualified archaeologist and a qualified physical anthropologist (unless waived by the Director of DHR in deference to the wishes of the descendants) to perform the recovery and skeletal analysis. The application for the archaeological removal of human remains is available on DHR's website, at [https://www.dhr.virginia.gov/pdf\\_files/Permit-RemovalOfHumanBurials.PDF](https://www.dhr.virginia.gov/pdf_files/Permit-RemovalOfHumanBurials.PDF)

### Procedure

In the event that primary burials or fragmentary remains are found in Alexandria, the following actions should be taken immediately.

1. STOP WORK at the location of the find and for a distance of 50 feet around the find. Do not touch or remove anything.
2. Immediately call the Alexandria Police Department at 911.



## **Methods, Procedures and Deliverables**

This section provides more details for archaeological consultants for successfully completing a project in Alexandria.



# Survey and Excavation

## Record Keeping

Each provenience will be assigned a unique record number and one series of unique numbers will be used across each registered archaeological site. These unique record numbers will be keyed to other provenience information and will appear on all field notes, artifact catalogues, analysis forms, etc.

## Field Notes

Complete records will be kept at all stages of field work and will be identified with the registered site number. Field notes will be made as important features and artifacts are discovered and will summarize the procedures used and work accomplished each day.



*Well excavation, basement of Freedom House (44AX75, Feature 1).*

## Photographs

Photos will be taken of each feature and of representative profiles and at other appropriate intervals to supplement the written and graphic records. A sign board with site number, date, unique record number, unit and level/feature designation, scale, and direction of north will be clearly shown in at least two photographs of each unit level, unit wall profile, and feature. A photolog will be kept of all pictures taken.

## Maps

All excavation units will be recorded precisely on the base map. These units can be recorded and mapped using a local site grid, but this base map and site grid must be tied in with the VA State Plane NAD 83 North (WKID: 2283) coordinate system. Features within the project area should be plotted on a topographical map of a scale not less than 1 inch to 100 feet. The archaeological base map should be updated daily showing the datum point(s), excavation units, all structures, and features. Plan view maps will be drawn for each stratigraphic level of each excavation unit, along with at least one wall profile for each unit.



*Mapping a ship (44AX235, Feature 155).*



Maps should readily show:

- The locations and designations (years, unit numbers, and/or coordinates) of previous archaeology conducted at the site, including locations of all test pits, units, and trenches, as well as relevant significant previous findings, when possible
- The locations and designations (unit numbers and/or coordinates) of all test pits, units, and trenches excavated as a result of this project to date
- The locations and designations (feature names and/or numbers) of all significant features encountered archaeologically
- The locations and designations (unit numbers and/or coordinates) of all proposed test pits, units, and trenches

## **Surface Inspection**

Systematic surface inspection surveys are very rare given the nature of a city. If a proposed development project happens to contain enough exposed surface area for a formal surface inspection, consult with Alexandria Archaeology before initiating.

## **Shovel Test Pits**

Because of Alexandria's urban environment, standard, open-area shovel testing procedures may not apply for most projects.

### ***STPs in Open-Area Settings***

When surface visibility is low or the integrity of the soil strata is unknown, Shovel Test Pits (STPs) will be required. STPs are excavated in a systematic pattern across the entire property, in "transects" spaced at regular intervals or in a grid pattern. The distance between STPs may vary according to the size of the property and the topography, but in no case will distances between STPs be greater than 50 feet unless there is a viable reason to expand the interval. Any changes to this protocol must be made in consultation with Alexandria Archaeology. Additional STPs at closer intervals shall be excavated in radials around positive STPs to estimate site boundaries. Two negative radial STPs in each cardinal direction are needed to establish a boundary.

All STP locations should be clearly mapped (in field maps and in the report) in relation to a known datum or fixed reference point. In most instances, one artifact does not constitute a site. However, the single artifact should still be collected as an isolated find and marked on the map. Furthermore, a few brick bits or other anomalous artifacts that cannot in good conscience be called a site, could be recorded as an isolated find or as a "location" and collected.

Each shovel-test hole must be at least 15 inches in diameter and excavated through cultural layers into sterile subsoil. The fill in each STP should be excavated and recorded in natural soil levels. All artifacts recovered should be bagged separately by stratigraphic horizon. All the dirt from the STP should be passed through ¼-inch steel mesh to retain artifacts. Forcibly pushing the soil through the screen while wearing gloves is permissible, particularly if the soil matrix contains a high degree of clay. If in consultation with Alexandria Archaeology an area has been heavily disturbed, or the soil matrix is primarily thick clay, the soil can be trowel sorted instead of screened.

A written record must be made of each STP, typically kept on a standardized form. Information pertaining to each shovel-test hole should include: a unique alpha-numeric designation, grid or transect location, either a profile drawing or detailed description of strata and soil types, Munsell descriptions, depth measurement, and a list of artifacts (both those kept and discarded). Note the environmental conditions under which any testing strategy was employed (for example, adverse weather, condition of ground surface, etc.).

### ***STPs in Urban Settings***

Given the archaeological constraints of heavily developed urban areas in Alexandria, the excavation of systematic STP transects that span a large area are often not possible. However, information derived from shovel test holes is an important source of data in urban settings. Shovel test holes may be necessary when buried surfaces are identified in mechanically excavated trenches. When potentially significant buried surfaces are encountered while mechanically trenching, STPs excavated at 20 ft intervals (or a reasonable interval that establishes coverage of the area) within the trench are standard procedure. The size and depth of the shovel-test hole and processing of the removed fill by screening through ¼-inch hardware cloth is identical to above.

### **Test Units**

Archaeological test units will be excavated in locations appropriate for determining the soil integrity and presence of archaeological resources or features. The units may vary in size from 3 x 3 feet to 5 x 5 feet square or comparable metric equivalents. Test units will be dug in natural stratigraphic (or occasionally in artificial) levels until sterile subsoil or bedrock is encountered. Screening of 100 percent of the soil will be accomplished using 1/4-inch mesh screens unless otherwise outlined in the individual Scope of Work.



*Test unit excavations at Shuter's Hill (44AX175).*



*Mechanical stripping at the Cameron Mills Site (44AX112).*

### **Mechanical Stripping**

Mechanical stripping should be conducted by an experienced operator after pavement or other impervious surfaces have been removed, as well as any modern fill to the depth of archaeological sensitivity. If soil stains, potential buried surfaces, or features are exposed, the trenching must cease until the Consultant archaeologist can determine the proper course of action through close inspection or hand excavation.

## **Mechanical Trenching**

Because of the stratigraphic complexity of many urban settings in Alexandria, mechanical trenching often is a necessary step in the archaeological evaluation of a property. The amount and location of trenches for any given project will be determined in the Scope of Work. In most cases, the excavating equipment must be outfitted with a flat, smooth-bladed bucket, preferably four to five feet wide. Archaeologists must direct the machine operator to ensure that the trenches are not over-dug or resources suffer adverse effects. The objective of most mechanical trenching on projects is to determine the integrity of the soil strata, identify potentially significant buried layers, and the presence of intact archaeological resources. If necessary, open trenches should be shored, stepped, or expanded following OSHA guidelines to allow for safe hand excavation and evaluation.

If features are identified, they must be mapped in plan and drawn in profile. An adequate sample of artifacts must be collected from the layers identified in the trench profiles to allow for dating of fill layers and occupation levels, if present. Before backfilling, each trench should be mapped in plan and one representative soil strata column should be mapped in profile for every 50 feet of trench. Alexandria Archaeology must be given the opportunity to conduct an on-site review of the trenches before backfilling.

Mechanical trenching is appropriate in situations where there is potential to find historic features such as structural foundations, or shaft features such as privies, cisterns, or wells under parking lots or in the backyards of historic properties. The Scope of Work should indicate whether the contractor will provide the operator and equipment.

## **Deep Testing and Excavation**

Deep testing will be employed in cases where there is soil fill in a project area that exceeds five feet in depth. Because of depth, projects requiring deep testing must include a plan for shoring and dewatering as part of the Scope of Work or RMP.

The methods for deep testing are similar to that of mechanical trenching. Trenches will be placed in locations across the property as a means to determine the integrity of the soil strata and presence/absence of archaeological resources. The field supervisor and all on-site personnel must exercise particular caution when working around these trenches. Side walls must be monitored constantly for stability.

An additional form of deep testing are soil borings in settings where the original surface is deeply buried and expected to be impacted by construction.

The archaeology team should also include a geoarchaeologist or geomorphologist with deep profile recordation and interpretation experience.





*Deep testing at the Bruin Slave Jail Site (44AX172).*

## **Feature Excavation**

The specific excavation procedures for buried archaeological features will be explained and justified in each RMP. In most cases, Alexandria Archaeology requires 100 percent excavation of features that likely date to the eighteenth and early nineteenth centuries as well as those features that date to the Civil War period. Sampling strategies for features post-dating the Civil War must be outlined in an RMP. In some cases, after a feature has been bisected, a determination may be made to terminate further excavation in consultation with Alexandria Archaeology. In features, each natural soil level must be excavated as a separate context. Screening of 100 percent of the soil will be accomplished using 1/4-inch mesh screens unless otherwise proscribed in the RMP.

Shaft features, trash pits, middens, or other types of data-rich contexts that predate 1865 or are significant under the Code, and contain intact, well-preserved, domestic evidence including micro-fauna, ethnobotanical data, or micro-artifacts should be water screened and/or floated in full or in part, depending upon the methods outlined in the RMP. Additional testing/sampling may be required including pollen/phytolith, soil chemistry, and parasitological sampling.



*Cellar excavations at the Colross Site (44AX197).*



*Excavating Ship 2 at the Robinson Terminal South Site (44AX235, Feature 155).*

## Geophysical Survey

This type of survey uses less invasive methods, such as ground penetrating radar and magnetic gradiometer, to estimate what is below the surface. These non-invasive techniques are well-suited for sites where excavation is not optimal, such as potential burial ground sites where resources should be protected in place. The Scope of Work for a geophysical survey must specify the instrument type, test intervals, data analysis method, report specifications, data file types, and the operator(s) qualifications. The work plan also should state whether and how the results of this testing would be physically tested or ground-truthed.



*Ground penetrating radar survey at Douglas Cemetery  
(44AX140).*

## Metal Detecting Survey

A Scope of Work, usually for suspected Civil War sites, may require a metal detection survey. The metal detection survey is to be conducted at the top of the natural soil layers after removal of any asphalt, parking lot bedding material, and other fill layers. The level at which the survey will take place may be determined by examination of stratigraphy seen in the trench excavation.

The personnel conducting the metal detection survey must have demonstrable experience and ability to identify sites, such as short-term Civil War era military camps that leave only sparse evidence in the ground. The survey will be conducted by walking transects with a sweep of approximately five feet centered on transects five feet apart. Positive contacts will be marked with pin flags and the area around each positive contact intensely swept to determine if additional cultural materials are located in the vicinity. The pin flag locations should be excavated to determine if the contact is positive for historic ferrous and/or non-ferrous metal artifacts. All positive locations should be recorded on an artifact distribution map that shows and discriminates between locations of military, non-military, and possible dual use artifacts. The area should be detected at least two times, preferably using transect grids that are perpendicular to each other. An inventory of all artifacts recovered will be prepared. The more recent metal artifacts may be discarded after being inventoried unless they relate to potentially significant contexts.



## Digital Documentation: Photogrammetry and Laser Scanning

Occasionally we will require additional documentation. In limited cases we will require or accept laser scanning, etc. as additional forms of field documentation. All work must be completed by a qualified professional with a proven record of successfully completing similar projects, as outlined in the RMP.



*Hotel Indigo Site ship (44AX229, Feature 53). Photo courtesy of Anna Frame.*

## Site Maintenance and Backfilling

All trash will be removed daily. All necessary erosion control measures will be implemented. At the conclusion of fieldwork, all materials and debris resulting from the excavation will be removed by the Archaeological Consultant. At the conclusion of the field portion of the project, all excavation units will be backfilled unless other arrangements have been made with the property owner.

# Artifact Processing

## Conservation

Stabilize all archaeologically significant unstable materials under the direct supervision of a professional archaeological conservator. All conservation decisions and work must be done in consultation with Alexandria Archaeology. A professional conservator must consult during artifact recovery on all sites involving waterlogged artifacts.

Provide full documentation of any conservation work undertaken, including procedures and chemicals used, date undertaken, name of conservator and other personnel directly involved in treatment, and before and after photographs.

## Cleaning and Sample Processing

All artifacts should be cleaned unless they are unstable and require preservation/conservation or may provide more information through specialized analysis in their unwashed state. The list below provides general guidance. Some exceptions exist for artifacts that may provide more information through specialized analysis in their unwashed state. Document all unwashed artifacts. Contact Alexandria Archaeology for questions about exceptions or materials not on the list.

Wet Wash	Dry Brush
Ceramics	Wood
Glass	Leather
Lithics	Textiles
Bone (do not soak)	Fragile objects
Ivory	
Architectural Material Brick	
FCR	
Shell	
Metal	

For artifacts being wet-washed, clean and rinse thoroughly, paying attention to the edges. Take care when handling fragile items such as tin-glazed earthenware, coarse/unglazed earthenware, pre-historic ceramics, overglaze porcelain, and bone (particularly unfused areas). Allow artifacts to dry for at least 24 hours before proceeding to the next step. Ambient humidity and porosity of the object may mean that some artifacts will require additional drying time (for example: a brick in July will need more time to dry).

**Ceramics and Glass:** All ceramic and glass fragments will be thoroughly cleaned with water, except where this may be damaging to the object or for samples set aside for chemical analysis.

**Metals:** Metal artifacts may be washed carefully with a wet brush. Significant unstable metal artifacts should be treated by a conservator. X-radiography should be used to aid in the identification and care of metal objects when appropriate.

**Organic materials:** If organic artifacts are found wet, keep them wet until treatment; if dry, keep dry. Archaeologically significant waterlogged artifacts are to be professionally treated by a conservator. Burial dirt can be removed with swabs or a soft brush, as appropriate. Until conservation treatment takes place, they are to be kept in a freezer or in a holding tank of de-ionized water, changed monthly. A mild fungicide (no more than 3%) can be added to the water as needed. Stable organic materials are to be stored in labeled polyethylene bags with air holes, with proper support provided by acid-free materials such as acid-free trays, ethafoam or acid-free blotting paper.

**Bone and Ivory artifacts:** Stable bone artifacts may be washed in water. Do not immerse.

**Faunal materials:** If bones are in good condition, wash the surface using a soft brush and water. Do not soak in water. You may use a bamboo skewer or similar material (not metal) skewer to clean the inside of a bone if needed.

**Soil sample processing:** Include a list of samples analyzed and analyses undertaken. Include soil samples, pollen samples, and any others.



*Faunal remains from the Bruin Slave Jail Site (44AX172).*



*Personal artifacts from the Bruin Slave Jail Site (44AX172, Feature 50).*

## Labeling

- Label artifacts with the site number and unique record number (context/lot number) or with the site number and feature, unit, and level numbers.
- Alexandria Archaeology accepts artifacts labeled with either paper or ink labels.
- Document the numbering system.
- Label artifacts bigger than a dime. Artifacts that cannot be labeled with B-72/B-67, ink, or paper labels should receive small, archival tags.
- Labels should include site number and unique record number (context/lot) or site number and feature, unit, and level information.
- Label artifacts in an inconspicuous spot.
  - Place labels on the underside or inside of an object, if known.
  - Place labels on an unbroken surface, closer to the edge than the center.
  - Avoid covering diagnostic features like decoration, surface treatment, or manufacturing details.
  - For ceramics: place label on a glazed surface and away from decoration. Never place a label on a broken edge.
  - For dark objects: use printed paper labels or labels written on a white background layer.
  - For patinated glass: place label on the area with the least amount of decay.

Label	Do Not Label
All ceramic sherds	Ferrous metal
Vessel glass	Mortar/daub/plaster
Tobacco pipes	Organics
	Fragile non-ferrous metal
	Polymers (Bakelite, rubber, plastic)
	Window glass

### ***With Paper Labels***

This must be done carefully and follow the procedure below to produce an archival quality label that will not flake off.

- Create and laser print labels on acid free, white paper using Calibri 5-pt font with “Expanded” spacing (in Microsoft Word, right click, select “Font” from the drop down menu, and then under the “Advanced” tab select “Expanded” from the “Spacing” drop down menu).
- Carefully cut artifact labels and place in a location where they will not blow away.
- Put a strip of B-72 on an inconspicuous area of artifacts to be labeled. This strip should be slightly larger than your paper label.
- While the base coat is still tacky, attach the paper label. You may want to use tweezers for this.
- Tap the label down into the B-72 base coat using tweezers or other small tools. Make sure to remove any air from beneath the label.
- Allow to dry for 30 minutes.
- Apply a topcoat of B-72 to seal the label.
- Allow the topcoat to dry for at least 30 minutes.

### ***With Ink***

- Put a strip of Acryloid B-72 in acetone on an inconspicuous area of artifacts to be labeled.
- On dark artifacts, use a base coat of white acrylic.
- Allow this base coat to dry for at least 30 minutes.
- Once this coat is dry, use a permanent black archival-quality ink using a .005 Pigma pen or equivalent to write the site number and unique record number (context/lot number) in small, legible print.
- If you make a mistake, or the lettering is illegible, use Acetone to remove the ink. Use Q-tips to carefully remove the label and let the artifact sit for 5 minutes before relabeling.
- Allow the ink to dry for 15-20 minutes.
- Apply a topcoat of Acryloid B-67 or Acryloid B-72 in acetone to seal the label.
- Allow to dry for 24 hours.



## Cataloguing and Analysis

We are currently working on standardizing how artifact catalogues are formatted and submitted. This eventually will allow us to fully integrate all CRM catalogues into a master database to facilitate interpretation and research. For now, Consultants may submit catalogues using their native format, and at a future date we will provide more specific requirements.

All collections must be catalogued and the inventory should be organized by provenience and must include:

- Site Number or find site
- Context, FS, or lot number
- Detailed provenience information
- Artifact count
- Detailed artifact description
- If applicable, manufacture date range and citation

Additional information may be included in the artifact catalog. The information listed above will allow us to better integrate collections into our existing database.

Analyze and catalogue all discarded artifacts as outlined in the approved SOW. The catalogue must identify and quantify all discarded artifacts and include an annotation that they were discarded and why.

All collections should be accompanied by a digital catalog (.xlsx format) that includes a key clearly translating the labeling system used to record the provenience information. The catalogue should also be accompanied by artifact codebooks, definitions of terms used, and database documentation. The catalogue should contain two main parts: a provenience table and the object inventory. Both should be included as appendices in applicable reports.

The contractor may elect to use the Alexandria Archaeology Laboratory Reference Book, in whole or part. An electronic copy is available online or by contacting the Alexandria Archaeology Collections Manager.

As necessary, Consultants should cross mend ceramic and glass artifacts and calculate minimum number of vessels (MNVs) and assign TPQs to contexts.

## Packaging and Organization

- Provide a list of materials used, an explanation, and justification for the organization system employed.
- Group and bag artifacts by provenience, separated by material within each provenience.
- Place all artifacts in polyethylene, zip-lock bags at least 4 ml thick. Perforate bags to allow air exchange and inhibit the development of unwanted microenvironments.
- Use archivally stable materials for those items requiring special packaging and for appropriate padding and protection.
- Place a label of acid-free card stock, Mylar, or Tyvek within each bag, with site, provenience, and catalogue numbers marked with indelible ink (such as Sharpie or Pigma Pen.). Pre-printed labels can also be used, if printed with permanent ink including that from photocopiers and laser printers.
- Label the exterior of the bag using a permanent marker.
- Artifacts should be grouped by sequential lot number, whenever possible, to increase accessibility for use by researchers
- Artifacts are to be stored in acid free, archival quality, Hollinger-type Record Storage Boxes, 10 x 12 x 15 inches with removable lid, of white, acid free, unbuffered corrugated board. Larger acid free boxes may be used for oversized objects.
- Oversize objects may be wrapped in polyethylene sheeting or padding and placed on a firm acid free surface for flat storage on shelves. If this methodology is not feasible given the size or shape of the object, please contact Alexandria Archaeology for further guidance.
- Label all boxes in the lower right corner of the end panel.
  - The label will consist of a 5 x 8 inches acid free card in a polyethylene sleeve open at the top, such as Associated Bag Co. Press-On Envelope #45-3-35.
  - This label is to be marked clearly with indelible marker or can be printed on a Laser printer or photocopier.
  - The box label will include Site Registration Number, site name or address, and other suitable information regarding proveniences and artifact types included in the box.

## Curating the Collection with Alexandria Archaeology

Help us hold Alexandria's history in trust by donating the archaeological collection to Alexandria Archaeology. Alexandria Archaeology strongly recommends that the owner donate the entire collection to Alexandria Archaeology to ensure its long-term care and preservation, to keep it accessible for continuing research and exhibition, and to avoid repository fees. We discourage the donation of only portions of a collection, resulting in the division of the collection among more than one owner, because the research value of the whole collection is much greater than that of the individual artifacts. We do not charge a curation fee for collections deeded to the City of Alexandria. Alexandria Archaeology recognizes the importance of context for archaeological materials and will thus maintain and preserve field notes, catalogues, research data, reports, and other supporting materials in perpetuity along with the artifact collections.



*Alexandria Archaeology collection storage.*

Archaeological collections recovered as a result of the Alexandria Archaeology Resource Protection Code must be curated at a facility that meets the Federal standards for archaeological curation and collections management as described by 36 CFR part 79, *Curation of Federally Owned and Administered Archeological Collections*. The City's repository meets these standards. These regulations state that a repository has the capability to provide adequate long-term curatorial services based on professional museum and archival practices. The repository must be able to provide acceptable storage conditions, have a curatorial staff, and be able to provide access to the collection to Alexandria Archaeology and to outside researchers within 30 days of notice.

The City of Alexandria, through Alexandria Archaeology, will maintain the collections and related documentation in accordance with Federal and State regulations and American Alliance of Museums Accreditation standards.

**Tax Considerations:** An owner who donates artifacts and other materials may be eligible for tax deductions authorized under various Federal and State laws and regulations. Donors should consult with a tax attorney and the Internal Revenue Service regarding their eligibility for a charitable donation. Alexandria Archaeology does not appraise collections for this purpose.

### Federally Owned Collections, Loans, Curation Fees

The owner may elect to deposit the artifacts at another repository that meets the Federal Standards, either through loan or donation. Repository fees are charged, per box, for collections where ownership is retained by the landowner and where ownership resides with the Commonwealth or Federal governments. The VDHR facility accepts collections from archaeological sites in Virginia and charges a repository fee for all collections. VDHR may then transfer the collections and fee to Alexandria Archaeology, as a loan. The National Park Service and Alexandria Archaeology both accept collections from archaeological sites on federal lands.

## **Loan of Artifacts to Alexandria Archaeology**

Alexandria Archaeology may consider accepting artifact collections as a loan if the owner/developer is unable or unwilling to donate the materials outright in order to facilitate access to the collection. Due to the costs involved in the storage and curation of archaeological materials, Alexandria Archaeology retains the right to assess a fee for the curation of artifacts deposited for loan. A one-time curation fee is charged per box of collections and associated records. Contact Alexandria Archaeology's Collections Manager regarding current fees.

## **Storage of Federally Owned Collections from Alexandria Sites**

Federal agencies retain ownership of collections obtained from their lands and deposit artifacts with Alexandria Archaeology through a Memorandum of Agreement. Sample text for such an agreement is provided in 36 CFD Part 79. A one-time curation fee is assessed for storage of federal collections. Please consult with Alexandria Archaeology's Collections Manager prior to excavation.

## Associated Records

At the conclusion of the project, all associated records will be delivered to Alexandria Archaeology along with the artifact collection. Records are required in three forms: original hard copy, acid-free copy, and a digital copy, as applicable. A finding aid must be prepared and included with the associated records. Complete scanned copies of associated documents will become part of a digital archive intended to make all Alexandria Archaeology records electronically searchable.

PDFs are required of all documents for public dissemination. An editable version of the report is also required so that typographical errors can be corrected if brought to our attention. No substantive changes will be made by Alexandria Archaeology.

Paper documents will be placed in acid-free file folders. The folders are to be stored in acid-free Hollinger-type Record Storage Boxes, 10 x 12 x 15 inches with removable lid, of white, acid free, unbuffered corrugated board.

All digital records, including photos, GIS shapefiles, scanned notes, reports, etc. may be submitted via USB, Cloud file sharing platform, or on one or more CDs or DVDs, labeled with site name, site number, and description of contents.

Type of Record	Digital File Format and Specs
Project Background and Historic Research Files	<ul style="list-style-type: none"><li>• .pdf and .docx</li><li>• Historic images, documents, etc. in .tif format</li></ul>
Artifact Catalog	<ul style="list-style-type: none"><li>• .xlsx</li><li>• Other database exported to comma-delineated or columnar format</li></ul>
Field Records: STP/Unit/Feature/Trench forms, field notes, photo log	<ul style="list-style-type: none"><li>• usually .pdf</li><li>• .xlsx if applicable</li></ul>
Lab Records (conservation analyses, artifact drawings, catalog documentation)	<ul style="list-style-type: none"><li>• .pdf</li></ul>
Maps	<ul style="list-style-type: none"><li>• .tif for images</li><li>• Zipped shapefile or file geodatabase</li></ul>
Final Report and Public Summary	<ul style="list-style-type: none"><li>• .pdf</li><li>• .docx</li></ul>
Report Graphics (each saved as a separate file)	<ul style="list-style-type: none"><li>• .tif</li><li>• Minimum 300 dpi resolution</li></ul>



Type of Record	Digital File Format and Specs
Historic Signage	<ul style="list-style-type: none"> <li>• .pdf</li> <li>• Commonly editable file format (.pptx or Adobe InDesign)</li> </ul>
Field and Lab photos	<ul style="list-style-type: none"> <li>• .jpeg</li> <li>• digital negative (ex .nef)</li> <li>• Minimum 300 dpi resolution</li> </ul>
Photogrammetry	<ul style="list-style-type: none"> <li>• Original and unchanged photos <ul style="list-style-type: none"> <li>• .jpeg</li> <li>• digital negative (ex .nef)</li> <li>• Original and unchanged EXIF data</li> </ul> </li> <li>• Control point metadata in .xlsx format</li> <li>• High resolution version <ul style="list-style-type: none"> <li>• Original point cloud in .las format</li> <li>• Full resolution 3D textured model in .obj format</li> </ul> </li> <li>• Web optimized version <ul style="list-style-type: none"> <li>• Reduced in size for public outreach</li> <li>• use across platforms and mobile friendly</li> <li>• .stl, total file size less than 200MB</li> </ul> </li> <li>• File size and type specifications may change as the technology changes and will be addressed in an RMP</li> </ul>
Laser Scanning	<ul style="list-style-type: none"> <li>• Raw data point clouds (.xyz or .ply)</li> <li>• Wire mesh of point cloud data (.xrl and .stl)</li> <li>• Web optimized version</li> </ul>
Geophysical Survey	<ul style="list-style-type: none"> <li>• File formats in consultation with AA</li> <li>• Open source, readable, archival stable data</li> </ul>

## Photography

Digital photographs will be curation quality and submitted in both .jpg and digital negative formats. Submitting duplicative, non-descript, and non-essential photographs will delay a collection's acceptance. A photo log or finding aid listing each digital image will be provided, with descriptions if deemed necessary for identification of the images. Photographs will be named following the standards listed below and metadata will be included for several fields. A photo management program like Adobe Bridge will make this process easier for the Consultant.

### File Names

- File names should include the site number, source code, and topical code appended to the original file name.
- You MUST rename both the .nef and .jpg version of the same image identically.
- **Site:** AX###
- **Topical Code**

This allows for quick sorting of photos and follows existing Alexandria Archaeology naming and coding conventions.

ARTB = Artifact, Bone	FR = Field Record
ARTC = Artifact, Ceramic	FW = Field Work
ARTG = Artifact, Glass	LW = Lab Work
ARTO = Artifact, Other	SLS = Sitescape

- **Source Code**

AAP = Alexandria Archaeology Phone

NAA = Not Alexandria Archaeology- use this for all photos taken by contract firms

No code = Alexandria Archaeology camera

- Complete example: **AX235\_FR\_NAA\_DSC\_0064**

### Metadata

- **Format standards:** Keeping with these standards will increase the integrity of search response.

Periods: omit all periods when inputting data, commas are acceptable

Abbreviations: Spell out Street, Avenue, Lane, Boulevard, North, South, East, West (exception: South St Asaph Street – leave off period)

Date: dd/month/year (18 May 1990)

- You MUST add the same metadata to both the .nef and .jpg versions of the SAME image
- Edit the following International Press Telecommunications Council (IPTC) core fields:

***Creator:*** Put in the photographer's name, if known. CRM firm name is acceptable.

***Title:*** The title in metadata will be the same as the file name without the .nef or .jpg. Example: 175\_FR\_DSC\_0064

***Description:*** Enter the full name of anyone in the picture and their affiliation, the subject of the photograph and provenience, and cardinal direction. This information can be found in the field photo log. Example: Fran Bromberg, Profile of bisected posthole, Facing N.

***Location:*** Physical Street Address, Site Name, Full Site Number. Example: 307 South St Asaph Street, Shreve House, 44AX108

If an image has copyright permissions or credit line information, put this information in the ***copyright notice*** and ***copyright status*** fields

## Mapping and GIS

Background Documentary Studies and Evaluation Reports shall include Ground Impact Maps in addition to the narrative. The Ground Impact Maps should be used to develop a testing strategy. They should clearly illustrate why specific recommendations are made in the report and show areas of potential archaeological significance.

A graphic (or graphics) in the report that should readily convey to the reader:

- The locations and depths of the proposed construction disturbances (including, but not limited to, structures, roads, grading/filling, landscaping, utilities)
- The impact of the proposed construction activities on all known cultural and natural features
- The suspected locations of features discovered as a result of the background documentary study (including, but not limited to, historic structures, historic topography, and water systems)
- The locations of any known previous disturbances to the site (including, but not limited to, changes in topography, grading and filling, previous construction activities)

The scale of the overlay map(s) will be large (such as 1 inch to 100 feet). The map(s) will depict the locations of features discovered as a result of the background documentary study (including, but not limited to, historic structures, historic topography, and water systems), the locations of any known previous disturbances to the site (including, but not limited to, changes in topography, grading and filling, and previous construction activities), and the locations and depths of the proposed construction disturbances (including, but not limited to, structures, roads, grading/filling, landscaping, and utilities). From this information, a final overlay map shall be created that indicates the areas with the potential to yield significant archaeological resources that could provide insight into Alexandria's past and presents specific recommendations for the archaeological testing strategy. This map will indicate locations for backhoe scraping or trenching, hand excavation, and/or monitoring. The recommendations will be based upon the specific criteria for evaluating potential archaeological significance as established and specified in the Alexandria Archaeological Protection Code. After the recommendations are approved by the City Archaeologist, the Consultant shall prepare a budget for the required testing.

In addition to all paper field maps (site plan/base map, unit plan views, profiles, etc.) and maps submitted as graphics in reports, the following GIS data should be submitted to Alexandria Archaeology:

- A shapefile with a polygon(s) representing the project area
- A shapefile with a polygon(s) representing the site boundary
- A shapefile(s) with -points representing each shovel test excavated and polygons representing each test unit, trench, or other excavation unit excavated
- A shapefile(s) with polygons representing the location and shape of every feature encountered on the site

At a minimum, these shapefiles will contain the following attributes:

- **Project Area Shapefile**
  - **Project name**
  - **Name of archaeology consulting firm**
  - **Title of report (if applicable)**
- **Site Boundary Shapefile**
  - **Tripartite site number as assigned from DHR, in the format 44AXxxx.**
  - **Site name as registered with DHR**
  - **Site type**
- **Shovel Test, Test Units, Trenches, etc. Shapefile**
  - **Number/name of excavation unit exactly as it appears in the artifact catalog and/or report**
  - **North coordinate of excavation unit (VA State Plane NAD 83 North)**
  - **East coordinate of excavation unit (VA State Plane NAD 83 North)**
  - **North coordinate of excavation unit (site grid, if different than VA State Plane NAD 83 North)**
  - **East coordinate of excavation unit (site grid, if different than VA State Plane NAD 83 North)**
  - **Subarea of site (if applicable)**
  - **Any additional comments**
- **Features Shapefile**
  - **Feature number exactly as it appears in the artifact catalog and/or report**
  - **Type of feature**
  - **Any additional comments**

All data should be submitted to Alexandria Archaeology as zipped shapefiles and conform to Virginia State Plane NAD 83 North.



## Report Format and Specifications

All reports must conform to certain specifications: all pages must be numbered and prepared in a manner comparable to the manuscript submission requirements for current professional archaeological journals and will be copy edited thoroughly before submission.

The archaeological evaluation and/or final full report will present the complete results of documentary study and archaeological field investigation. The text will fully explain the project methodology and rationale. The research design will be presented, including the questions/problems addressed by this research and the resulting contributions to knowledge. Reports must contain complete descriptions of field and lab results. Archaeological evaluation reports will draw documentary research and archaeological research together to evaluate the significance of all features and structures and recommendations for future research. Reports will include an overlay map of the project area with all surface features clearly identified.

Reports for projects that require specialized studies will include both the complete subconsultant report as an appendix and provide a synthesis of the results in the main body of the archaeological evaluation report or final report.

In addition, all reports must adhere to the following conditions:

- All photographs must be of high quality, showing details of the field operation, structures, test excavation units, and features.
- If the report has been authored by someone other than the contract principal investigator, the cover and title page of the report must bear the inscription: "Prepared under the supervision of (Name), Principal Investigator." The principal investigator is required to sign the original copy of the report.
- If the report has been authored by someone other than the contract principal investigator, the principal investigator must at least prepare a forward describing the overall research context of the report, the significance of the work, and any other circumstances relating to the manner in which the work was undertaken. The authors are to be clearly identified on the title page.
- Both an illustrated Public Summary and an abstract must be included. These should present a summary of project actions, an evaluation of the potential or discovered archaeological resources, a statement of the significance of the investigation, and any recommendations for further work.
- The Public Summary should be approximately four pages long with a few color illustrations. It should be prepared in a style and format that is reproducible for public distribution and use on the City's web site. It must include the Site Number as part of the title or first sentence, the name and contact information for the consulting firm, name of the Applicant for whom the study was conducted, and the name of the authors or principle investigator.

Section	Documentary Study & Archaeological Recommendations	Archaeological Evaluation Report	Full Final Report
Title Page	x	x	x
Public Summary	x	x	x
Table of Contents List of Figures List of Tables	x	x	x
Abstract	x	x	x
Acknowledgements	x	x	x
Introduction (project location and description, historic context, and research questions)	x	x	x
Methodology	x	x	x
Documentary Research Results (chain of title, tax and census information, and/or other sources)	x	If new research conducted.	If new research conducted.
Recommendations	x	RMPs	
Field Results		x	x
Laboratory Results/Artifact Analysis		x	x
Interpretation of Archaeological and Documentary Research		x	x
Conclusions	x	x	x
Historic and Contemporary Photographs (embedded in text or at end of report)	x	x	x
Ground Impact Map or series of maps showing identified resources (embedded in text or at end of report)	x	x	x
Data Table and Charts (embedded in text or at end of report)	x	x	x
References	x	x	x
List of Personnel	x	x	x
Site Registration Form(s)		x	x

Section	Documentary Study & Archaeological Recommendations	Archaeological Evaluation Report	Full Final Report
Resource Management Plan(s)		x	x
Artifact Catalog		x	x
Subconsultant Reports (if applicable)		x	

## **Sharing the Information with the Public**

The goal of Alexandria’s community archaeology program is to inspire stewardship of the past while creating a sense of adventure about what lies beneath modern Alexandria. Alexandria Archaeologists are actively engaged in presenting research to residents, visitors, and students in a variety of ways. Applicants and Consultants are an integral part of the community archaeology process. In order to provide thoughtful and meaningful content, we ask that Consultants and Applicants consult with Alexandria Archaeology before publicly announcing their work and finds in any public forum—including social media and with the press. This is to ensure that the discovery is announced in a coordinated manner and that the site and discovery can be protected. In Alexandria, public interpretation can take many forms including interpretive signs, architectural and landscaping elements, lessons and other educational activities, and more innovative digital programming.

### ***Historic Interpretive Signage***

Many projects that require archaeological work— and even some important places and sites that do not —will be required to present that information to the public through our Alexandria Heritage Trail program. This includes a fixed interpretive sign and inclusion of that sign on the Office of Historic Alexandria website. Consultants and Applicants **MUST** coordinate with Alexandria Archaeology before writing text and selecting images as well as throughout the sign making process. The Consultant will supply the text, graphics and captions, and general overview of their arrangement before fabricating the sign for Alexandria Archaeology to review. An internal version of the sign with text and image citations/references will be provided to Alexandria Archaeology for permanent curation. A second version of the sign, saved as a PDF, will be submitted and marked **FINAL**. Alternatively, Applicants may opt to have Alexandria Archaeology create the signs for a one-time fee. Contact Alexandria Archaeology to make arrangements.

### ***Text***

- The sign should consist of two text blocks not to exceed 250 words each.
- The upper left block provides a broad overview of the site. This section should address the site’s significance, key dates and activities, and historic context.
- The lower right block addresses the material culture, archaeology, architecture, oral history, and archival information. This block should show the evidence used to study this site and encourage the reader to appreciate the role of archaeology, ethnography, and history in preserving places and information.
- A credit line will be included that lists the Applicant, Consultant, and Alexandria Archaeology.

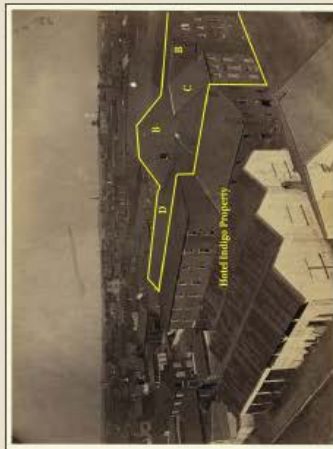
## ***Graphics***

- 3-6 graphics.
- Line drawings (e.g., site maps, feature drawings), historic photographs and maps, other illustrations (e.g., site or artifact photos), and other items that can be used as images (e.g. poems, newspaper quotes).
- Graphics must be in electronic format at 2400 ppi level of resolution for slides at 100% and a minimum of 300 ppi for color or black and white prints. at 100% of original size. 600 ppi for line art at 100%.
- The Consultant will obtain all copyright releases, provide copyright releases if necessary, and provide credit for each graphic.
- All graphics should be accompanied by a caption that includes the title and source of the image. Captions should also provide some explanatory text of the image and how it relates to the broader story and themes of the sign.



# INDUSTRIALIZATION OF THE STRAND

During the 19th century, numerous entrepreneurs gradually improved the lots and expanded the warehouses and wharves associated with the 200 block of the Strand. Josiah Davis owned many properties along Alexandria's waterfront and bought property at present-day 211 Strand Street specifically to open a plaster mill in 1822, which he operated until 1875, except during the Civil War. His warehouse contained a steam engine, a boiler, and machinery for grinding plaster. He was also involved in ship chandlery, the procurement of supplies for ships and their crews, and the lumber business.



Born in Alexandria in 1821, William Moore, a conchman, operated an iron and brass foundry from 1852 to 1897 on Union Street across from this property, but the machine and pattern storage warehouses (C and D) were located here. The building consisted of four stories with patterns stored on the third and fourth floors, while his 25 employees operated lathes and other machinery on the first and second floors. He produced many kinds of iron and brass castings and had customers throughout the country. ("Alexandria from Pioneer Mill, looking north-west", March 1865 Photograph, Courtesy of the Library of Congress, Prints and Photographs Division).

**FOUNDERS AND MACHINISTS.**

**W. S. MOORE,**

**Machinist, Iron and Brass Founder**

**SHIPSMITH AND BLACKSMITH.**

(OLD DOMINION WORKS)

No. 59 and 65 Union Street, Alexandria, Va.

Will furnish and repair all kinds of Machinery, Iron and Brass Castings, Wrought and Cast Iron Pipes, Mill Work, Foundry, Blacksmithing, and all kinds of Mill Work made and repaired at the shortest notice, and at reasonable prices.

The highest market price paid for Old Wrought and Cast Iron, Brass and Copper.

je21

Alexandria Gazette 6 August 1888

## ARCHAEOLOGICAL EVIDENCE OF A WORKING SEAPORT

By the latter decades of the 19th century Alexandria's waterfront was becoming increasingly industrialized. Archaeological excavations uncovered evidence of some of these burgeoning industries on the property. For example, the Sanborn Fire Insurance Map showed four warehouses on the property in 1885, but by 1896, Warehouse A had been demolished and was used by DeWilton Aitcheson for his coal yard. Annie Moore continued to operate her

husband's business after he died in 1894. Warehouse D continued to be used for pattern storage, but Warehouse C was converted into a blacksmith shop. The warehouse foundations uncovered during archaeological excavations also defined the two alleys that historically ran between Warehouses A and B and between B and C. Historic alleyways would have given waterfront access to merchants occupying buildings across the entire property.



"Bird's eye view of Alexandria, Va." by Charles Magnus (1863) showing the full 200 block of the Strand. The Watermark property, outlined in yellow, contained three buildings that founded the Strand. (Courtesy of the Library of Congress, Prints and Photographs Division).



1896 Sanborn Fire Insurance Map of Alexandria (Weiland Studios and Solutions, Inc.).

## THE 1897 FIRE

In 1897, a fire destroyed most of the 200 block of the Strand. It began in the engine room of Herbert Bryant's bone mill, located on the east side of Strand Street, present-day Point Lumley Park. Only one building east of Union Street survived the blaze.

"It was first supposed that the fire could be confined to the mill, which is of brick...before it could hardly be realized, the devouring element had crossed the Strand via the tramway connecting the mill with the frame warehouse on the west...in a short time the entire square was a roaring furnace...Herbert Bryant says there is no doubt in his mind that the fire was of incendiary origin". - Alexandria Gazette 3 June 1897

After the fire, DeWilton Aitcheson bought some of the newly empty lots primarily on the north side of the block to add open space to his business, the D.W. Aitcheson Coal & Wood Yard (also known as Aitcheson Fuel Co.). He cleared much of the destroyed warehouses and built a new office, new warehouses, and a railroad switch. Further improvements to the property included the addition of a stable in 1902 and a tannery in 1907. After Aitcheson's death in 1925, the property passed to Mary Williamson who owned and maintained the property and business until her death in 1962. She left the business to Beverly D. Turner, who added a gas pump for cars and air conditioning services until Aitcheson Fuel Co. finally closed in 1978.

Alexandria Gazette 20 February 1899

**NOTICE!**

**COAL!!!**

We have received notice from the whole-sale dealer that the advance of 25¢ per ton on coal.

**WE WILL NOT ADVANCE**

this price to our customers. We have a large stock of the best grades on hand—CLEAN, 2240 pounds to the ton. **GUARANTEED.**

**DeWilton Aitcheson.**

—OFFICE—Deke and Fairfax streets.  
—PHONE 95. Jan 4, 19, 21, 23, 29



CITY OF ALEXANDRIA EST. 1749

Historic interpretive sign for the 211 Strand Site (44AX237).



## ***Architectural and Landscape Components***

Alexandria Archaeology encourages Applicants and Consultants to incorporate historical character and archaeological research into a project through architectural elements or the landscape design. Applicants and Consultants should discuss their ideas with Alexandria Archaeology and Department of Planning and Zoning.



*Architectural and landscape interpretive elements at the Belle Pre Site (44AX215).*



## ***Alternative Forms of Interpretation***

Alexandria Archaeology encourages Applicants and Consultants to consider alternative modes of interpretation beyond signage. Lesson plans, public programming, and digital components such as StoryMaps, online interactive reports, or virtual exhibits provide innovative ways for the public to engage with Alexandria's rich archaeological heritage. Applicants and Consultants should discuss any alternative forms of interpretation with Alexandria Archaeology.



*Public outreach during excavations of ships at the Robinson Terminal South Site (44AX235).*



*City staff, contract archaeologists, conservators, and volunteers after excavating Ship 3 at the Robinson Terminal South Site (44AX235, Feature 159).*

## Appendix: Forms

1. [Archaeological Preservation Certificate](#)
2. [Checklist of Supplemental Approvals for Excavation](#)
3. [Supplement Approvals for Excavation Signature Page](#)

# Appendix: Archaeological Preservation Certificate



## ARCHAEOLOGICAL PRESERVATION CERTIFICATION

Project:

Date:

Address:

Contact:

Phone Number(s):

Address:

---

ATTACH MAP:      impact areas: **red**  
archaeological excavation areas: **green**

---

resource areas: **blue**

1. Proposed Development Action(s):

Expected Date: \_\_\_\_\_

☐

Demolition

☐

Construction

☐

Grading

☐

Filling

☐

Utility Trenches

☐

Other (specify) \_\_\_\_\_

2. Statement of Archaeological Significance:

☐

Determined significant

☐

Potentially Significant

☐

No Significance

Description:



### 3. Archaeological Impact:

- ☐ Proposed action will alter or destroy significant resources.  
☐ Proposed action will not affect significant resources.  
☐ Unknown until testing occurs

Description:

#### 4. Proposed Archaeological Preservation Action:

- ☐ Test and then conduct data recovery, if warranted
- ☐ Data Recovery (attach methods and design)
- ☐ Sampling (attach strategy)—see below.
- ☐ Recordation (attach methods)
- ☐ No preservation actions

Description:

5. Coordination and Scheduling of Archaeological Work in Relation to Proposed Action:

6. Dates of Fieldwork: From \_\_\_\_\_ to \_\_\_\_\_  
m. d. y. m. d. y.

I certify to the best of my knowledge that the above information is accurate and that the proposed actions will not endanger archaeological resources which may be significant for our understanding of Alexandria’s heritage.

_____	_____
Date	Name
	_____
	Job Title and Company Name
	_____
	Address
	_____
	Telephone

APPROVED BY CITY ARCHAEOLOGIST:

_____	_____
Date	City Archaeologist

**THIS CERTIFICATION IS IN EFFECT**  
**FROM** \_\_\_\_\_ **TO** \_\_\_\_\_  
          m. d. y.           m. d. y.

# Appendix: Checklist of Supplemental Approvals

## City of Alexandria Checklist of Supplemental Approvals for Archaeological Excavation

Project Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. Will you be excavating within 10 feet of a tree that is 6 or more inches in diameter at breast height?

\_\_\_\_\_ NO - Go to Question 2.

\_\_\_\_\_ YES - All trees that are 6 or more inches in diameter at breast height must be accurately located and identified on the testing strategy map, including species and size information (trunk diameter and DBH). Also, include a statement of how trees will be protected. (Tree Protection Plan) in the archaeological Scope of Work. Submit a copy of the testing strategy map and Tree Protection plan to the City Arborist for his review, and obtain his signature.

2. Will the archaeological activities governed by your Site Plan disturb 2500 or more square feet of soil?

Total Length \_\_\_\_\_ feet x Total Width \_\_\_\_\_ feet = \_\_\_\_\_ square feet of

Test	Units	Machine	Trenches
------	-------	---------	----------

Depth of Excavation \_\_\_\_\_ feet.

\_\_\_\_\_ NO - Go to question 3.

\_\_\_\_\_ YES - You must provide the City of Alexandria Department of Transportation and Environmental Services (T&ES) with an erosion control plan. Indicate the ground disturbance locations, the depth of disturbance, and the placement of erosion control devices (e.g., siltation fences). This plan must be approved by the Site Plan Coordinator.

3. Will you be digging in a Resource Protection Area designated by the Chesapeake Bay Preservation Act? Chesapeake Bay Preservation Act Regulations, with maps, are available at Alexandria Archaeology, and in City Hall, Room 4130.

\_\_\_\_\_ NO - Go to Question 4.

\_\_\_\_\_ YES - If you will be digging any amount of soil in a RPA, you come under provisions of the Chesapeake Bay Preservation Act. However, archaeology may be exempted from the provisions of this act. To receive a exemption, write a letter of request to Thomas F. O’Kane, Director of T&ES, Box 178, City Hall, Alexandria, VA 22313.

4. Will you be digging trenches deeper than 5 feet, or into Marine Clay?

\_\_\_\_\_ NO - Go to Question 6.

\_\_\_\_\_ YES - OSHA regulations require all trenches deeper than 5 feet to be shored, or stepped back. Trenches in Marine Clay must also be shored or stepped back. Present a summary of which method(s) you will use in the excavation to the Site Plan Coordinator, or his representative, for his approval.

5. Do the historic land uses on your property or information gathered by the project developer indicate that contaminated soils may be present? If your historical data is inconclusive, consult the map of suspected contamination sites and the 1945 aerial photograph series in Room 4130 of City Hall.

\_\_\_\_\_ No - Go to Question 5.

\_\_\_\_\_ Yes - If contaminated soils are found, appropriate steps must be taken to preserve the health of the excavators, and to protect the ground water. Do not backfill contaminated soil into non-contaminated soil strata.

A. Ground water protection measures should be included in the Soil Erosion Plan. If you do not need to file a Soil Erosion Plan, present a statement of how you plan to contain the toxic excavated material to the Site Plan Coordinator, for his approval.

B. Excavators must have the proper training and equipment to protect them from harmful pollutants present on some industrial and landfill sites. Present a written summary of your planned Health and Safety measures to the Environmental Quality Manager (Health Department) or his representative, for his approval.

6. Are there known or suspected burials on your site? Do you plan to excavate the burials?

\_\_\_\_\_ NO

\_\_\_\_\_ YES – A court order must be obtained to exhume human remains. You must also obtain a permit from the Virginia Department of Historic Resources, in accordance with VR 390-01-02. Copies of VA 390-01-02 are available at Alexandria Archaeology. The Virginia Department of Historic Resources is a legally interested party in any request for a court order to remove an historic cemetery.

#### REMINDERS

Don't forget to call Miss Utility (703) 559-0100) to clear your excavations.

All field personnel working with heavy machinery and/or contaminated soil should wear proper protection (e.g., hard hats, gloves, etc.). Everyone must comply with all OSHA standards.

I certify to the best of my knowledge that the above information is accurate.

_____	_____
Date	Name
	_____
	Job Title and Company Name
	_____
	Address & Telephone Number

# Appendix: Supplement Approvals for Excavation

## City of Alexandria Supplemental Approvals for Archaeological Excavation

Project Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. Who signs?: Bob Williams, Division Chief, Natural Resources, 703-746-4688.

[Bob.Williams@alexandriava.gov](mailto:Bob.Williams@alexandriava.gov)

Impact of ground disturbance on existing trees: The applicant has obtained my approval of the excavation strategy and submitted an acceptable tree protection plan (copy attached), if necessary.

\_\_\_\_\_  
Signature & Date

2. – 5A. Who signs?: Brian Dofflemyer, Development Review Manager, T&ES, 703.746.4025.

[Brian.Dofflemyer@alexandriava.gov](mailto:Brian.Dofflemyer@alexandriava.gov)

Soil Erosion Control: An approved erosion control plan is on file with the Department of Transportation and Environmental Services, if necessary.

\_\_\_\_\_  
Signature & Date

Chesapeake Bay Preservation Act: A letter of exemption from the provisions of this act is attached, if necessary.

\_\_\_\_\_  
Signature & Date

Deep Trenching or Marine Clay: An approved plan for shoring or stepping back the trenches is attached, if necessary.

\_\_\_\_\_  
Signature & Date

Contaminated Soil: An approved plan for protecting ground water/soils is attached, if necessary.

5B. Who signs?: Khoadinh Tran, Environmental Quality Division, T&ES, City Hall, Room 3900, 703-746-4076, [Khoadinh.Tran@alexandriava.gov](mailto:Khoadinh.Tran@alexandriava.gov)

Contaminated Soil: An approved plan for protecting workers' health and safety is attached, or is part of the approved erosion control plan, if necessary.

\_\_\_\_\_  
Signature & Date

6. Who signs?: Eleanor Breen, City Archaeologist, 105 N. Union Street, #327, 703-746-4399.

[Eleanor.Breen@alexandriava.gov](mailto:Eleanor.Breen@alexandriava.gov)

Burials: Appropriate court orders and VDHR permits are attached, if necessary.



# Appendix: Checklist of Deliverables

## Transmittal Form and Checklist of Deliverables

Site #: 44AX _____	Contact name: _____
Project Name: _____	Contact phone #: _____
Project Address: _____	
Delivery Date: _____	Accession # _____

Number of boxes of records: _____	
Number of boxes of artifacts: _____	
Deed of Gift:	Yes                      No
Repository Fee Amount: _____	
<i>(to be completed by Alexandria Archaeology)</i>	
Delivered by (signature): _____	
Accepted by (Signature): _____	

*Please place a checkmark next to all items in this delivery.*

☐ **Completed Checklist**

☐ **Legal Document for Transmittal of Collections**

- ☐ Deed of Gift
- ☐ MOU/MOA
- ☐ Loan Form
- ☐ Other \_\_\_\_\_

☐ **Final Report**

- ☐ **One unbound copy**
- ☐ **Four bound copies**
- ☐ **PDF**
- ☐ **Electronic document in editable format**
- ☐ **Electronic copies of graphics**, each saved as separate file.

☐ **Public Summary**

- ☐ **Included in Final Report**
- ☐ **One hard copy** (submitted separately from report)
- ☐ **PDF** (submitted separately from report)

- ☐ **Site Registration form**
  - ☐ **Included in Final Report**
  - ☐ **One hard copy** (submitted separately from report)
- ☐ **Collections Catalogue**
  - ☐ **Included in Final Report**
  - ☐ **One hard copy** (submitted separately from report)
  - ☐ **PDF** (submitted separately from report)
  - ☐ **Spreadsheet or Database**
  - ☐ **Documentation for catalogue**
- ☐ **Historical Marker Text and Graphics**
  - ☐ **Electronic copy of text and graphics in editable format**, including captions and credit for graphics.
  - ☐ **Electronic copy of text and graphics as a PDF marked FINAL**, including captions and credit for graphics.
  - ☐ **Electronic copy of text and graphics in an editable format**, including captions and credit for graphics AND citations/references/sources for text.
  - ☐ **Electronic copies of graphics**, each saved as separate file.
  - ☐ **Copyright releases** for all graphics (as may be legally necessary).
- ☐ **Associated Records**
  - ☐ **Finding Aid**
  - ☐ **Digital versions of all associated records**
  - ☐ **Paper records**
    - o **Original records**, stored as specified above
    - o **A complete, legible copy of all records**
  - ☐ **Maps**
  - ☐ **Digital submission of all GIS data**
- ☐ **Photographs**
  - ☐ **Digital copies of all photographs and images**
  - ☐ **Photo log** listing each digital image and a brief description
- ☐ **Collections**
  - ☐ **Hollinger Record Storage Boxes** (number of boxes \_\_\_\_\_)
  - ☐ **Oversize boxes** (number of boxes; size \_\_\_\_\_)

If collections are not delivered to Alexandria Archaeology Storage Facility, please provide the following information.

<b>Approved Repository</b>	<hr/>
Repository Contact	<hr/>
Repository Address	<hr/>
	<hr/>
Repository Tel #	<hr/>
Repository e-mail	<hr/>
Date delivered	<hr/>
Number of boxes delivered	<hr/>

# Appendix: Personnel Qualifications

Applicants must hire a qualified professional Archaeological Consultant for projects that require some form of mitigation. Alexandria Archaeology cannot endorse or recommend individual firms. A list of qualified archaeological resource management firms that have conducted work in the Northern Virginia area can be found on the Alexandria Archaeology webpage at <https://www.alexandriava.gov/historic/archaeology/default.aspx?id=39440>

The City of Alexandria observes the professional qualification standards for historic preservation as developed at the federal level under the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation and 43 CFR Subtitle A [10- 1-05 Edition], Section 7.8* (<https://www.govinfo.gov/content/pkg/CFR-2005-title43-vol1/pdf/CFR-2005-title43-vol1-sec7-8.pdf>). In order to supervise an archaeological project or serve as the principal investigator, the Secretary's minimum professional qualifications in archeology require a graduate degree in archaeology, anthropology, or closely related field plus:

1. At least one year of fulltime professional experience or equivalent specialized training in archaeological research, administration, or management
2. At least four months of supervised field and analytic experience in general North American archaeology
3. Demonstrated ability to carry research to completion, as evidenced by timely completion of theses, research reports, or similar documents
4. Demonstrated ability to plan, equip, staff, organize, and supervise activity of the type and scope proposed
5. Completion of at least 16 months of professional experience and/or specialized training in archaeological field, laboratory, or library research, administration, or management, including at least four months experience and/ or specialized training in the kind of activity the individual proposes to conduct under authority of a permit
6. One year of full-time professional experience at a supervisory level in the study of archaeological resources of the prehistoric period or historic period, depending on the area of specialization.

The individual supervising and directing the project must be appropriately qualified, as evidenced by training, education, and/or experience, and possess demonstrable competence in archaeological theory and methods and in collecting, handling, analyzing, evaluating, and reporting archaeological data, relative to the type and scope of the work proposed. Curriculum vitae of all project staff (including archaeological technicians) must be on file with Alexandria Archaeology before documentary or archaeological investigations commence. No substitutions of staff without submission and approval of their qualifications will be allowed. In most cases current membership in the **Register of Professional Archaeologists** and/or the **Council of Virginia Archaeologists** (with appropriate emphases and experience) are sufficient credentials for conducting archaeological research. These organizations have an accreditation process in order to become a member and have standards that are similar to the federal standards, but slightly more rigorous, and include adherence to standards of

performance and ethics. Applicants should strongly consider whether the principal investigator(s) on a Consultant's team is a member of one or more of these professional organizations. No field work will be conducted without the direct supervision of a qualified archaeologist.

### **Professional Qualifications, Additional Guidance**

In addition to a principal investigator, project teams will be comprised of one or more of the professionals listed below. Beyond the minimum qualifications described above, Alexandria Archaeology recommends seeking Consultants with the additional experience listed below. Suitable professional references should be included to obtain estimates regarding the adequacy of previous work.

### **Field and Laboratory Director**

The field director, assisting the principal investigator, is responsible for the implementation of the field methods as outlined in the work plan and directed by the research design and should have at least 18 months of full-time experience in survey, excavation, and laboratory processing/analysis. Six of the 18 months must be in a supervisory capacity. Laboratory directors should have between five and ten years of experience in supervising archaeological laboratory activities, including sorting, curation, and analysis of archaeological materials; in planning and implementing lab strategies, processing, and cataloging artifact collections; and familiarity with Alexandria and Virginia curation standards. Archaeologists in these positions must have demonstrable experience in excavation and artifact analysis of sites of a similar time period (i.e., prehistoric or historic), region, and site type (e.g., maritime, African American mortuary, and/or industrial) to those that are expected to be surveyed and/or excavated in the proposed project. The City Archaeologist may approve a field or laboratory director who does not have previous experience with the particular site type if a Consultant with the specialized experience is hired to assist the director.

### **Field and Laboratory Supervisor**

Persons working in this capacity under the direct supervision of an archaeologist have an important place in the recovery of the archaeological record. It is at this level that consistent and accurate recovery of archaeological data occurs. The minimum qualifications for a field or laboratory supervisor are a bachelor's degree in archaeology, anthropology, history, or a closely related field; and six months of full-time experience in archaeological research, at least two of which must have been in North America. This experience may have been gained through paid positions, completion of an archaeological field school or other certifiable training, such as volunteering with a professional archaeological organization. These supervisors must have demonstrable experience in excavation and artifact analysis of sites of a similar region, time period, and site type to the sites expected to be surveyed and/or excavated and analyzed in the proposed project. References for training and/or work experience must be included in the curriculum vitae submitted to Alexandria Archaeology so that confirmation of the required training and/or work can be verified.

### **Archaeological Technician**

Archaeological Technicians (field and laboratory crew members) should be no less professional than other members of the archaeological team. Their CV must document at least two months of supervised field and/or laboratory training in North American archaeology, in a paid position, as a student in



an archaeological field school (of at least four weeks in length), as a volunteer with a professional archaeological organization, or by other certifiable means. References for training and/or work experience must be included in the CV submitted to Alexandria Archaeology so that confirmation of the required training and/or work can be verified.

### **Documentary Researcher and Historian**

Personnel that conduct primary documentary research as part of a Documentary Study or an Archaeological Evaluation must gather data and interpret it in a way that facilitates formulation of archaeological field testing strategies. Minimal qualifications are a graduate degree in history, anthropology, archaeology, or a closely related field and experience in conducting intensive documentary research; or two or more years' experience in conducting documentary research and applying the results to cultural resource management or historical archaeological projects. The Documentary Researcher or Historian must have demonstrable experience in conducting documentary research on the same region, time periods, and similar site types as those expected to be surveyed and/or excavated in the proposed project.

### **Architectural Historian**

The minimum qualifications for this personnel position are a graduate degree in historic preservation, architectural history or a closely related field, and experience in conducting research on historic standing structures or two or more years' experience in conducting research on historical architecture. The Architectural Historian must have demonstrable experience in conducting historical architectural studies on the same region, time periods, and similar structural types as those found in the proposed project area.

### **Archaeological Conservator**

A conservator is defined as an individual with a master's degree in conservation or equivalent training with demonstrated experience in archaeological conservation and who is a member in good standing of the American Institute for Conservation (AIC).

### **Geomorphologist/Geoarchaeologist**

This specialist looks at the connection between the earth sciences and the archaeological record. The task is to examine why, how, and when cultural deposits are associated with natural landscapes. At a minimum, a geomorphologist/geoarchaeologist must have a master's degree or Ph.D. in geomorphology, geology, hydrology, or related field of study or at least five years of practical experience with the identification and documentation of soils stratigraphy containing archaeological materials and features. The named geomorphologist/geoarchaeologist also must have practical experience with the safety standards needed to implement deep testing in fill, alluvial, and colluvial depositional environments.

### **Specialized Studies**

Selection of Maritime Archaeologists, Zooarchaeologists, Palynologists, Physical Anthropologists, and Ethnobotanists must be approved by Alexandria Archaeology and specialized Consultants must have experience necessary to carry out required work.