

Union Street Hotel

214-220 South Union Street

WSSI #22392.01

Documentary Study

Prepared for:

Carr City Centers

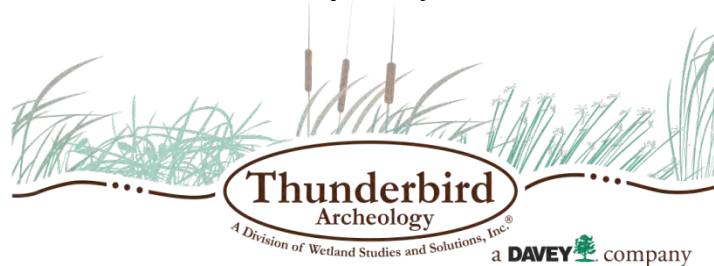
1455 Pennsylvania Ave, NW Suite 100

Washington, D.C. 20004

May 2014

Revised July 2014

Prepared by:



5300 Wellington Branch Drive, Suite 100

Gainesville, Virginia 20155

Tel: 703-679-5600 Email: contactus@wetlandstudies.com

www.wetlandstudies.com

ABSTRACT

A Documentary Study was conducted on the Union Street Hotel property located at 220 South Union Street and the Alexandria Yacht Club property located at 210 The Strand, within the City of Alexandria, Virginia. Thunderbird Archeology, a division of Wetland Studies and Solutions, Inc., of Gainesville, Virginia, conducted the research for Carr City Centers of Washington, D.C. The work was required under the City of Alexandria Archaeological Protection Code prior to development of the property and followed the Archaeology conditions of the Development Special Use Permit #2011-0034.

The properties are located along the historic waterfront of Alexandria. The waterfront originally consisted of high bluffs overlooking the Potomac River, but after the establishment of Alexandria the banks were cut down and the fill dumped eastward to create more land in a process called “banking out.” Portions of the land at 220 South Union Street and the entirety of the 210 The Strand parcel were originally within the river, but now primarily on artificially created land.

Numerous industries, warehouses, businesses, and residences were located on the 220 Union Street Hotel property during the late 18th and 19th centuries, including blacksmiths, carpenters, coopers, grocers, iron foundries, and commission merchants. Late in the 19th century, the fertilizer manufacturing plant of the Bryant Fertilizer Company occupied the entirety of the Union Street Hotel property.

The property at 210 The Strand was not dry land until sometime in the mid-20th century. From the 1880s until 1922, the clubhouse of the Old Dominion Boat Club stood on piers in the location, accessed by a wooden foot bridge from The Strand. The clubhouse was destroyed by fire several times in the 19th and 20th centuries before the club moved to its current location near the foot of King Street. A small building resting on a concrete slab foundation is currently located on the property.

Remnants of 18th and 19th century buildings may be present beneath the 220 South Union Street property; most notably, the remains of the circa 1756 Carlyle warehouse. Additionally, 18th and 19th century wharves and other structures by which land was created within the original course of the Potomac are almost certainly extant within the property; in Alexandria and elsewhere, these are typically timber structures retaining earth and stone fill. There is also a possibility of encountering derelict vessels, the hulls of which may have been used as part of the frame and fill for the “banking out” of land on the waterfront.

ACKNOWLEDGMENTS

We would like to express our gratitude to Ted Pulliam for personally compiling research pertinent to the early history of the Point Lumley and the Alexandria waterfront for our use. We would also like to thank Francine Bromberg and Garrett Fesler of the Office of Historic Alexandria for their research assistance.

TABLE OF CONTENTS

ABSTRACT	i
ACKNOWLEDGMENTS	iii
TABLE OF CONTENTS	v
LIST OF FIGURES	vii
LIST OF TABLES	vii
INTRODUCTION	1
FROM TOBACCO PORT TO BIRTH OF A NATION (1732- ca 1800)	3
Early Ownership of Lot 69: Nathaniel Harrison and Richard Arell	5
Public Lands and the Creation of New Land	6
<i>The City Lot and Carlyle's Warehouse</i>	7
GROWTH ON THE WATERFRONT (ca 1800 – ca 1860)	13
Parcel 1: Arell Parcel – Corner of Duke and Union Streets	13
<i>Richard Arell (II) ca. 1802-1819</i>	13
<i>Henry Bayne and heirs 1819-1868</i>	15
Parcel 2: Lowe Parcel – Union Street, South of Alley	16
<i>Christiana (Arell) Lowe ca. 1802-1873</i>	16
Parcel 3: Muncaster/Marsteller/Violett Parcel – North of Alley	17
Parcel 4: Marsteller Parcel – Northeast Corner of Alley	18
Parcel 5: City Lot – Corner of Duke and the Strand	19
RAILROADS, THE CIVIL WAR AND RECONSTRUCTION (1860- 1890s)	19
Parcel 1: Arell Parcel	23
<i>Enoch and Joanna Lyles 1868-1891</i>	23
Parcel 2: Lowe Parcel	26
<i>Christiana (Arell) Lowe ca. 1802-1873</i>	26
Parcel 3: Muncaster/Marsteller/Violett Parcel	26
Parcel 4: Marsteller Parcel	29
Parcel 5: City Lot	29
Fires and Floods	30
TWENTIETH CENTURY INDUSTRIALIZATION (1890s- 1950s)	31
The Bryant Fertilizer Company	31
<i>The Commercial Fertilizer Industry</i>	32
<i>J.C. Herbert Bryant</i>	32
220 The Strand	41
PREVIOUS WATERFRONT ARCHEOLOGICAL INVESTIGATIONS	42
CURRENT CONDITIONS AND KNOWN DISTURBANCES	45
ARCHEOLOGICAL EVALUATION	47
18th-Century Buildings and Warehouses	47
Wharf Construction	47
19th – Early 20th-Century Buildings	48
20th-Century Buildings	49
PROPOSED CONSTRUCTION	49
REFERENCES CITED	53

Appendix I	57
Scope of Work for Documentary Study.....	57
Appendix II.....	63
Chain of Title.....	63
Appendix III	71
Proposed Scope of Work for Archeological Investigations.....	71

LIST OF FIGURES

Figure 1: 2007 ADC Vicinity Map Showing the Location of the Project Area	2
Figure 2: Early Alexandria, Illustration by Elisabeth Luellen	3
Figure 3: 1749 Map of Alexandria.....	4
Figure 4: Warehouse on Point Lumley, Circa 1760.	8
Figure 5: 1788 Arell Plat.....	9
Figure 6: 1798 Map of Alexandria.....	12
Figure 7: 1845 Ewing Map of Alexandria	14
Figure 8 : View from Pioneer Mill, looking up Duke Street (Andrew J. Russell)	21
Figure 9: View of Study Area from Pioneer Mill, looking north-west.....	21
Figure 10: U.S. Quartermaster Corps Map, 1865	22
Figure 11: Detail of Buildings Within Parcel 1	23
Figure 12: 1877 Hopkins Map	24
Figure 13: 1885 Sanborn Map	25
Figure 14: Detail Showing Building on Parcel 2	26
Figure 15: Detail Showing Warehouses on Parcels 3 and 4	27
Figure 16: 1891 Sanborn Map	28
Figure 17: Herbert Bryant Letterhead.....	31
Figure 18: Various Advertisements	33
Figure 19: Detail from Herbert Bryant Flyer: Season of 1880	34
Figure 20: Herbert Bryant Manufacturer of Fertilizers Advertisement	35
Figure 21: 1896 Sanborn Map	36
Figure 22: 1902 Sanborn Map	38
Figure 23: 1912 Sanborn Map	39
Figure 24: 1921 Sanborn Map	40
Figure 25: Keith's Wharf Bulkhead and Tie-Back Braces.....	43
Figure 26: Bulkhead Repairs Overlying a Barge.....	43
Figure 27: Plan View and Photo of Feature 27.....	44
Figure 28: Project Map Showing 2011 ATC Test Bores and Historic Shorelines	46
Figure 29: Examples of Crib and Cobb Wharf Construction	48
Figure 30: Proposed Elevation on The Strand	50
Figure 31: Proposed Union Street Elevation	50
Figure 32: Proposed Duke Street Elevation.....	51

LIST OF TABLES

Table 1: Archeological Wharf Excavations in Alexandria, Virginia.....	42
---	----

INTRODUCTION

This report presents the results of an archival and documentary study of the Union Street Hotel property, located at 220 South Union Street, and including the property at 210 The Strand, Alexandria, Virginia (Figure 1). Thunderbird Archeology, a division of Wetland Studies and Solutions, Inc., of Gainesville, Virginia, conducted the study described in this report for Carr City Centers of Washington, D.C. The study was initiated in anticipation of the planned development of the study area and the concern that significant archeological resources may be impacted by this construction.

The work was required under the City of Alexandria Archaeological Protection Code prior to development of the property and followed a Scope of Work approved by Alexandria Archeology (Appendix I). The purpose of the documentary study was to develop a historical context for the interpretation of the land use history of the study area and to identify the potential locations of archaeological resources that may be preserved, and ultimately determine if archeological investigations were needed on the property prior to development. The Chain of Title as it is currently understood is summarized within the discussions below and contained within Appendix II.

John P. Mullen, M.A., RPA served as Principal Investigator on this project and conducted the archival research with the assistance of Associate Archeologists Edward Johnson and David Carroll. Jill Rosche prepared the exhibits. Archival research was conducted at the offices of Alexandria Archaeology, the Alexandria Courthouse, and the Barrett Branch of the Alexandria Library (Special Collections). We would like to acknowledge the assistance of Francine Bromberg, Acting Alexandria Archaeologist, and other staff at the Office of Alexandria Archaeology, and especially Ted Pulliam, author and historian, who has conducted extensive research into the history of the Alexandria waterfront.

Our documentary research and review of previous archeological investigations have revealed the types of archeological resources that may be present on the property, including the remains of the circa 1756 Carlyle warehouse, remnants of 18th and 19th century buildings, wharves and other structures by which land was created during the “banking out” process of land reclamation.



FROM TOBACCO PORT TO BIRTH OF A NATION (1732- ca 1800)

The town of Alexandria began circa 1732 as a tobacco trading post on Hugh West's land on the upper side of Great Hunting Creek. The area was a focal point for commerce because of the presence of the tobacco warehouses and inspection station, making it a good location for a town. In anticipation of the development of Alexandria as a town site, John West Jr. surveyed the land north of Hunting Creek in 1749; a copy of the survey map made by 17-year-old George Washington shows the town lots bounded by Duke, Royal and Oronoko Streets stretching between two points of land on either side of a crescent shaped bay on the west bank of the Potomac (Figure 2).

The southernmost point was named Point Lumley, after a ship captain who moored offshore in this location. The northern point later became known as "West's Point" and was the location of one of the first tobacco inspection stations that was established by an Act of the Virginia Assembly in 1730. The Alexandria waterfront originally consisted of high bluffs overlooking the river; the banks of the bay rose abruptly above the tidal flats, perhaps as much as 15-20 feet. At this time, the town consisted of "a scattering of wooden structures, a house, a tavern, or "ordinary", and two large tobacco warehouses" (Shephard 2006:1).

The Union Street Hotel study area is located near the foot of Duke Street, occupying a portion of Town Lot 69 as well as public land on Point Lumley (see Figure 2). Thomas Graffort, one of the chainmen during John West's 1749 survey, described Lot 69 as being located atop the high bluffs that lined the Potomac River, while the Point Lumley portion was a "very miry pocoson or swamp and no firm land" (Miller 1987:4; Sparacio and Sparacio 1992:8).



Figure 2: Early Alexandria, Illustration by Elisabeth Luellen
Courtesy of Alexandria Archaeology



Figure 3
A Plan of Alexandria, Now Belhaven - George Washington, 1749

Lot 69 was originally purchased by Colonel George Fairfax, friend of George Washington, at the initial auction of town lots in 1749; however, Fairfax apparently did not develop the land as per the conditions of the purchase agreement and the land was re-sold to Nathaniel Harrison in 1752 (Weis n.d.:1).

Early Ownership of Lot 69: Nathaniel Harrison and Richard Arell

Nathaniel Harrison, of Brandon plantation in Prince George County, Virginia purchased Lots 69 and 70 for 46 pistoles from the Trustees of Alexandria in 1749 (Ring and Pippenger 2008: 120); the deed for Lot 69 was recorded in 1752 Fairfax County Deed Book C:312). As master of the sizeable plantation farm established in 1616 far to the south on the James River, Harrison purchased the lot on the waterfront as a speculator and investor and did not personally occupy the property. Records detailing the use of Lot 69 during Harrison's ownership could not be located at this time, but it is clear that he constructed at least one building on the lot to satisfy the purchase agreement, as he maintained ownership of the property until 1775, in which year he sold the lot, along with several others, to Richard Arell (Fairfax County Deed Book M:33).

Richard Arell was not a native of Virginia or a founder of Alexandria, but he was a notable presence in the community following his arrival from Pennsylvania circa 1762 (Maloney 2013:1). He purchased several lots within the fledgling city, including Lots 69 and 70 on the waterfront (building his house on Lot 70) and Lot 48 at Market Square adjacent to the courthouse, where he owned and operated a popular tavern. He acquired an ordinary license to operate the establishment in 1768, and its location near the seat of local government no doubt made the tavern a meeting place for many notables including George Washington, who dined at Arell's establishment several times; the tavern also may have been the location of the drafting of the Fairfax Resolves in 1774 (Maloney 2013:1-2). Arell himself was a supporter of the American colonial cause, having been signatory to a letter from the "Friends of Liberty" cancelling their subscription to the Norfolk Intelligencer newspaper in response to the printing of pro-British features (Maloney 2013: 2).

Existing records do not make clear to what specific purpose Lot 69 was put during Arell's ownership, but considering its location immediately adjacent to a deepwater landing site, the property was almost certainly rented to merchants, businesses and craftsmen who depended on the shipping trade for their livelihood.

Richard Arell died in late 1795 and was likely interred in the Presbyterian burying ground, the land for which he had donated to the Presbyterian congregation of Alexandria (Maloney 2013: 4). He died seized of considerable amounts of property but left no will. Although several deeds and chancery suits consulted during research for this project mention a division of Arell's real estate amongst his heirs, no specific document is cited and no details of this division could be located.

One chancery cause on record is of particular note. James R. M. Lowe and his wife Christiana, Richard Arell's granddaughter, complained on behalf of themselves and other heirs of Richard Arell that no division or dispersal of Richard Arell's estate had been forthcoming from his administrators (*Lowe vs. the Administrators of Richard Arell*. Chancery Cause 1810-014, Arlington County Court Records). The defendants in the case were Philip G. Marsteller, husband of Christiana Copper (another of Arell's granddaughters) and George Jenkins (widower of Arell's daughter Mary), who were accused of mismanagement of the estate. The court decreed an accounting and dispersal of the estate to the heirs, but the documents on file do not detail the division of Arell's real estate. Examination of 1810 tax records for properties lying within the original Lot 69 indicate that many of the various heirs appear to have received parcels along one or both sides of Union Street between Prince and Duke Streets; other lots had apparently been sold outside of the family during Richard Arell's lifetime, but Deed Book N, which included many of these transactions from 1778-1783, has since been lost (Ring and Pippenger 2008:60).

Although specific details are lacking, it is clear that by Richard Arell's death and the distribution of his real estate to his heirs, Lot 69 had been divided into numerous smaller parcels, including the portion of the lot within the study area. The property ownership for these parcels will be addressed later in this discussion.

Public Lands and the Creation of New Land

Soon after the establishment of the town, work began along the Potomac waterfront to improve the access of the town to the river, and vice versa. Those that had purchased lots along the river had the "benefit of extending the said Lotts into the River as far as they shall think proper" and could retain ownership of this newly created land (Ring and Pippenger 2008:139; Shephard 2006:4). Eventually, land was created in the shallow crescent bay to create more waterfront and to increase access to the deep-water channel originally only accessible via Points West and Lumley; much of the earth used to create this land came from the bluffs that overlooked the Potomac, which were cut down and spread out in the shallow water in a process referred to as "banking out." The creation of wharfs and the banking out process are described in greater detail in the *Archeological Evaluation* section of this report.

West's Point and Point Lumley were not sold at auction with the numbered lots, but were reserved as public land owned by the town. While West's Point and its tobacco warehouses formed the early economic hub of Alexandria, Point Lumley became the site of the town's small 18th and early 19th century shipbuilding industry.

Point Lumley was leased by the trustees of Alexandria until 1892, when the land was first sold to private individuals. The land was first leased in the 1750s to Thomas Fleming, a ship builder - although the first recorded lease that could be located was dated 1774 (Pulliam n.d.). In 1752, Fleming completed his first vessel, a 154-ton ship named the *Ranger*. By 1759, Fleming had constructed a dock for building ships at Point Lumley.

Other possible landscape features associated with Fleming's use of the land may have been a large pit for hull making and storage sheds (Pulliam 2008:2).

The wharf at Point Lumley was not constructed until 1774, but became a “formidable addition to the...waterfront.” The materials to construct this roughly 55.5 by 110 foot wharf included stone from Great Falls, shingles from Norfolk, iron from Snowden Ironworks on the Patuxent River, and tree logs from Port Tobacco, MD (Shumate 1985:44 citing the Harrison Ledger Book).

Although Fleming's operations never proved a major industry of the city, a number of vessels were built and considerably more repaired and maintained. Between the years of 1752 and 1776, nineteen vessels were constructed in colonial Alexandria, including ships, snows, brigs and schooners (Shomette 1985: Figure 1). The launching of the 200-ton ship *Hero* in 1760 was an event that George Washington especially noted. The ship had originally been constructed for a trading company from Whitehaven, England, but the galley later served during the Revolutionary War as part of the Virginia State Navy (Shomette 1985:35). Alexandria's ship building industry came to a temporary halt during the early 1770's as a result of a lack of available timber for construction (Pulliam 2007:2).

Alexandria was the largest town on the Potomac River and by the 1770s had developed into an important center for maritime trade, and participated in the flour trade with Europe and the Caribbean. By 1775, there were "20 major mercantile firms in Alexandria, 12 of which were involved in the transshipment of wheat" (Smith and Miller 1989:14). Although Alexandria flour was not considered as fine as that from Philadelphia, New York and Baltimore, flour milling served as a chief industry during the early 1780s and again in the 1790s (Smith and Miller 1989:14). The international market for flour transformed local milling into a larger and more profitable enterprise. By 1782, deep water access was needed to effectively compete with other Colonial ports, prompting the Virginia legislature to authorize the “banking out” of the high Potomac bluffs to create Union Street along the edge of the bay between King and Queen Street (Schumate 1985:79-80).

The City Lot and Carlyle's Warehouse

The remainder of the 220 Union Street property is located east of the original Lot 69 boundary, falling partially upon the northern edge of the point of land named Point Lumley and partially within the 1749 course of the Potomac River. However, it seems that more and firmer land was created at this location relatively quickly, likely beginning with the extension of Duke Street onto Point Lumley circa 1751. The Alexandria Trustees directed John Carlyle, a prominent Scottish merchant and businessman of the town, to “have a good road cleared down to Point Lumley” (Pulliam 2006:4). To accomplish this task, a significant amount of earth would need to be shifted to create a functional road to the Point; earth from the extension of Duke Street was most likely

employed to fill the shipbuilding wharf on the southern edge of Point Lumley as well as to expand the useable land to the north within the study area.

In June 1755, The Alexandria Trustees once again called upon John Carlyle, this time to construct a public warehouse on Point Lumley:

Ordered that John Carlyle Gent. do erect & build at Point Lumley in this Town a Warehouse of the following Dementions[sic] (Viz.) One hundred feet long twenty four feet wide thirteen feet Pitch'd To be three Divisions double strided, the sills to be rais'd four feet from the ground & so compleatly finished [Alexandria Board of Trustees, nd.:23]



**Figure 4: Warehouse on Point Lumley, Circa 1760.
Illustration by Elisabeth Luellen**

The location of the warehouse can be easily seen in the plat made for the chancery cause *Arell v. the Mayor of Alexandria* (discussed below); it is depicted as extending at a slight angle away from Duke Street and into the Potomac River, and standing entirely within the 220 South Union Street parcel (Figure 5). The location, straddling the tidal Potomac River's edge at the time, was no doubt the reason the Trustees had called for the building to be elevated four feet from the ground.

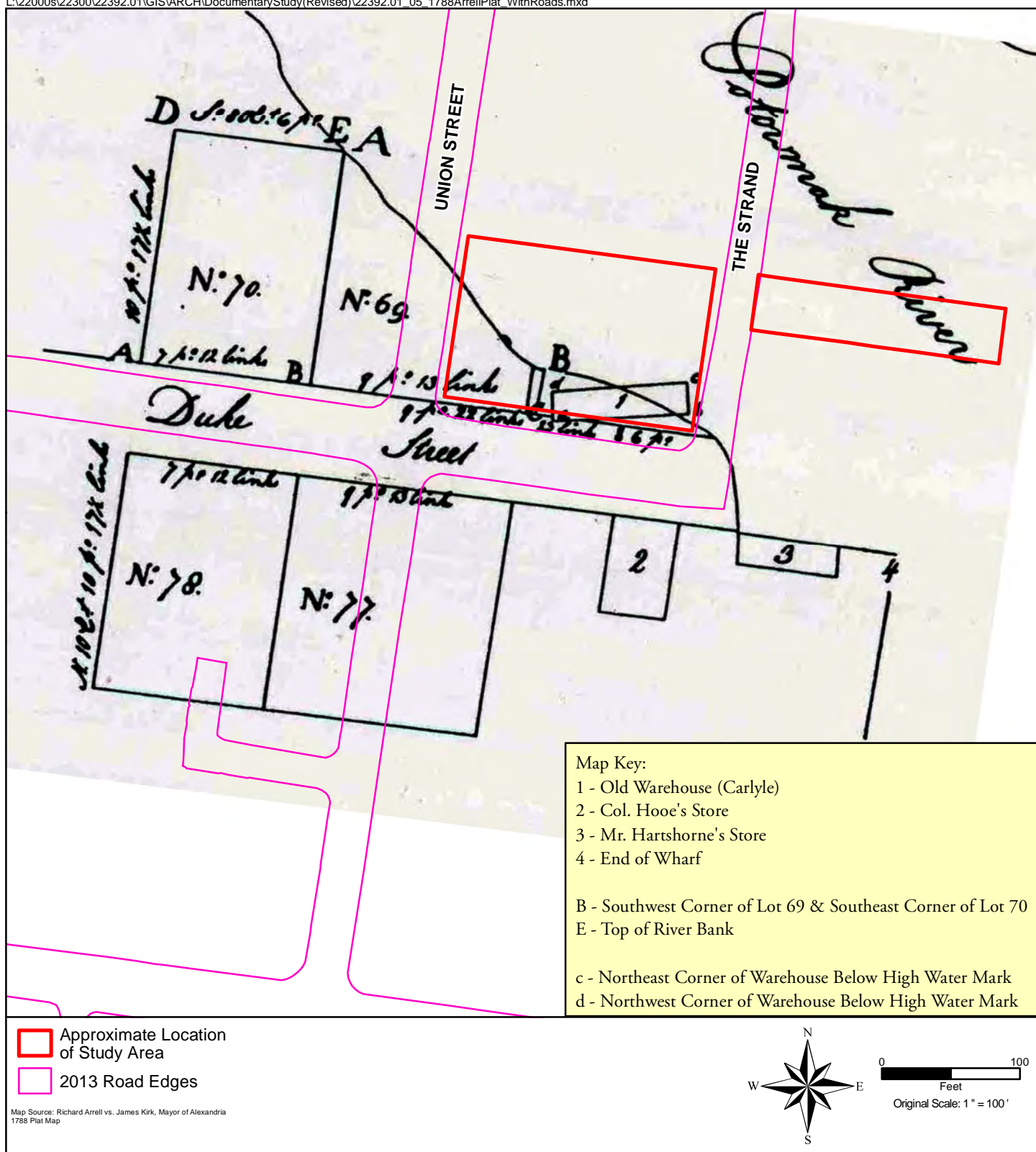


Figure 5
1788 Arrell Plat

In September of 1755, likely after the completion of the warehouse, the Trustees decreed that the public warehouse “be fill’d in with Land & Rubbish from the Point but in such a manner as not to prejudice the foundations” (Alexandria Board of Trustees, nd.:28). In effect, the order was to convert the pier that formed the foundation of the warehouse into a wharf; additionally, the order indicates that the fill should consist of “Land...from the Point,” suggesting that the “banking out” of Point Lumley with earth from the bluffs immediately to the west was in progress at the time of the warehouse’s construction.

This portion of the study area was described in John Muir’s 1755 court deposition:

The warehouse was built on the north side of Duke Street on point Lumley. There was dry ground on north side of Duke Street under the bank where the warehouse was built and he understood that there was dry ground enough belonging to the point to build another house to the north of that Warehouse as he was informed by the Trustees. At that time there was dry ground adjoining the north side of the warehouse but Muir did not know of what quality. He remembered that a man could pass (and he had himself had) between the west end of the warehouse and the bank about the time that warehouse was built [Prince William County, Virginia Land Causes, 1789-1793, cited in Miller 1987:12].

As new land was created, the boundary between Lot 69 and the public land at Point Lumley may have unclear, as the Trustees of Alexandria ordered Lot 69 to be resurveyed. The original town surveyors met with the current town surveyor, John West, and “affixed posts to the corners of Lott numbered Sixty nine in or within a very few feet of the former and first corners ascertained by the original platt and survey in 1749” (Ring and Pippenger 2008:153).

While a specific use of the warehouse is not given in the Trustee’s construction order, Robert Adam recollected at his deposition in the 1880s that the warehouse was built in order to store supplies from the Braddock expedition, who arrived in Alexandria in April 1755 and departed to assault Fort Duquesne at present-day Pittsburgh in May. The order to construct the warehouse came in June, after the departure of Braddock’s expedition, and may have been in response to the need to store such supplies as did not accompany the march to Pennsylvania. John Carlyle would have been responsible for the supplies, as he had been appointed Commissary of Stores and Provisions for the Virginia Regiment of colonial volunteers by Governor Dinwiddie in 1754, and served in that capacity for Braddock’s expedition as well in 1755 (Pulliam n.d.).

Following the French and Indian War, the warehouse was rented by the Trustees to various merchants. An excerpt from the March 29, 1774 Trustee meeting minutes provides an example of the nature of such rental agreements:

Rented to William Hartshorn & Josias Watson the Town Warehouse on Point Lumley on the following terms, viz. to receive the said Warehouse in such order as Andrew Wales the former tenant should put it in conformable to their own agreement the Trustees who are renters of the said house to make the roof tight & to put on weather boards where wanted, also to underpin the said house where wanted to make good & sufficient doors and good lock & hinges where wanted – a pair of steps to be affixed to the West door, the attic story to be secured with props where wanted and necessary, but in that case the upper room or the attic story not to be contracted or made less; and the said house during the said term to be kept in tenantable repair, in consideration of which the said William Hartshorn & Josias Watson are to pay the sum of forty pounds per annum...the same house by this agreement is to be in their possession ten years unless a subsequent agreement take place [Alexandria Board of Trustees, nd.:77].

William Hartshorn and Josiah Watson were Alexandria merchants who owned numerous properties in Alexandria. Both men were among the “most respectable merchants and Inhabitants of this Town” who endorsed Richard Marshall Scott’s application to George Washington as a collector of customs duties on the Potomac in 1789 (Twohig 1987). Andrew Wales, the warehouse tenant prior to Hartshorn and Watson, was a merchant and brewer who advertised the ability to supply “any Quantity and Quality of Beer on the shortest notice” (Riker 2008).

The public warehouse stood until sometime after 1788, when it appeared on a plat surveyed for the chancery cause *Arell v. the Mayor of Alexandria*. Richard Arell brought the suit against Alexandria over the disputed location of the eastern boundary of Lot 69 with the western boundary of City of Alexandria land on Point Lumley. The fact that it was necessary to bring this suit to court suggests that the bank at the lot’s original eastern edge, described by survey assistant Thomas Graffort as “very perpendicular and broken” had been significantly if not entirely reduced, rendering the precise location of Lot 69’s eastern boundary unclear (Pulliam 2006:2,6). The location of the warehouse in relation to the bluff overlooking the Potomac at the time of its construction was a major factor in the case, with some deponents claiming there was little to no room between the bank and the western edge of the warehouse, and others claiming there was ample space to walk between the structure and the bank (Pulliam 2006:5). Given the establishment of the warehouse and wharf on the public land of Point Lumley as early as 1755, it is likely that the “banking out” of the bluff at Lot 69 which may have begun during Nathaniel Harrison’s ownership of the property was possibly complete by Arell’s suit in 1780.

According to Gilpin’s 1798 map of Alexandria, there was no sign of the crescent bay remaining in that year, and enough land had been created for the laying of Union Street along the waterfront (Figure 6).



Figure 6
Plan of the Town of Alexandria in the District of Columbia, George Gilpin 1798

GROWTH ON THE WATERFRONT (ca 1800 – ca 1860)

By the turn of the 19th century, the entirety of the 220 South Union Street parcel was usable land and the high bluff that had divided Lot 69 from Point Lumley had been leveled. Union Street was an established thoroughfare and the location of the Strand was wharf front and docks. The 1845 Ewing map also shows an alley bisecting the property between Union Street and the Strand (Figure 7). The 210 The Strand parcel remained primarily within the Potomac River until after the Civil War.

The Union Street corridor was home to merchants, shopkeepers, grocers, taverns, blacksmiths, coopers, warehouses and offices, and other numerous other businesses and industries – some with residences located on the upper stories of the buildings. At least two buildings stood within the study area near the corner of Union and Duke Streets by the first decade of the century and warehouses were constructed along the northern end shortly thereafter. It is also possible, based on a description in an 1814 deed, that a building was constructed ca. 1798 within the study area. It is not clear what was constructed on the city lot in the vicinity of the old Carlyle warehouse, but records suggest that the property continued to be leased up to the Civil War period.

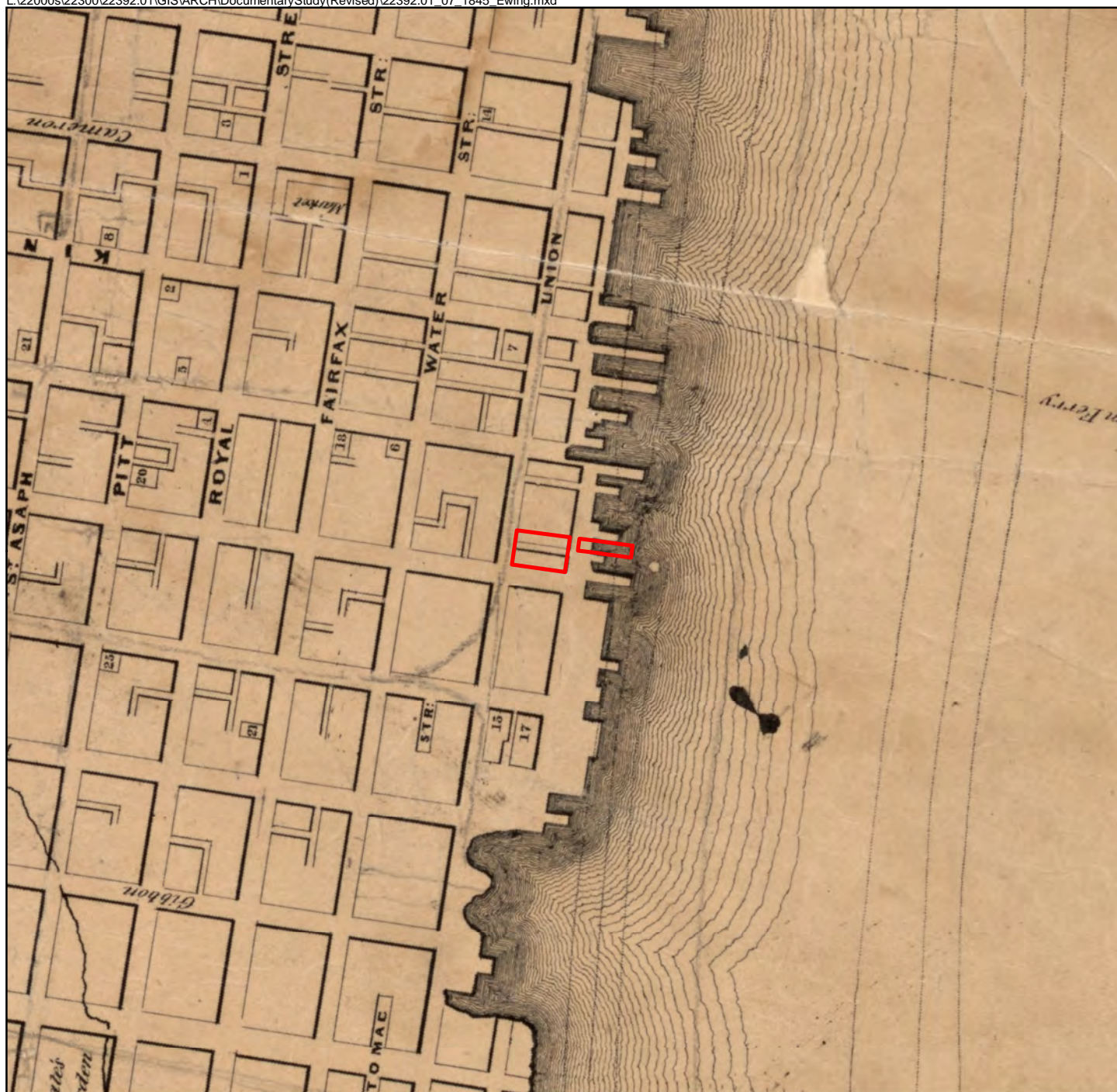
Parcel 1: Arell Parcel – Corner of Duke and Union Streets


Richard Arell (II) ca. 1802-1819

The division of Richard Arell (I)'s property, which included Lot 69, is referenced in several deeds and other documents; however, no document detailing the distribution of his real estate has been located. Based upon tax records and deeds recording property transfers and leases, we know that four of Arell's heirs received property within the study area: Richard Arell (II) and Christiana (Arell) Lowe, children of Richard (I)'s son David Arell, who predeceased his father; and Christiana (Copper) Marsteller and Elizabeth (Copper) Muncaster, daughters of Elizabeth (Arell) Copper, who also predeceased her father Richard Arell (I).

Tax records for the year 1802 list "David Arell's heirs" (i.e. Christiana (Arell) Lowe and Richard Arell [II]) as possessing three shops on Union Street occupied by Reardon, Watson, and Wilk, as well as a lot at the corner of Union and Duke streets described as "the ground on which George Coryell House is." John Muncaster (husband of Elizabeth (Copper) Muncaster) was taxed for a brick house on Union Street occupied by John Hughes, but this building's location is unknown. Phillip Marsteller (husband of Christiana (Copper) Marsteller) was not taxed for property on Union Street.

Richard Arell (II), son of David Arell, deceased, received a parcel on the corner of Union and Duke Streets, with a frontage of 35 feet on Union and 56 feet 1 inch on Duke, from the estate of his grandfather Richard Arell (I). While Arell owned the land, Alexandria tax records from 1802 and 1810 show that George Coryell was taxed for the building that occupied the lot. Tradition holds that Coryell, a carpenter and house builder, was



 Approximate Location of Study Area

Map Source: "Plan of the Town of Alexandria, D.C. with the Environs Exhibiting the outlet of the Alexandria Canal, the Shipping Channel, wharves, Hunting Cr., etc.," Maskell C. Ewing, 1845. Library of Congress Geography and Map Division Washington D.C.

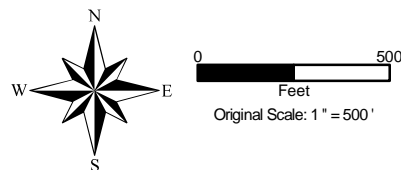


Figure 7
1845 Ewing Map of Alexandria, VA

encouraged to come to Alexandria from Philadelphia by George Washington, who admired a gate Coryell had built for Benjamin Franklin. It is known that George Coryell lived several blocks to the west on Duke Street and was responsible for the construction of numerous houses in Alexandria (Moore 2009). The occupier of Coryell's house on Arell's lot in 1810 was Alice Coleman according to tax records of that year.

The entire block bounded by Union, Prince and Duke Streets was ravaged in 1810 by a fire which began in a cooper's shop and quickly spread to engulf the block (Miller 1993b). According to the local newspaper account, the fire "raged till nearly two o'clock, before the inhabitants were able to control it...every building was burnt in the square" (AG 26 September 1810). The two buildings standing within the study area along Union Street, Coryell's house and Thomas White's blacksmith's shop (on Parcel 2), were destroyed; the estimated value of each building was \$500. The loss of goods and damages to the warehouses outside of the study area was immense, with estimated losses between \$15,000 and \$100,000 (Miller 1993b).

Henry Bayne and heirs 1819-1868

In 1819, Arell sold the corner lot at Union and Duke to Henry Bayne (Alexandria Deed Book K2:56). Property tax records for that year indicate that Richard Arell owned the house and lot on the corner of Duke and Union, and that the house was occupied by David Mankins, a merchant. This suggests that after the 1810 fire that destroyed the house on the lot owned by George Coryell, Arell constructed his own building to replace Coryell's. Mankins remains listed as the occupant of the property in tax records until 1822, when Henry Bayne himself is reported as the occupant.

Henry Bayne, formerly of Bayne and Cartwright, continued the business under his own name after his partner died in 1811 (AG 26 April 1811). He appears to have been a merchant who likely did business from his property at the corner of Duke and Union streets from 1822 until his death circa 1826. Henry Bayne's will, made in 1826, bequeaths all of his property and real estate to his wife Sarah until her death, whereupon his estate would descend to his daughters Susan and Betsey (Alexandria Will Book 3:220).

Tax records for the year 1830 show Henry Bayne's estate as the owner of the property, and note that the occupant of the lot is one Mrs. Imoher; the property appears to have been rented as a business after Bayne's death, although the occupation of Mrs. Imoher is unknown.

In 1851, Betsey (Bayne) Hicks and her husband, Nehemiah Hicks, sold their share of the parcel to Susan (Bayne) Bacon and her husband Ebenezer Bacon (Alexandria Deed Book 03:110), making Ebenezer and Susan Bacon sole owners of the property.

Ebenezer Bacon was a seaman, and circa 1830 was master of the brig *Numa* of Alexandria (Cranch 1852 Vol 4: 97) and also ran a consignment house (Miller 1987:371), possibly from his property at Duke and Union. Bacon was the owner of the parcel in 1854 when a fire broke out in Thomas McKnight's carpenter's shop on the adjoining lot to the north (Miller 1993). According to the Alexandria Gazette, the "brick building at the corner owned by Capt. E. Bacon and occupied by Mr. Lyles had the shed and outhouses burned, and was otherwise much injured"(AG 16 June 1854:3). Enoch Lyles, according to the 1850 census, was a cooper, and likely operated his business out of the parcel.

Parcel 2: Lowe Parcel – Union Street, South of Alley

Christiana (Arell) Lowe ca. 1802-1873

Christiana Arell, daughter of David Arell and sister to Richard Arell (II), inherited the parcel directly to the north of her brother's from her grandfather Richard Arell (I)'s estate. The parcel had identical dimensions, with a frontage of 35 feet on Union Street and a depth of 56 feet 1 inch. James Rector Magruder Lowe, Christiana Arell's husband, is frequently referred to in the leases, deeds and tax records associated with this and other properties that Christiana Lowe inherited from her grandfather; Christiana's guardian, Peter Caverly, was also frequently a factor in such records and transactions (Crowl and Schwarz 2013:3-9).

1802 tax records record three shops located on Union Street for which "David Arell's heirs" were taxed a total of \$800. It is unknown if some or all of these shops were located within the parcel or elsewhere along Union Street. The Lowes did not personally occupy the lot, as evidenced by several leases recorded in the City of Alexandria deed books.

The lot apparently was empty in 1804 when the northern half of the parcel, with a frontage of 17.5 feet on Union Street, was leased by the Lowes to Thomas White, blacksmith (Alexandria Deed Book H:497), who as part of the terms of the lease was to construct a building on the lot with a value of at least \$150 by 1806. The lease was voided because of non-payment of rent in July 1811 (Alexandria Deed Book W:392)—at the time, it was noted there was no building or seizable goods on the lot which could be sold to cover the back rent. This was likely because of the 1810 fire which devastated the east side of Union Street from Prince to Duke Streets. An account of the losses caused by the 1810 fire lists Thomas White, who ran a blacksmith's shop and grocery, with a loss of \$500 (Miller 1993b).

In August 1811, Peter Caverly, acting as agent to James R. M. Lowe and Christiana his wife, leased the northern portion of the lot formerly leased to Thomas White to William Morgan and Moses Smith for a cooper's shop (Alexandria Deed Book U:124). Morgan and Smith were listed as occupants of the parcel until at least 1822, at which time the tax for the parcel is attributed to James R. M. Lowe and the occupier is noted as Robert Bell.

Tax records for 1830 list R. M. Lowe as owner of a house and lot on Union Street adjoining Capt. Henry Bayne's estate; the property is occupied by Goddard, Samuel and James Hill.

1850 tax records enumerate Christiana Lowe, taxed for "Lot only," followed by William McKnight, taxed for "shop only." McKnight operated a carpenter's shop on the parcel, which appears to be in the former location of Thomas White's blacksmith's shop, which had been destroyed in the earlier 1810 fire.

McKnight's shop was the ignition point of a fire in 1854 that burned a portion of the block, destroying his shop and damaging Ebenezer Bacon's building to the south (ss).

A fire broke out, on Wednesday night, about 12 o'clock, in the Carpenter's Shop of Mr. Wm. H. McKnight, on Union street, near the corner of Duke. The building was soon in flames, and together with its contents, was entirely destroyed. A quantity of work, finished and unfinished, intended for the adjoining warehouses, a number of valuable tools, books, papers, &c., &c., were destroyed. Mr. McKnight's loss must be, at least, \$1000, and he was not insured...We have, with sorrow, again to add, that this fire, also, was, without doubt, caused by an incendiary. The city watchmen had passed the place only about fifteen minutes before the flames burst forth and all appeared to be well. The watchman at the Pioneer Mill saw the fire when it first broke out, and ran to the spot, but the combustible nature of the materials in the carpenter's shop, rendered all efforts unavailing to prevent the destruction of the place...We sincerely regret the loss of Mr. McKnight, who is one of our most respectable citizens, and deservedly esteemed by all who know him [AG 16 June 1854:3]

Parcel 3: Muncaster/Marsteller/Violett Parcel – North of Alley

Christiana (Copper) Marsteller and Elizabeth (Copper) Muncaster, daughters of Elizabeth (Arell) Copper, inherited several parcels of land on the Alexandria waterfront from their grandfather, Richard Arell (I), including the parcel fronting 30 feet on Union Street directly north of the 18 foot, 4 inch wide alley and running east into the Potomac River. This parcel occupies the northern portion of the current 220 Union Street property and technically includes the 210 The Strand property as well, although this property appears to have been occupied by a pier/wharf and open water in the early 19th century. Christiana Copper had married Philip G. Marsteller, a vendue master and businessman, and one of the delinquent administrators of Richard Arell (I)'s will. Elizabeth Copper, sister of Christiana, married John Muncaster, an Alexandria businessman.

An 1814 lease from the Muncasters and Marstellers to William Newton for the parcel, included leaving a specific allowance “lying between a line drawn in a straight direction from the East line or side of Hooe’s Warehouse so called at that time and the front of the wharf usually called Arell’s wharf as at present extended left open as a passage by which to communicate with other parts of the town and as a landing place” (Alexandria Deed Book 322). This open passage would in time become The Strand, and “Arell’s Wharf” existed in the approximate location of the 210 The Strand parcel, discussed separately below. The lease to Newton calls for the construction of a two story brick warehouse measuring 30 feet by 95 feet to be built on the lot, noting that this building would replace buildings consumed in the 1810 fire and constructed by John Ricketts according to a referenced 1798 lease agreement.

At some time before 1853, the Muncaster/Marsteller parcel was apparently split into two parcels, with the Muncasters presumably maintaining the western parcel, with 30 feet of frontage on Union Street and a depth of 120 feet, and the Marstellers receiving the eastern portion running eastward from the Muncaster parcel into the river, and including the wharf and landing previously described in the 1814 description of the full lot. No record of the property split has been located. This section continues with the Muncaster/Violett parcel fronting on Union Street; the Marsteller parcel is discussed in the succeeding section of this report.

Little additional information about the occupation and use of the parcel has been recovered at this time. Sometime between the 1814 lease discussed above and 1954, the parcel was apparently transferred to Robert G. Violett, an Alexandria businessman with significant land holdings in the city. No deed or other transfer recording Violett’s acquisition of the property was located. An Alexandria Gazette article from June 16, 1854 describing the 1854 fire notes that “new brick warehouses to the north, belonging to Mr. R. H. Miller and Mr. R. G. Violett, were not materially injured” (AG 1854: 3), indicating both that Violett likely owned the property at that time, and that the circa 1814 two-story Newton warehouse had likely been replaced by a newer structure.

Parcel 4: Marsteller Parcel – Northeast Corner of Alley

The Marsteller Parcel, measuring 30 feet paralleling Union Street and extending eastward from the eastern portion of the Muncaster/Violett parcel into the Potomac River, was split from the Muncaster/Marsteller/Violett parcel sometime between 1814 and 1853. The parcel was sold by decree in the chancery suit *Cyrus C. Marsteller v. Marsteller et. al.* to Benjamin H. Lambert and Lewis McKenzie in July 1853; Christopher Neale made the sale as the court-appointed commissioner (Alexandria Deed Book P3:101); however, the court documents detailing the case were not located. Cyrus C. Marsteller was likely the son of Philip G. Marsteller and his wife Christiana (Copper) Marsteller, whose father’s name was Cyrus Copper, but this connection was not confirmed at this time through genealogical research due to a lack of available information.

Tax records from 1850, though not conclusive, suggest that Lambert & McKenzie already did business from the property in that year. Lambert & McKenzie operated a shipping and commission merchant concern on the waterfront and owned or occupied several properties along South Union Street.

Parcel 5: City Lot – Corner of Duke and the Strand

The City of Alexandria presumably continued to rent the lot of ground at the foot of Duke Street to various businesses for which the waterfront location was desirable. Confirmation for this practice during the early part of the 19th century practice proved difficult to attain from land taxes and other records.

Alexandria tax records for 1830 identify Levi Pickering as leasing the “house only” on the Strand and Duke Street, adjacent to Capt. Henry Bayne’s estate (Parcel 1). Following his death, his wife Sarah petitioned the city in 1835 to have the lease terminated (AG 6 June 1835:3); however, she is still taxed for the building on “Corporation Property” in 1850. William Leman, Mary Lawson and James Green also occupied or leased portions of the public land in the vicinity. In 1850, the city agreed to pay Sarah Pickering \$200 minus rent and taxed for the buildings located on Duke Street and the Strand.

RAILROADS, THE CIVIL WAR AND RECONSTRUCTION (1860- 1890s)

On May 23, 1861, Virginia formally seceded from the Union by a vote of 97,000 to 32,000 (Bowman 1985:51, 55). In a public referendum, Alexandrians voted 958 for and only 106 against secession (Smith and Miller 1989:83). The morning after Virginia voted to secede; Federal troops entered Alexandria as Confederate troops exited the city to the west. Alexandria would remain an occupied city throughout the duration of the War. Private homes and businesses were taken over by the occupying army, and the city was used as a staging point for the various military campaigns in Virginia.

The main impetus for occupation of Alexandria was its rail connections with the South. The passage of the Railways and Telegraph Act of January 31, 1862, granted the federal government authority to control all Northern and captured Southern railroads. Control of the railroads was considered key to victory in the war. The City of Alexandria was the terminus of three strategic lines: the Alexandria, Loudoun and Hampshire (AL&HRR), Alexandria and Washington Railroad (A&WRR), and the Orange & Alexandria (O&ARR).

The O&ARR was incorporated on March 27, 1848 by an Act of the Virginia Assembly; construction began in early 1850. By 1851, the tracks had been laid down Union Street, passing the study area, and connecting to the Wilkes Street tunnel. In addition to passengers, the line was used to transport guano from the Alexandria waterfront to Western Virginia, and passengers and farm products back to Alexandria (Pulliam 2011:36). As an indication of the agricultural economic benefits gained by the previously depressed area, by 1860 the O&ARR, which charged the lowest freight rates

in the state, had carried on its rails over 2,000,000 bushels of corn and over 1,000,000 bushels of wheat. In 1861, the inventory of rolling stock included 13 locomotives, 16 passenger cars, ten mail and bag cars, and 80 box/flat cars (Hurst 1991: 6, 7).

The O&ARR offices and rail yards (located north of the study area around Duke and Henry Streets) were developed into the operation headquarters of the United States Military Railroads (USMRR). Daniel C. McCallum was appointed the Military Director and Superintendent of United States Railroads on February 11, 1862, and in May of that year, Herman Haupt was commissioned by Secretary of War Stanton to act as the director of rail operations for the military. Although authority overlapped in some cases, McCallum and Haupt were able to work together.

Haupt was concerned that the USMRR rail yards and machine shops at the edge of the city were vulnerable to raids by the Confederate Calvary and convinced authorities that protection was needed. In the late summer of 1863, a stockade was constructed around the twelve city block complex, complete with flanking bastions. Similarly, a wood barricade was constructed across Duke Street along Union Street adjacent to the western edge of the study area, as depicted in a photograph taken by Andrew J Russell from the upper story of the nearby Pioneer Mills (Figure 8). The photograph looks west up Duke Street, with the study area on the left. A second photograph from the same vantage point shows the study area in greater detail, and is discussed below (Figure 9).

The waterfront played a critical role during the Union occupation of Alexandria during the war. Much of the waterfront area was taken over by the United States Office of the Quartermaster General for the storing, administration and distribution of supplies and material for the prosecution of the war. Numerous buildings, including several within the study area, served as commissary warehouses as they were convenient both to the wharves and the rail line that ran along Union Street (Figure 10).



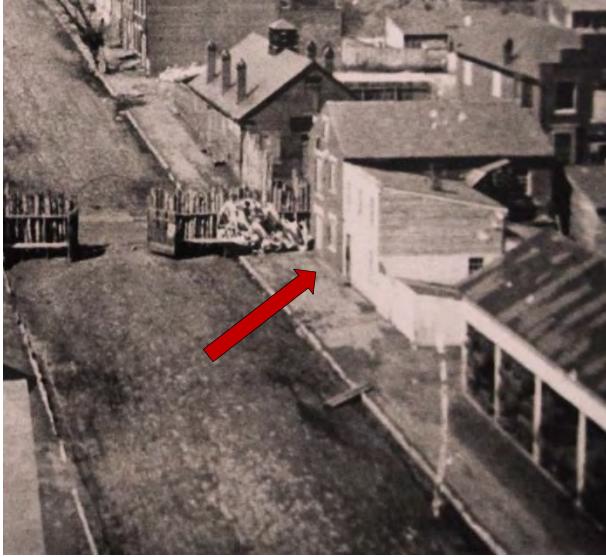
Figure 8 : View from Pioneer Mill, looking up Duke Street (Andrew J. Russell)
Source: Alexandria Library Special Collections



Figure 9: View of Study Area from Pioneer Mill, looking north-west
Source: Library of Congress
<http://www.loc.gov/pictures/item/2005684449/>

Parcel 1: Arell Parcel

Russell's ca. 1860s photograph shows a two-story brick building on the corner of Duke and Union Streets within the Arell parcel (Figure 11 and see Figure 8). A smaller one and



one-half story saltbox frame building and small frame shed lay west of the brick building. Access through the barricade across Duke Street was limited to a narrow gate. Duke Street appears to have been lined with stone curbs and brick pave sidewalks. Although the parcel was not directly commandeered by the federals during the Civil War, the property was behind the barricade; it is unknown if a business could have, or would have been allowed to, operate successfully within the military perimeter; it is probable that the Civil War caused a cessation of private business activity on the parcel.

Figure 11: Detail of Buildings Within Parcel 1

Source: Library of Congress

Enoch and Joanna Lyles 1868-1891

Following the Civil War, William H. Bacon, “son and survivor of Ebenezer Bacon & Susan his wife” sold this parcel in May 1868 to Enoch H. Lyles (Alexandria Deed Book Y3:415). Enoch Lyles was likely the “Mr. Lyles” who was the occupant of the property at the time of the 1854 fire. Lyles was apparently no longer a cooper at this time; the IRS assessment for 1866 lists him as a retail liquor dealer, and the 1870 census records him as a restaurant keeper. It is unknown if Lyles operated these businesses from the study property, but it is likely. Lyles also purchased the neighboring Lowe Parcel (Parcel 2) in 1873, forming a single lot with 70 feet of frontage on Union and 56 feet, 1 inch along Duke Street. The 1877 Hopkins shows the combined lot with the two buildings depicted in the Civil War-era photographs persisting along Duke Street (Figure 12).

Enoch Lyles died before 1880 according to the U.S. Census, which recorded Joanna Lyles, widow, as head of household with her son Richard and his family occupying the same residence on Duke Street; it is not known if the study property was the family's residence. Enoch Lyles left all of his property to his widow Joanna (Alexandria Will Book 1:228). According to the 1885 Sanborn Fire Insurance map, only the house and outbuilding associated with the corner lot are standing within the combined parcels owned by Joanna Lyles; the parcel to the north, purchased from the heirs of Christiana Lowe, is apparently empty (Figure 13). The building on the corner lot is listed as a grocery. In October 1891, Joanna Lyles sold the two parcels to J. C. Herbert Bryant, founder of the Bryant Chemical Company (Alexandria Deed Book 26:404).

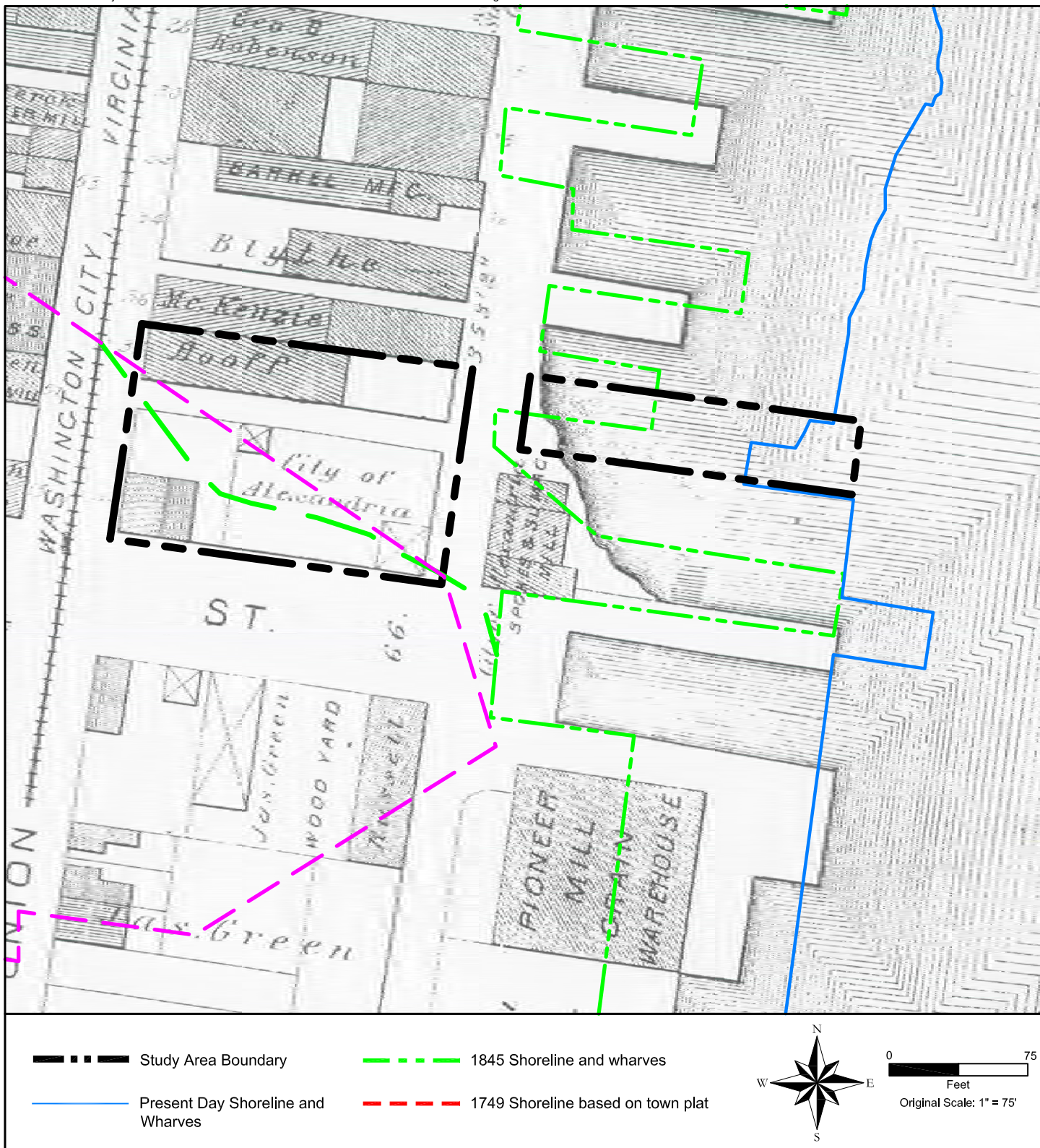


Exhibit 12
1877 Hopkins Map and Historic Shorelines

Page 25

Parcel 2: Lowe Parcel

Christiana (Arell) Lowe ca. 1802-1873

During the Civil War, this parcel, like the Arell parcel immediately to the south, was apparently not commandeered by the Union Army during its occupation of Alexandria's waterfront. A second period photograph taken from the top of the Pioneer Mill shows a single story frame building standing within the Lowe parcel, with a sign reading "Smoot & Perry" on the roofline (see Figure 9 and Figure 14). The Smoot & Perry lumber and coal yard was located several blocks to the north along Union Street between Queen and Cameron streets; the small building within the Lowe's parcel may represent offices associated with that business (Alexandria Archaeology 2006). Also visible in the photograph is what appears to be a rail car blocking the alley between the Smoot & Perry building and the warehouse to the north.



Figure 14: Detail Showing Building on Parcel 2

Source: Library of Congress

In 1873, the heirs of Christiana Arell Lowe sold the parcel to Enoch Lyles, as discussed previously in this report under the Arell Parcel, creating a single parcel occupying 70 feet of frontage along Union Street and running from the corner of Duke and Union to the 18 foot 4 inch alley to the north (Alexandria Deed Book 3:92). This building is not standing in 1877 or 1885 (see Figures 12 and 13). In October 1891, Joanna Lyles sold the two parcels to J. C. Herbert Bryant, founder of the Bryant Chemical Company (Alexandria Deed Book 26:404).

Parcel 3: Muncaster/Marsteller/Violett Parcel

A three-story brick warehouse is depicted on this parcel in a Civil War-era photograph of the block (Figure 15 and see Figure 9); this structure is most likely Violett's "new brick warehouse" mentioned in the Alexandria Gazette article describing the 1854 fire (AG 1854: 3). The building in the photograph includes a sign reading "P.H. Hooff's (illegible) Store." IRS tax assessment records for the year 1963 list Hooff as a retail merchant who resides at 190 Prince Street; Hooff is listed as a 69-year-old commission merchant in Alexandria on the 1870 census. On Hopkins' map of 1877, "Hooff" continues to be the occupant of the building on the parcel (see Figure 12).

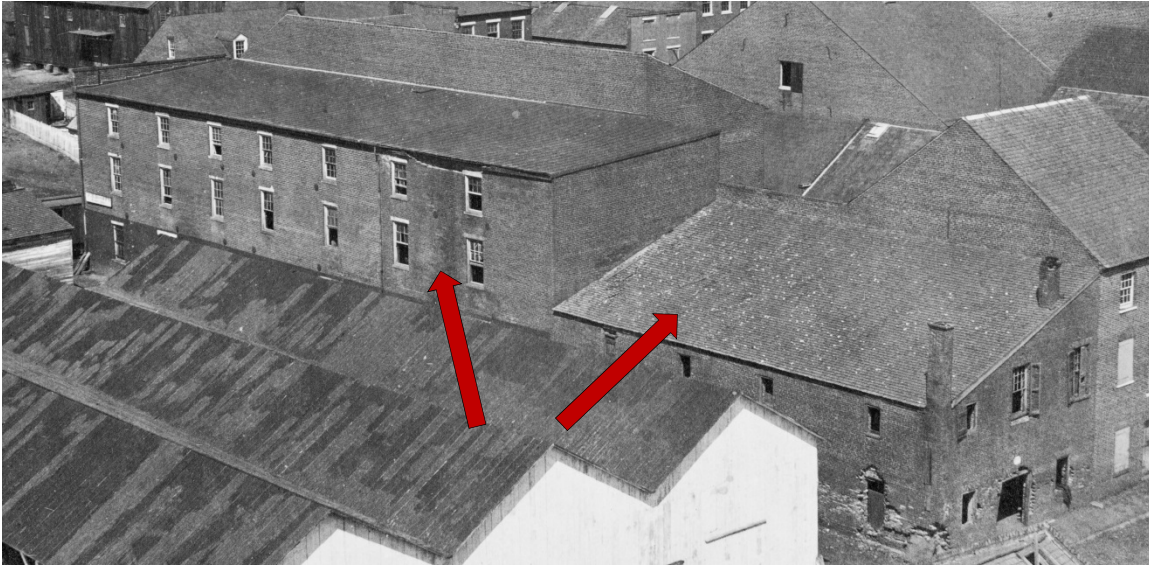


Figure 15: Detail Showing Warehouses on Parcels 3 and 4

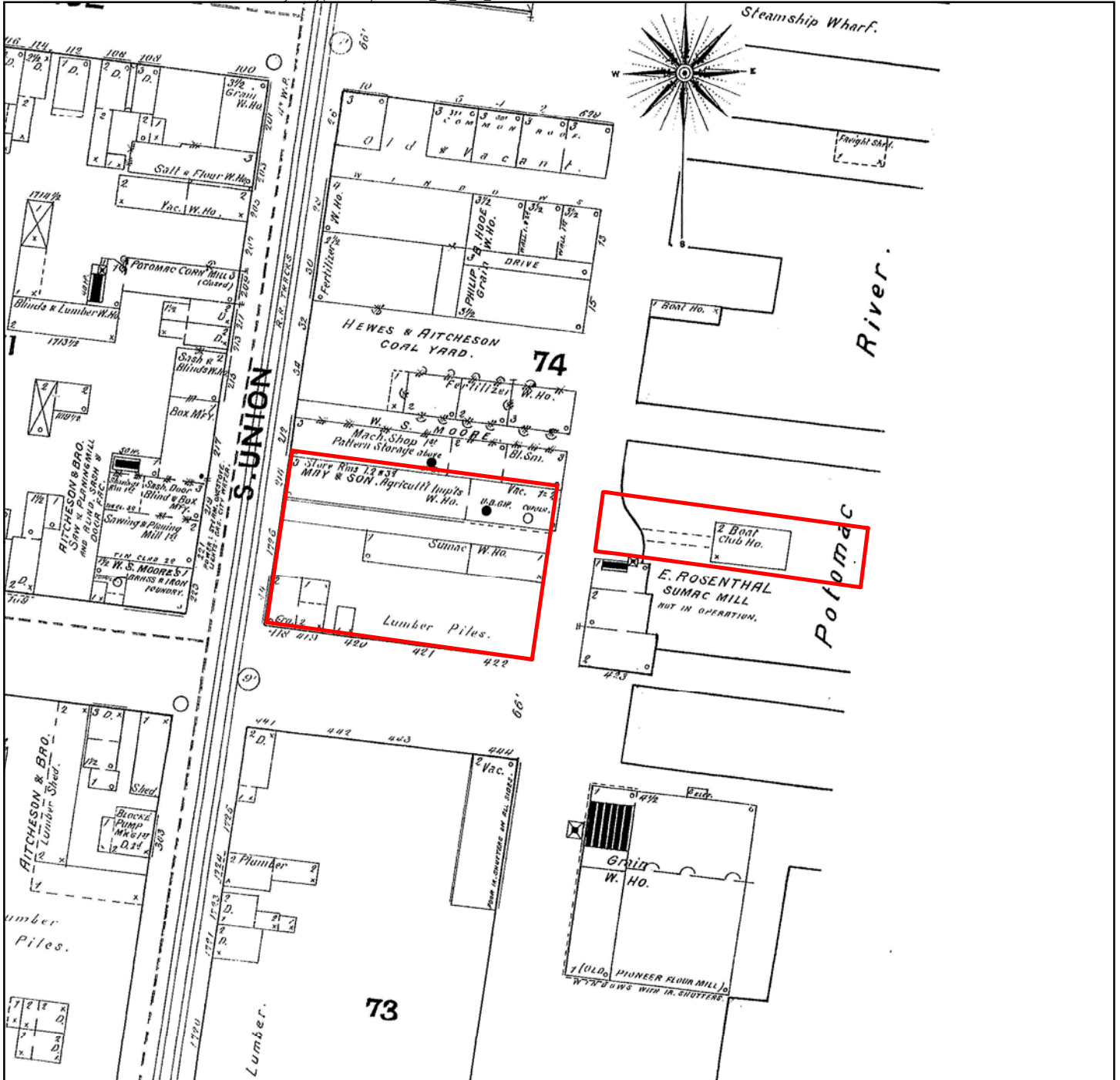
Source: Library of Congress

By 1887, the Alexandria City Directory lists Philip H. Hooff's home at 190 Prince Street, but does not list a business; at the age of 86 in that year, Hooff had most likely retired from running a business.

The Sanborn Fire Insurance map of Alexandria in the year 1885 shows May & Son Iron Founders Agricultural Works occupying the three story brick warehouse within the parcel, as well as an adjoining two story building standing within the Marsteller parcel fronting on the Strand (see Figure 13). According to the city directories, William H. May & Son sold agricultural implements, plows fertilizers, and seeds out of this office at 38 S. Union Street; by the late 1880s, with an office on Fairfax Street. The Mays appear to have used the building on the Muncaster/Violett parcel primarily for storage, although a woodworking shop occupied a portion of the second floor overlooking Union Street and a paint shop occupied the second floor of the eastern section of the building.

The 1891 Sanborn map shows the Muncaster/Violett parcel as occupied by May & Son Agricultural Implements Warehouse (Figure 16), and indicates that the entirety of the parcel is occupied by a three story brick building, as shown in a Civil War photograph of the block. It is possible that the two story portion of the building indicated on the 1885 Sanborn map is an error, and the entire parcel had been occupied by a three story brick building since at least the Civil War.

In October 1891, J. C. Herbert Bryant purchased the parcel, including a brick warehouse that stood upon it, from Anthony W. Armstrong, appointed Special Commissioner of Sale in the chancery suit *Amanda M. Violett v. William A. Kramer et al.* (Alexandria Deed Book 26:422). Amanda Violett was the wife of Robert G. Violett, deceased. No details concerning the property or its use prior to the sale were included in the chancery records.



Approximate Location of Project Area

Map Source: "Sanborn Fire Insurance Map from Alexandria, Independent Cities, Virginia." Sanborn Map Company, July 1891. Sheet 11. Library of Congress Geography and Map Division Washington, D.C.

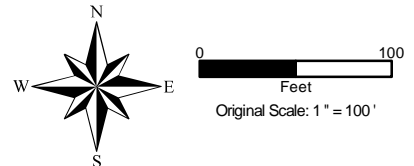


Figure 16
Sanborn Fire Insurance Map - Alexandria 1891

Parcel 4: Marsteller Parcel

During the Civil War, the brick building standing on the Marsteller parcel and featured in a photograph from the period was used by the U.S. Army Quartermaster Department for commissary storage (see Figure 9). In the photograph showing Parcels 4 and 5 in detail the warehouse on the right appears to be in poor repair (see Figure 15); by 1877, the building within the Marsteller parcel is no longer shown (see Figure 12).

By 1885, Lambert & McKenzie's firm no longer occupied the parcel, as indicated on the Sanborn Fire Insurance map of that year, which shows May & Son Iron Foundry and Agricultural Works occupying the parcel as well as the Muncaster/Violett parcel to the west (see Figure 13). The building within the Marsteller parcel includes a vertical boiler and a cupola on the roof, and was likely the site of the actual foundry works for May & Son. The building is also noted as being two stories in height but only one story in construction, suggesting an industrial space and indicating that a different building than that depicted in the Civil War photograph has been constructed on the parcel (see Figure 15).

The heirs of Benjamin H. Lambert sold his one-half undivided interest in the parcel to the Old Dominion Boat Club in August 1883 (Alexandria Deed Book 13:203). This organization is discussed at greater depth in the discussion of the 210 The Strand Parcel below. Lewis McKenzie in turn sold his half interest in the parcel to William S. Moore in 1891 (Alexandria Deed Book 25:109). The following year, William Moore and wife Ann recorded a Deed of Partition in which the Moores received the portion of the parcel west of Strand and the Old Dominion Boat Club received the portion east of Strand, fronting on and extending into the Potomac (Alexandria Deed Book 28:30). The same day, the Moores sold their parcel to J. C. Herbert Bryant (Alexandria Deed Book 28:27).

In 1891, the year of the sale of the property to William Moore, the Sanborn Fire Insurance map indicates that the building on the parcel is vacant (see Figure 16).

Parcel 5: City Lot

As discussed *supra*, the federal army appears to have constructed two storage warehouses within the study area along Duke and The Strand (see Figures 9 and 10). The larger of the two warehouses, situated along Duke Street was subdivided into a Hay Store Shed (measuring 60 by 72 feet) and a Grain Store House (measuring 72 by 74 feet). The second building was located across the "alley" and was fronting The Strand. This building (60 feet by 23.5 feet) was used as a commissary storehouse. The buildings are prominent in Russell's photograph, which show that the larger storehouse is a three-bay post and frame building, with three gabled plank roofs it is evident (see Figures 9). Hay bales are evident on the western end of the building. The smaller storehouse is a two-story brick building, which appears in poor condition and/or abandoned in this photo.

Fires and Floods

In 1889, extensive damage was reported up and down the entire Alexandria waterfront, in Georgetown, and in the District from a flood. The high water marks from the previous flood in 1856 on buildings along The Strand were exceeded by 10 inches and Jones Point was almost completely inundated (AG 3 June 1889: 3).

Union Street from Prince to the cove above Fishtown was an unbroken canal, suggestive of a scene in Venice, lacking only the gondola to enable one to imagine himself in the city of the Adriatic...the scene attracted near everybody in town to the waterfront, and the eastern terminus of each street was thronged with people [AG 3 June 1889: 33]

The estimated losses varied, but appears to be greater toward the northern end of town: the high water washed away much of the earth fill of the American Coal Company wharf on the north end of town (now the Robinson North Terminal), but did not reach the quantity of grain stored on the upper floors of the Pioneer Mills; Hooe reported \$25 worth of damage; but the water filled J H Crilly's store, resulting in \$500 worth of damage to his flour, sugar, and other stock (AG 3 June 1889: 3).

Finally, a massive fire in 1897 burned a large section of the waterfront, including the block bounded by Union, Prince and Duke Streets; this fire was widely regarded as the most devastating fire in Alexandria's history. The fire began in the engine room of the Herbert Bryant's bone mill, located on the east side of the Strand, and quickly spread to the larger factory located within the study area (Riker 2009; AG 3 June 1897:1). The Alexandria Gazette reported:

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 [AG 3 June 1897:1]

The fire is described in greater detail in the following section.

TWENTIETH CENTURY INDUSTRIALIZATION (1890s- 1950s)

Like much of the south, industrial development brought economic relief to Alexandria following the devastating effects of the Civil War. Federal troops withdrew from the city, leaving behind empty, albeit largely intact warehouses and wharfs along the waterfront.

The greatest change that has taken place is the appearance of Alexandria, since the war, is observable in and about the wharves. The riverfront is far different from what it was when every warehouse was filled with goods and every store and counting room open for the transaction of business from the fish wharf to the Pioneer Mills [AG 20 June 1866].

Also left relatively intact were the railroad tracks that serviced the waterfront, specifically the tracks along Union Street, which bordered the study area. The railroad certainly was vital to the business operations of Herbert Bryant, as indicated by his 1892 testimony. The manufacturing of fertilizers became one of the most important industries in Alexandria up through the turn of the 20th century (Pulliam 2011: 48).

The Bryant Fertilizer Company

The Bryant Fertilizer Company emerged from the retail farm equipment/fertilizer business that John Carlyle Herbert Bryant established in Alexandria in 1868¹. By 1873, Bryant was operating a plaster mill and a bone mill behind his office on King Street, and was mixing fertilizers out of rented space in a warehouse at the foot of Queen Street (Alexandria Library, Local History/Special Collections Box 239). The company was chartered in May of 1899 under the name Bryant Fertilizer Company, which reflected Bryant's shift to manufacturing fertilizers on a much larger scale (Evening Star [ES] 6 May 1899).



Figure 17: Herbert Bryant Letterhead

Source: *Herbert Bryant vs. Ann V. Ferguson*
Chancery Court Cause 1903--006, Fairfax County Court Records

¹ In 1867, Captain Herbert Bryant was employed by J.P. Bartholow, a local seed and agricultural implements dealer in Washington DC, who opened a Alexandria branch office managed by Bryant that year; by 1868, Bryant appears to have purchased the business and was operating under his own name (AG 24 June 1867; AG 7 February 1868:4; AG 5 August 1868; 1867-1868 Washington DC City Directories; Daspit 2014).

The Commercial Fertilizer Industry

The fertilizer industry in the United States essentially developed out of the need to correct past poor agricultural practices, in an effort to make the land more productive. Individual farmers in the late-18th century and early-19th century had already begun experimenting with improving crop production, but the establishment of agricultural societies and fairs, agricultural journals and finally by the mid-19th century, agricultural colleges, did more to educate farmers on how to improve their agricultural practices (Nelson 1990:28-33). Farmers soon became “trained” consumers of and dependent on the fertilizer industry (McKinley 2014:12).

The importation of Peruvian guano, which began earnestly in the 1840s and peaked in 1856, may mark the beginning of the commercial fertilizer industry in the United States (McKinley 2014:12-13; Nelson 1990:35). Beginning in 1843, articles extolling the extraordinary benefits of guano on crop production were published in the *Alexandria Gazette*, and by 1844 guano was advertised for sale from various wharves and warehouses on the Alexandria waterfront. By 1851, guano from the Alexandria waterfront was transported to the nutrient starved fields of western Virginia on the Orange and Alexandria Railroad (Pulliam 2011:36).

Peruvian guano was rich in nitrogen and phosphates, but guano recovered from more humid climates contained less nitrogen and was used to produce a soluble phosphate product (Nelson 1990:35). As guano became increasingly scarce and expensive, manufacturers turned to calcium phosphate in bones that were “burned, pulverized and dissolved in sulfuric acid” to produce superphosphates (McKinley 2014: 13). Two Englishmen, John B. Lawes and James Murray, filed separate patents in 1842 for the production of superphosphates, which were created by dissolving bone and/or phosphate rock with sulfuric acid (Brueelsema et. al. 2013:21).

Baltimore led the country in fertilizer production in the 1860s and 1870s because of its seaport, excellent railroad infrastructure and close proximity to agricultural areas; however, the discovery of the “importance” and abundance of phosphate rock deposits in South Carolina paved the way for Charleston to become the center of fertilizer production in the country (Nelson 1990: 99).

Early manufacturers of superphosphates hand-mixed the materials together in earthen pits later in iron pots- using large wooden paddles; gradually, the process became mechanized with the use of power mixers (Nelson 1990:40). By 1870, the Wando Mining and Manufacturing Company of Charleston, South Carolina had constructed a four-story processing plant, where the pulverized phosphate rock was elevated to the top floor and mixed with sulfuric acid and other materials. After cooling/setting on the third floor, it was broken by hand into small pieces and crushed into powder by rollers. The product was then deposited into bags for distribution.

J.C. Herbert Bryant

J.C. Herbert Bryant was originally from Lexington, Virginia, but settled in Alexandria after the Civil War. Bryant enlisted as a private in the Confederate Army in April of 1861, but later rejoined Company A of the 17th Virginia as a 2nd Lieutenant after attending the Virginia Military Institute; he had attained the rank of Captain in the Reserve Army of the Confederate States by the end of the War (VMI Archives 2013). Bryant was wounded and captured twice - at the Battles of Antietam and Sayler's Creek.

Captain Herbert Bryant purchased J.P. Bartholow's local branch office and began operating under his own name in 1868 (AG 7 February 1868). In 1868, Herbert Bryant sold agricultural implements, such as portable cider mills, grain fans, grain drills, scales, timothy and clover seed, along with various fertilizers (including guano, phosphate of lime, and bone dust) out of his store located at 25 King Street (between Union and Water Streets).



Figure 18: Various Advertisements
Source: Alexandria Gazette 8 May 1876 and 10 July 1869

In the early 1890s, Bryant began to acquire properties within and surrounding the 220 South Union Street study area for the construction of a fertilizer plant, and had completed the purchase of all portions of the study area by 1893. On the South Union Street property, he constructed a modern fertilizer manufacturing facility that utilized the previously existing three story brick warehouse north of the alley and a new two story frame factory building that occupied the entire property south of the alley; also incorporated into the works were a bone mill occupying the repurposed Rosenthal Sumac Mill east of the study property. Bryant was obligated to begin production under the resolution of sale from the city; and by May of 1892, was a “dry-mixing” material by hand, while awaiting the arrival of his machinery (Alexandria Library, Local History/Special Collections 1892: Volume 2).

The fertilizer complex was featured in an 1893 newspaper advertisement, with illustrations of the buildings, and is shown on the 1896 Sanborn Fire Insurance map occupying the entirety of the 220 South Union Street property (Figures 20 and 21).

The 1893 advertisement and promotional article detailed the operation of the mill as well as its layout, production capabilities and connection to rail and naval transportation networks. The first floor of the three-story brick warehouse was used for storage of crude ammonia and other materials. Ammoniates were elevated by steam elevator to the second floor and were mixed using Walker & Elliott's Improved Mixer. Bryant noted that his company could mix one hundred tons of fertilizer per day; and that each ton was mixed separately, a procedure that produced a more accurate mixture than the “old style” of dumping and mixing, and which was verified by the State Chemist² (AGVA 16 September 1893:17).

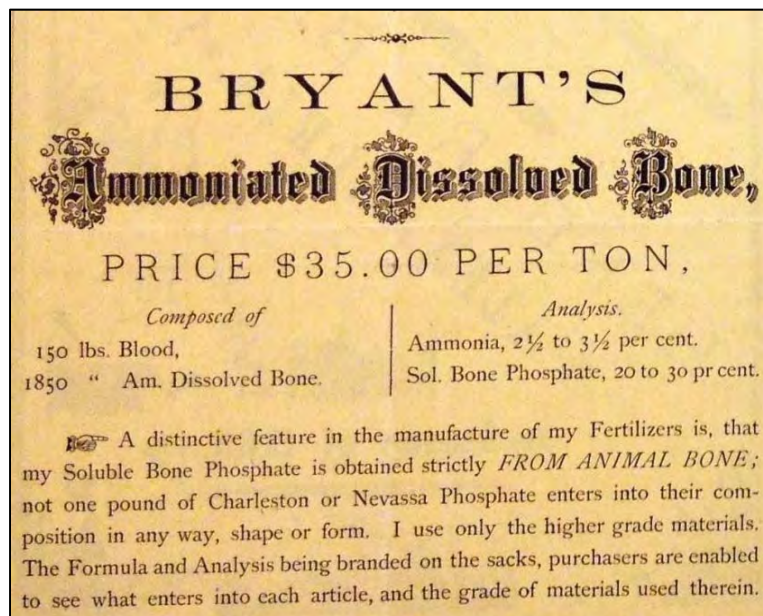


Figure 19: Detail from Herbert Bryant Flyer: Season of 1880
Source: Alexandria Library Special Collations

The first floor of the large two-story frame building was also used for storage of bone, which was “procured from all parts of the world”. The second floor was used to hold finished products, which were transferred via a tramway from the bagging room directly onto rail cars on Union Street. At this time, two tracks had been laid down Union Street; one of the tracks was to be kept clear of all cars, in order to facilitate movement between the two depots (Alexandria Library, Local History/Special Collections 1892: Volume 2).

A tramway also connected the main building with the mill, located on the opposite side of the Strand, to the south of the Old Dominion Boat Club (210 The Strand).

² Fraud and misrepresentation was common early in the fertilizer industry, as it was not easy for the consumer to determine the nutrient value and contents of the mixtures. Maryland appointed a state chemist in 1848 to inspect guano and plaster of Paris (Nelson 1990:49); however, it not known at this time when Virginia established this position or how often inspections of fertilizers were conducted.

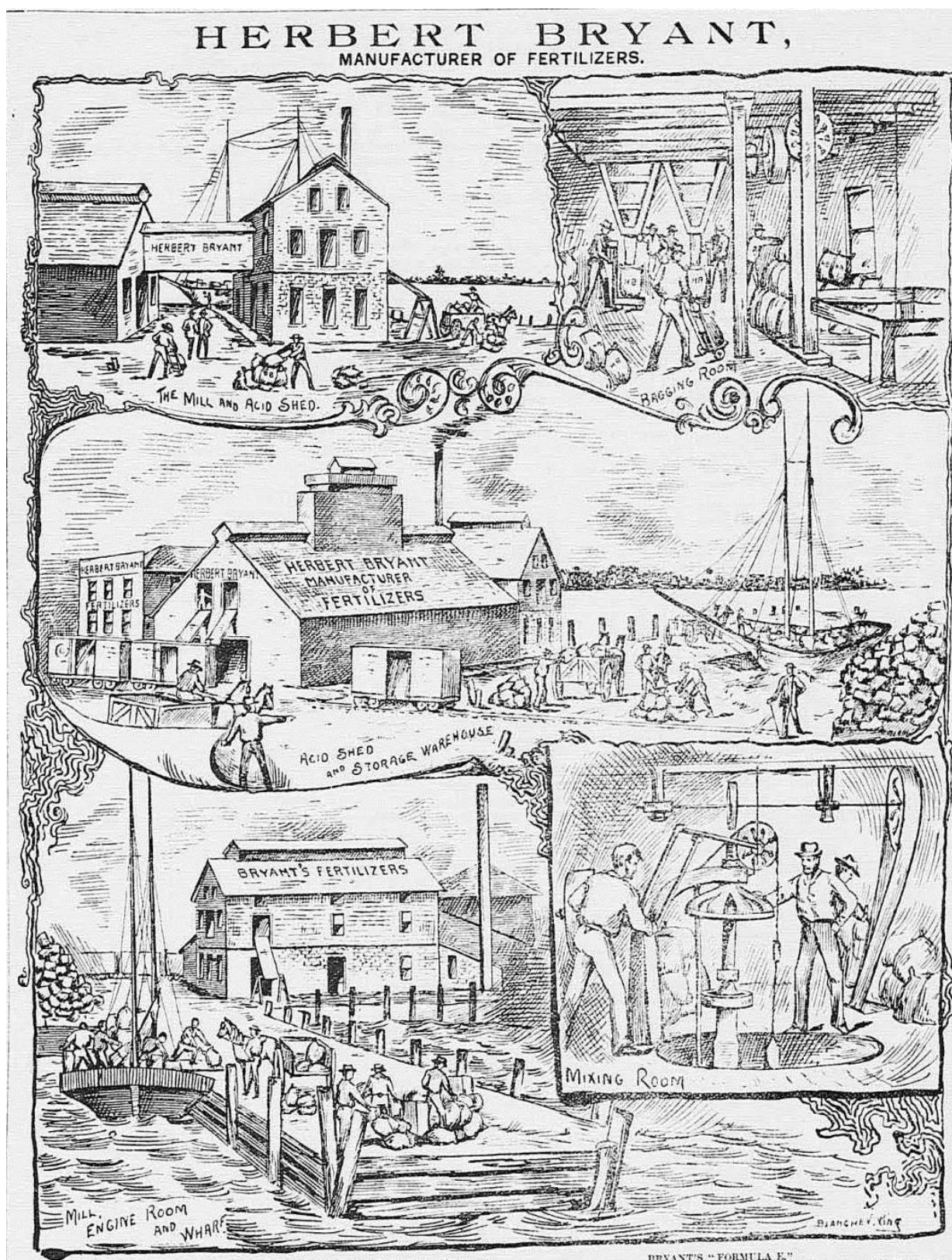
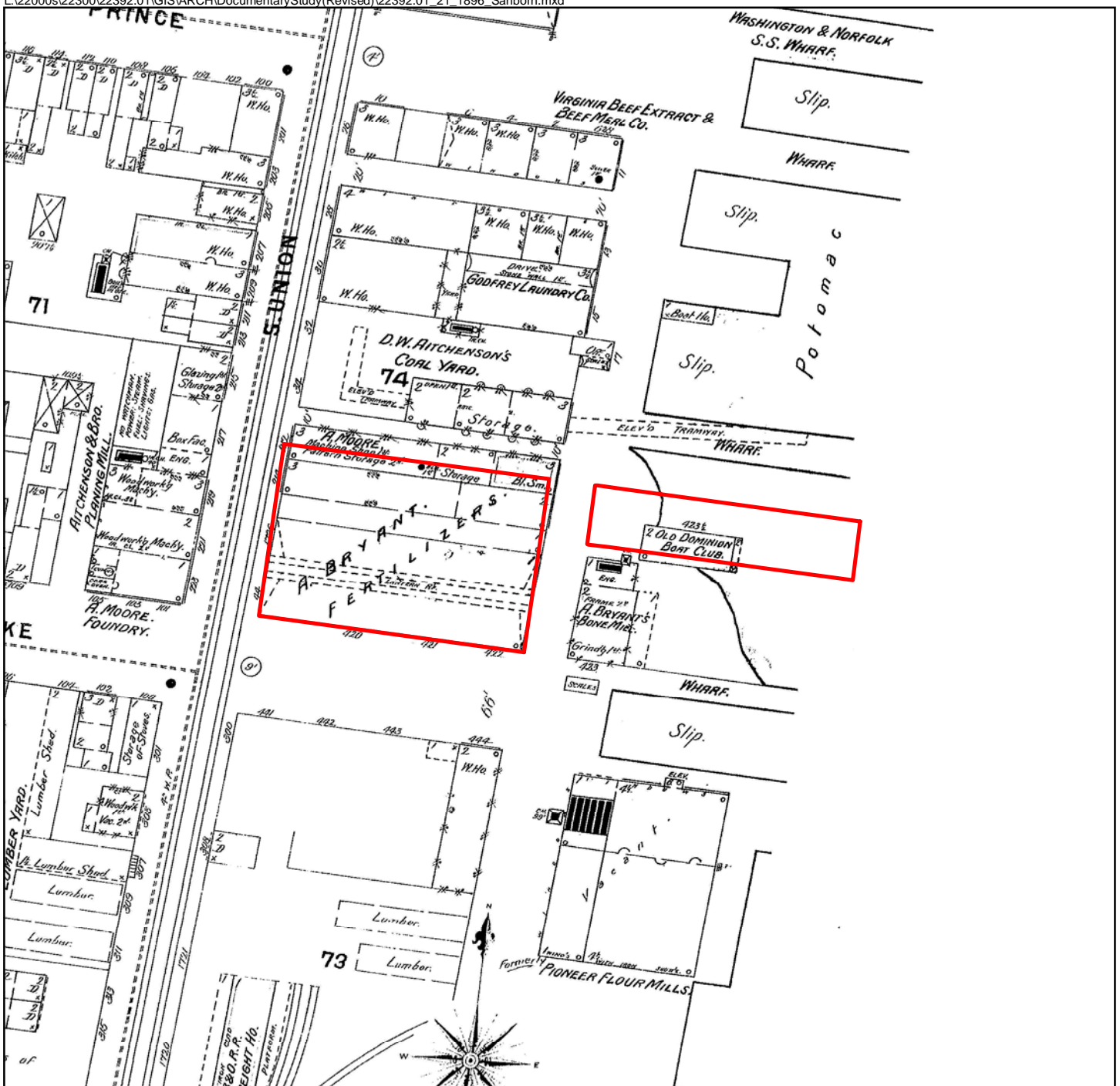


Figure 20: Herbert Bryant Manufacturer of Fertilizers Advertisement

Source: AGVA 16 September 1893:17



Approximate Location of Study Area

Map Source: "Sanborn Fire Insurance Map from Alexandria, Independent Cities, Virginia." Sanborn Map Company, August 1896. Sheet 8. Library of Congress Geography and Map Division Washington, D.C.

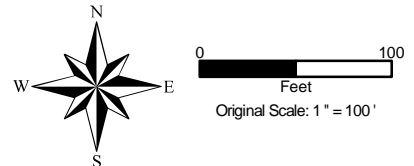


Figure 21
Sanborn Fire Insurance Map - Alexandria 1896

Bryant's mill was "equipped with a full line of machinery...[including] a 75 horse-power engine and a 150 horse-power boiler. There is a complete line of machinery for grinding bone, plaster and disintegrating and grinding fertilizing material" (AGVA 16 September 1893:17). The crib wharf with its dirt floor measured 178 by 36 feet, and contained a draught of 20 feet for vessels.

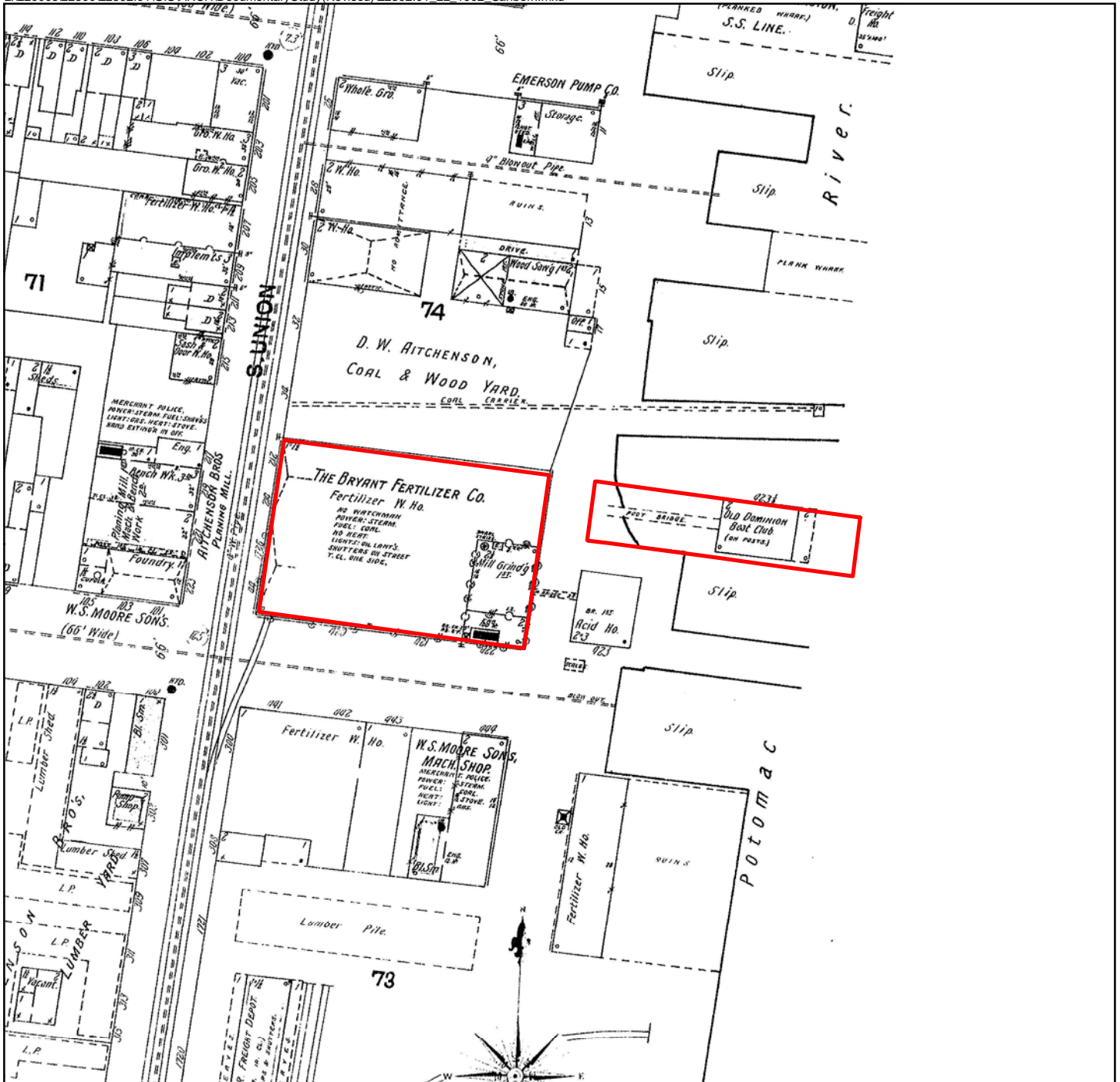
Bryant's factory was destroyed by a fire that began in the engine room of the bone mill on June 3, 1897. The fire was first seen by the crew of the tug *Bremerton* and was also reported by several individuals on land. The fire burned every building on the block bounded by Duke, Prince, Union and the river, as well as the abandoned Pioneer Mill south of Duke Street. Arson was suspected (Riker 2009; AG 3 June 1897:1). Company operations were obviously suspended temporarily; the newspaper reported that two schooners delivering fertilizer materials from Baltimore and plaster from Nova Scotia to Bryant were turned away toward the Alexandria Fertilizer Company (AG 3 June 1897:1).

Bryant rebuilt his fertilizer factory after the fire and sold all of his land for the factory (which he had heretofore personally owned since purchasing the various parcels in 1891-92) to his company, the Bryant Fertilizer Company in 1899 (Alexandria Deed Book 42:512). Included in the land transferred was the right to enclose the 18 foot 4 inch wide alley which had appeared in deeds as early as the 18th century by virtue of the ownership of all of the property adjacent to the alley.

By 1902, the plant had been rebuilt as a single building occupying the entirety of the 220 South Union Street parcel. The grinding mill was relocated into the main building, and its former location across the Strand and outside of the study area was occupied by an acid house connected to the main building by a bridge or tramway over the Strand (Figure 22). By 1912, the grinding mill and acid house had been converted to storage, and was used for storage until sometime after 1921 (Figures 23 and 24).

The Bryant Fertilizer Company closed its waterfront operation sometime after 1922, and the particulars of the use and ownership of the property are unknown for several decades. The Sanborn Fire Insurance map for 1941 shows the property as an empty lot. In 1945, the entirety of the 220 South Union Street parcel formerly owned by the Herbert Bryant Company was sold by Edward G. Smith, receiver of the Sales Corporation, to Carlyle R. and T. P. Boguess (Deed Book 214:204). Information on these individuals and company were not located. John Carlyle Herbert Bryant (1909-1983) served as Chairman of the Herbert Bryant Inc., Alexandria, which by 1961 had become a real estate development company.

The warehouse that currently stands on the property was constructed by 1959, as it was noted on the Sanborn Fire Insurance map of that year as a packing and crating facility, believed to have been rented by the Robinson Terminal Warehouse Corporation which operated a facility south of Duke Street. The property was sold to Cummings Investment Associates, the current owner, in 1963 (Alexandria Deed Book 581:231). The property has served as a warehouse and art studio in the intervening years, and is currently vacant.



Approximate Location of Study Area

Map Source: "Sanborn Fire Insurance Map from Alexandria, Independent Cities, Virginia." Sanborn Map Company, July 1902. Sheet 14. Library of Congress Geography and Map Division Washington, D.C.

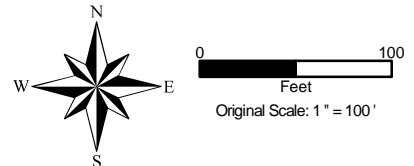
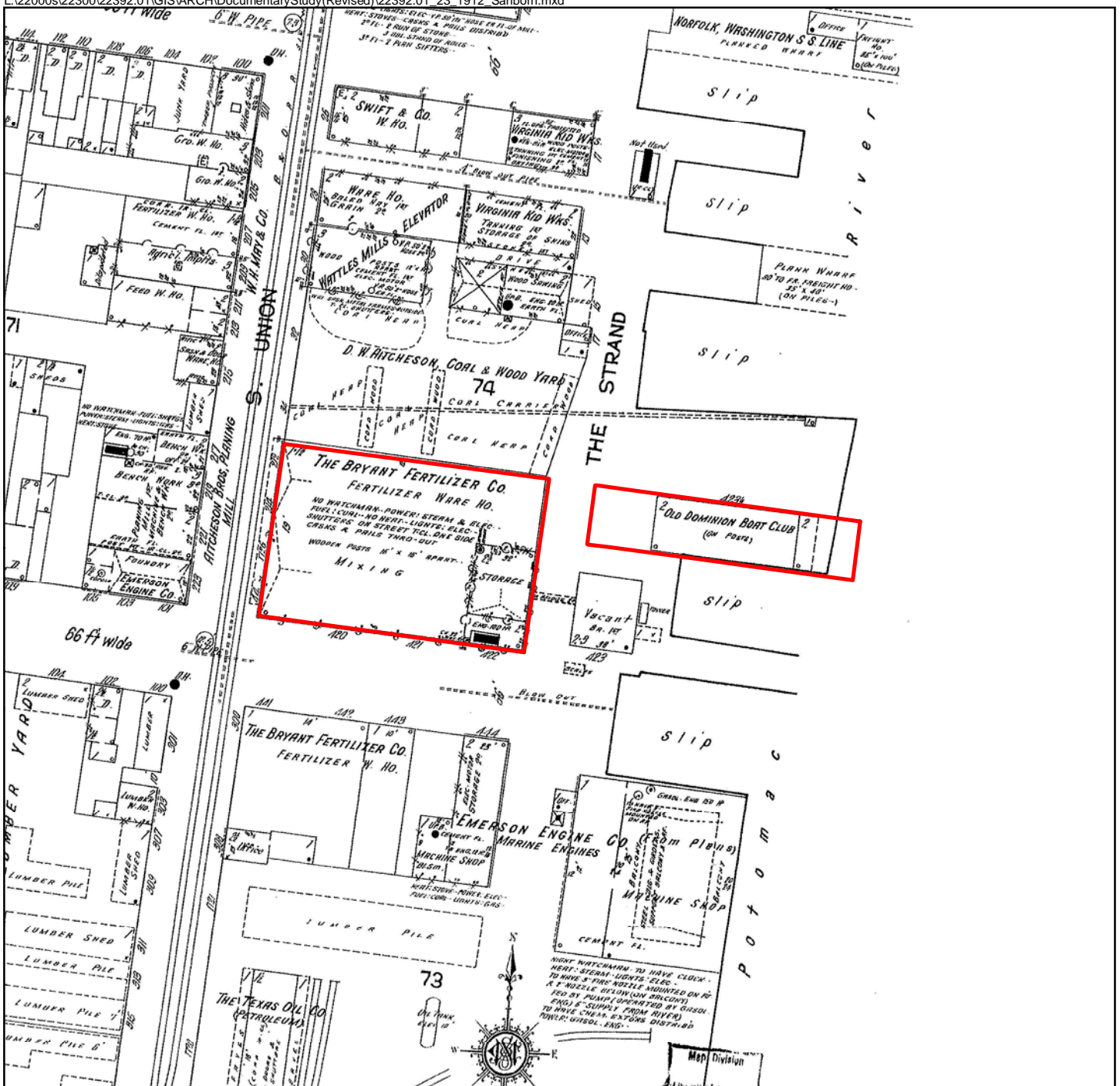


Figure 22
Sanborn Fire Insurance Map - Alexandria 1902



Approximate Location of Study Area

Map Source: "Sanborn Fire Insurance Map from Alexandria, Independent Cities, Virginia." Sanborn Map Company, November 1912. Sheet 14. Library of Congress Geography and Map Division Washington, D.C.

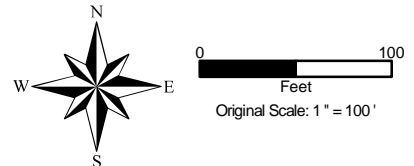


Figure 23
Sanborn Fire Insurance Map - Alexandria 1912

220 The Strand

The 220 Strand parcel, with regard to its present boundaries, remained mostly within the waters of the Potomac and occupied by landing piers and wharfs for the majority of the 19th century. The parcel was originally attached to the Muncaster/Marsteller/Violett parcel, which occupied a 30 foot frontage on Union Street and ran into the Potomac River in the early 19th century. At an unknown time before 1853, the eastern portion of this parcel was transferred to the ownership of Christiana Marsteller and her husband, Philip G. Marsteller and the 220 Strand parcel, now contained within the Marsteller parcel, was purchased by Lambert and McKenzie as previously discussed in this report.

In 1883, the Old Dominion Boat Club purchased an undivided half interest in the Marsteller parcel, which at that time included what would become the 220 Strand parcel, from the heirs of Benjamin Lambert (Alexandria Deed Book 13:203). The Boat Club, chartered in 1881, was composed of boating enthusiasts from many of the influential families of Alexandria; the club hosted boating events, regattas and outings that ranged up and down the Potomac, and members were sometimes known to go on extended trips as far south as Lynchburg via canoe or small boat. The club house was destroyed or significantly damaged by fire several times: in 1895, 1897, 1919 and 1922. The clubhouse was rebuilt after each fire until the last, when the club moved to its current location at the foot of King Street (Miller n.d.).

The Old Dominion Boat Club sold the property at 220 Strand in 1928 to William L. Davis (Alexandria Deed Book 93:100). Davis' heirs sold the property in 1974 to Russell and Flavienne Crenshaw (Alexandria Deed Book 772:859), who in turn sold the parcel to the City of Alexandria in 2006 (Alexandria Instrument #060013597).

According to the Sanborn Fire Insurance map for 1885, the Boat Club House was built on piers off the shoreline of the Potomac, and accessed by a narrow walkway from a small piece of land bordering the east side of the Strand (see Figure 13). Later Sanborn maps show a similar layout, indicating a two story frame building on posts in the Potomac accessed by a foot bridge until 1912, when a wharf has been constructed to the north of the club house; the boat house itself continues to be built on posts, although the foot bridge has been replaced with direct access to the Strand via the wharf and land fill (see Figures 16, 20; 22-24). A boat house continued to stand on the parcel well after the Old Dominion Boat Club sold the property, as shown on the 1941 Sanborn Fire Insurance map.

By 1959, the Sanborn map indicates that the parcel has been converted to riverfront land; a small building labelled "Boat Rep.", presumably used for boat repairs, is located fronting the Strand in the western portion of the parcel. The building depicted on this map is significantly smaller than the building currently standing within the parcel.

PREVIOUS WATERFRONT ARCHEOLOGICAL INVESTIGATIONS

Few descriptions exist documenting the construction techniques used to infill the Alexandria harbor in the 18th and 19th century; therefore, the archeological record becomes even more important to complement the documentary record. At least four wharves have been documented along the Alexandria waterfront (Table 1).

Table 1: Archeological Wharf Excavations in Alexandria, Virginia

Name	Date	Construction Type and Fill
1. Carlyle-Dalton wharf	1759	Crib with cobbles and gravel
2. Lee Street	Ca. 1780	Bulkhead
3. Roberdeau's wharf	1785	Pier and Bulkhead with earthen fill
4. Keith's Wharf	1785	Bulkhead with earthen fill

During construction of the Torpedo Factory condominiums in 1982, four sections of the Carlyle-Dalton wharf were uncovered by archeologists along Cameron Street (Heintzelman- Muego 1983). The crib wharf was constructed of yellow pine, some with bark still attached. A second wharf was discovered on the block bounded by Lee, Queen, Union and Cameron streets (Shephard 2006:10). The wharf remains consisted of 14 timber posts, connected by horizontal planks, and a single layer of sandstone blocks. Artifacts were recovered from the fill during the excavations, however could not be used to date the stone paved wharf (URS 7-17).

Excavations in 1989 for the Harborside Development exposed the surface of Roberdeau's wharf at the end of Wolfe Street. Much of the surface appeared to be covered with wooden planks, while other portions were covered with a mixture of wood, sawdust, pine tar and sand. The wharf was constructed of timber bulkheads with piled supports.

Finally, the archeological investigations conducted prior to the development of the Ford's Landing site (at the base of Franklin Street) revealed the most information to date. They identified the well preserved and intact remains of Keith's Wharf bulkhead, along with "a 350 foot-long shipway, nine derelict vessel hulls, [and] a marine railway". The archeologists at Ford's Landing expected Keith's Wharf to be of cob/crib construction, but found a bulkhead wharf measuring 400 by 500 feet (Engineering Science 1993). Because the bay was shallow and located away from the fast flowing Potomac River channel, a cob/crib structure containing vast quantities of earthen fill wasn't necessary. The archeologists also theorized that this method may have been an expedient and inexpensive investment for a speculative venture.

The remains of Keith's Wharf were found 6-13 feet below the modern surface. The 18th century wharf timber measured 10-17 inches in diameter and were connected by "half-lap scarf joints reinforced with iron dowels or drift pins." Tie back braces were dovetailed and pinned to the bulkhead, extended up to 30 feet into the fill and were anchored in such a manner that the fill would not "push out" on the bulkhead. Images of the bulkhead construction and of a scuttled scow are shown below (Figures 25-27).

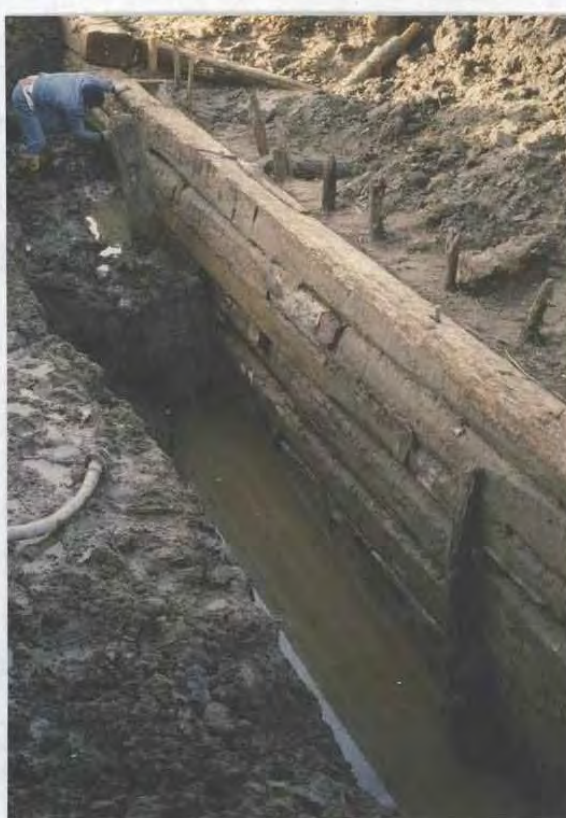


Figure 25: Keith's Wharf Bulkhead and Tie-Back Braces
Source: Engineering Science 1993, Courtesy of Alexandria Archaeology



Figure 26: Bulkhead Repairs Overlying a Barge
Source: Engineering Science 1993, Courtesy of Alexandria Archaeology

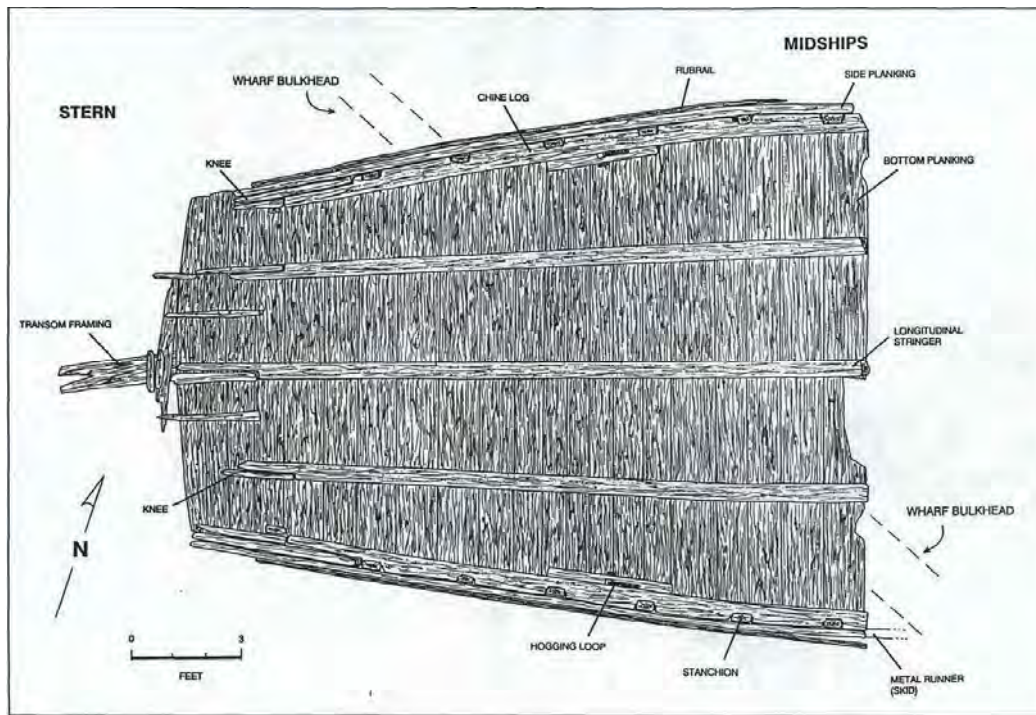


Figure 27: Plan View and Photo of Feature 27

A scow, or flat bottomed vessel

Source: Engineering Science 1993, Courtesy of Alexandria Archaeology

CURRENT CONDITIONS AND KNOWN DISTURBANCES

In March of 2011, ATC Associates, Inc. of Columbia, Maryland conducted both geotechnical soil boring excavations and a Phase I Environmental Site Assessment of the S. Union Street property, which provided broad stratigraphic profiles and an assessment of *recognized environmental conditions* within the study area (ATC 2011a; 2011b).

Subsurface conditions were investigated on the S. Union Street property through the excavation of soil borings in five locations within the building's footprint; one each in the southwest, southeast, northeast, and northwest corners of the building and one situated generally in the center of the building (Figure 23). Each of the soil bores were excavated to a depth of approximately 12 feet below the top of the concrete slab pad and identified a fill horizon between 5 and 9 feet thick overlying Potomac River alluvial and terrace deposits within the termination depths of the soil borings (ATC 2011a). The ATC soil borings indicated shallower fills in the western portion of the study area and deeper fills in the eastern portion, which is generally indicative of the historic natural landform of Point Lumley in the west and the artificial land in the remainder of the study area.

The Phase I Environmental Site Assessment (ESA) performed by ATC provides a profile of the potential contaminants that could be present within the study area; no subsurface testing for contaminants was conducted during the 2011 ESA. Based on the historic use of the property and adjacent properties by the Bryant Fertilizer Company, ATC concluded that there is a potential for soil and groundwater contamination associated with the historic manufacturing of phosphate fertilizer within the S. Union Street property; "including lead, arsenic, polyaromatic hydrocarbons (PAHs) and acidic (low pH) conditions" (ATC 2011b: 3). ATC further concluded that "it is likely that soil and groundwater impacts may be present related to the former off-site industrial operations" conducted on adjacent or nearby properties (*ibid.*). ATC also conducted a limited asbestos survey of the property, which identified asbestos containing materials; however, all were associated with materials present within the extant superstructure on the property.

Soil samples collected during the 2011 ATC geotechnical exploration of the property were submitted for laboratory analysis for the presence of volatile organic compounds (VOCs), semi-VOCs, Priority Pollutant Metals, Total Petroleum Hydrocarbons (TPH), Diesel Range Organics (DRO), and Gasoline Range Organics (GRO). The laboratory analysis of the soil cores identified concentrations of arsenic and chromium above the Virginia Department of Environmental Quality Regional Screening Level for Commercial/Industrial Soils, with the highest levels present in samples taken from the western portion of the property. ATC concluded that these elevated levels likely represent low-level impacts associated with the historic industrial use of the property and study area vicinity (ATC 2011c). However, ATC went on to state that none of the concentrations "represent levels that would require remediation, regulatory reporting, or special handling during excavation and disposal" (ATC 2011c:5).

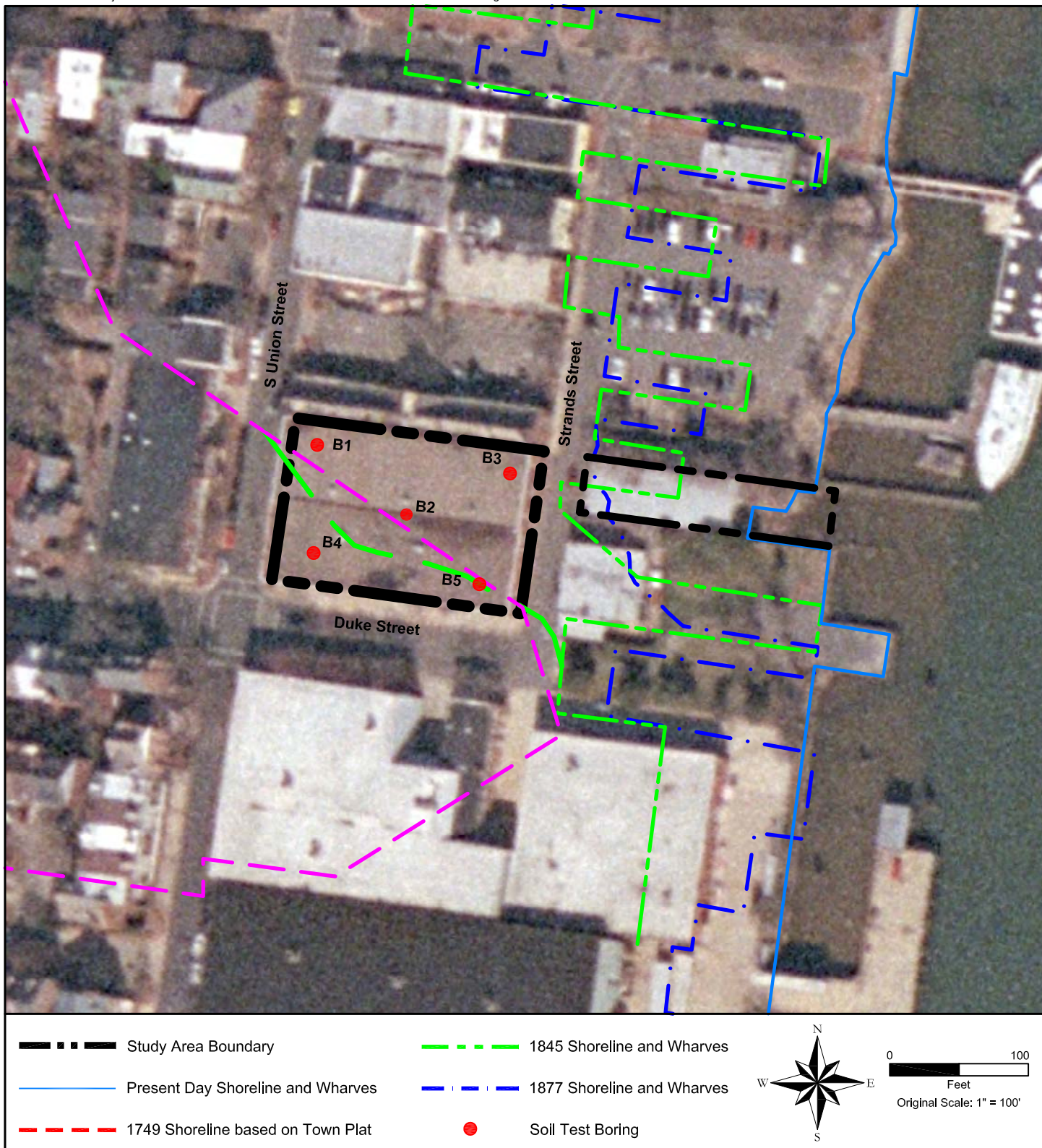


Exhibit 28
2011 Test Bores and Historic Shorelines

ARCHEOLOGICAL EVALUATION

Based on the archival research and previous archeological research presented above, the following resources were present or are currently located within the 220 Union Street parcel; an assessment of their potential archaeological signature is also addressed below. An archeological resource assessment of the 210 The Strand Street parcel is also included, although this property, which is owned by the City of Alexandria, is not currently slated for redevelopment.

18th-Century Buildings and Warehouses

Three buildings are shown on a circa 1788 plat map (*Richard Arrell vs. James Kirk, Mayor of Alexandria*) of Lots 69, 70, 77 and 78 on Point Lumley (see Figure 5). Building 1 is the John Carlyle Warehouse, shown as approximately 100 feet by 24 feet. Building 2 is Hooe's stone warehouse, which measured 72 by 44 feet. Building 3 measures roughly 19 by 76 feet and was constructed in 1786 by Hartshorne on land he leased from Hooe and Harrison.

Based on our review of the history and previous archeological work conducted along Alexandria's waterfront, it is likely that buried remnants of John Carlyle circa 1755 warehouse may be present within the southeastern portion of the 220 Union Street property. Additionally, it is very likely that archeological evidence of deeply buried 18th century wharves that were used to "bank out" and create new land will be found beneath the current buildings on the parcel.

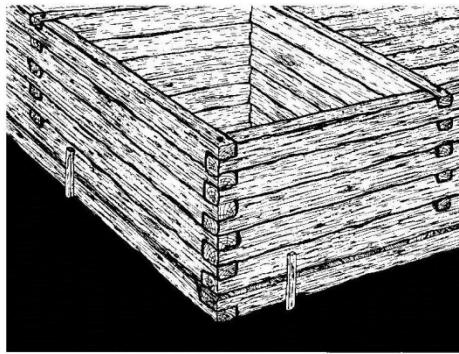
Wharf Construction

Several techniques were at the disposal of the residents of Alexandria to construct wharves and extend new land out into the river. Four general types of retaining structures used in wharf construction are recognized: grillage³; cob/crib; bulkhead; and piling (Engineering Science 1993: 97). Based on the archival research and previous archeological investigations in Alexandria, the latter three wharf construction techniques are expected to have been used beneath the Union Street Hotel parcel.

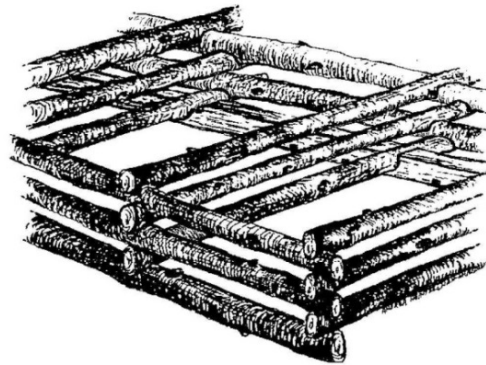
1. Cob or Crib Wharf Construction – consists of stacking timbers to form a square framework that sank to the bottom of the water when filled with stone or soil. The crib technique used tightly packed timbers or planks that were notched in the corners and often pinned with wooden spikes or "trunnels". Cob frameworks were more loosely constructed with gaps and therefore filled with stone (the name may have derived from cobblestones (Figure 29).

³ Grillage wharfs consisted of rafts of logs layered alternately and weighed with stones - only two wharves of this type have been found in the archeological record (Engineering Science 1993: 97)

A wharf measuring 25 feet wide may have been constructed of only one crib. This type of construction was likely used in the late 18th /early 19th century to extend the land within the study area out from Point Lumley.



Crib Wharf Structure (Alexandria Archaeology)



Cobb Wharf Structure (Heintzelman-Muego 1983)

Figure 29: Examples of Crib and Cobb Wharf Construction

2. Bulkhead Construction – consisted of "stacking and interlocking long timbers" to form a three sided structure. The walls were often braced with struts, or back braces, "that attached to the wall and projected back into the wharf fill". Pilings may have been added at a later time to support the bulkhead walls.
3. Piles Wharves – are a type of bulkhead wharf that used a pile driver to set logs vertically into the river bottom. Early pile drivers consisted of a heavy weight attached to ropes that would be lifted by teams of workers and dropped on the pile (Shephard 2006:6). This method became more common in the later 19th century with the advent of steam powered pile drivers. The Fish Wharf, which was located at the foot of Oronoco Street, was reconstructed or repaired in 1852 using over 150 piles that ranged in length between 25 and 45 feet (AG 22 July 1852:2). The flooring may have also been constructed of pine or gum wood.

The remains of the 18th and 19th century wharves are likely preserved beneath the Union Street Hotel property. The original wharves were probably of crib or bulkhead construction, but later reinforced with pilings.

19th – Early 20th-Century Buildings

Civil War era photographs and historic maps show at least seven buildings within the study area. A circa 1810 dwelling was constructed on the corner of Duke and Union Streets. The circa 1860 photograph shows this was a two-story brick building. A second dwelling of frame construction lay adjacent, along with outbuildings. A third frame building, occupied by Smoot and Perry during the War, was located along Union Street.

The USQM was using a large three-bay post and frame warehouse on the corner of Duke Street and the Strand for hay and grain storage and a smaller two-story brick warehouse on the Strand for commissary storehouse. Finally a circa 1854 three-story brick warehouse was situated along the northern end of the study area between Union and the Strand.

The circa 1854 three-story warehouse and circa 1810 brick dwelling are shown on the 1877 Hopkins map (see Figure 12); however the frame dwellings and USQM storehouses had been demolished and replaced by two smaller frame stables or garages on the City property. By the turn of the 20th century, the Bryant Fertilizer Company had taken over the block; by 1902, one large structure was constructed spanning the study area. The building was demolished by 1941, as evidenced on Sanborn maps.

20th-Century Buildings

By 1959, the current building had been constructed within the study area. This one-story building (21,240-square foot) was originally used for storage, but is currently occupied by an art studio. A covered parking garage lies adjacent. The building's exterior walls are constructed of Concrete Masonry Units with brick façade, resting on an approximately six inch thick concrete slab pad; the foundation system for the building is unknown.

PROPOSED CONSTRUCTION

A one-story warehouse is currently standing within the study area; the building was the former location of the Art League and is currently vacant. The building's exterior walls are constructed of Concrete Masonry Units with a brick façade and the building rests on a concrete slab foundation.

This Documentary Study was initiated in anticipation of the planned construction of a five-story hotel containing 120 guest rooms and one level of below grade parking (Figures 30-32). The proposed development is consistent with the Waterfront Small Area Plan and will include an enhanced streetscape along South Union and Duke Streets; improvements include the undergrounding of utilities, new brick sidewalks, street trees and street lights. The project also includes a 5,000 sf, publicly accessible courtyard with outdoor seating. Offsite improvements include the demolition of the two buildings on the east side of The Strand (210 The Strand) to make way for the future expansion to Point Lumley Park.



Figure 30: Proposed Elevation on The Strand



Figure 31: Proposed Union Street Elevation



Figure 32: Proposed Duke Street Elevation

RECOMMENDATIONS

The study area has a high probability of containing 18th – 20th century archeological features that could potentially provide significant information about the industrial development on the waterfront in Alexandria. Because of the possibility of deep subsurface features within the study area, we recommend the mechanical excavation of test trenches following the demolition of the superstructure to determine if significant subsurface remnants of 18th – 19th century wharves are present. It is also likely that buried remnants of John Carlyle’ circa 1752 warehouse may be present within the southeastern portion of the 220 Union Street property.

Because of the potential risk to archeologists conducting field investigations at a site with possible contaminants, the Scope of Work for the archeological investigation of the property should take into account measures of avoidance and/or abatement of known and potential contaminants in the soil at the site, and be developed with the City of Alexandria Archaeologists. A proposed Scope of Work for the archeological work is included as Appendix III, but must be approved by the City of Alexandria Archaeologists.

REFERENCES CITED

Alexandria Archaeology

- 2006 *Alexandria Waterfront Heritage*. Office of Historic Alexandria. Electronic Document, <http://alexandriava.gov/uploadedfiles/historic/info/history/OHAHistoryWFhandout.pdf>, accessed May 6, 2014.

Alexandria Library, Local History/Special Collections

- 1880 *Bryant, Herbert, Reliable Fertilizers, 1880-Flier*. Alexandria Library, Local History/Special Collections, Box 240a VF Businesses
- 1892 *Sarah G. Smith vs. Richmond & Danville Railroad Company and the Virginia Midland Railway Company*. Volume 1: Testimony of Sarah G. Smith (Complainant). Volume 2: Testimony of the Richmond & Danville Railroad (Defendant). Alexandria Library, Local History/Special Collections, Box 239.
- 1926 Business Records for Herbert Byrant, Inc. 1926-1951. Alexandria Library, Local History/Special Collections, Box 81.

Alexandria Board of Trustees

- n.d. Proceedings of the Trustees of the Town of Alexandria, Virginia, 1749-1788, 193-1800. *United States v. Bryant*, Conolitated Civil Nos. 73-2211 and 73-1903. Northern Virginia Conservation Council Gen. Exh. C. Alexandria Library Special Collections, Alexandria, Virginia.

Alexandria Gazette (AG) [Alexandria, Virginia]

- 1811 "Notice" 26 April: 1.
- 1835 "In Council – June 1, 1835" 6 June: 3.
- 1836 "In Council – December 29, 1835" 2 January: 3.
- 1852 "Wharf Timber Wanted" 22 July: 2.
- 1854 "Local Items: Another Fire" 16 June: 3.
- 1868 "Herbert Bryant, Successor to J.P. Batholow (old Stand)" 4 April: 4.
- 1869 "Agricultural" 10 July: 4.
- 1876 "Fertilizers" 8 May: 1.
- 1897 "An Extensive Conflagration" 3 June: 3.
- 1899 "The Freshet in the Potomac" 3 June: 3.

Alexandria Gazette and Virginia Advertiser (AGVA) [Alexandria, Virginia]

- 1893 "Special Edition" 16 September 1893:17

ATC Associates Inc.

- 2011a *Preliminary Report of Geotechnical Exploration & Engineering Services Proposed Strand Street Development, 214-220 S. Union Street, City of Alexandria, VA*. Report prepared for: Carr Hospitality LLC, Washington, DC by ATC Associates Inc., Columbia, MD.

2011b *Phase I Environmental Site Assessment of 214-220 S. Union Street, Alexandria, VA*. Report prepared for: Carr Hospitality LLC, Washington, DC by ATC Associates Inc., Columbia, MD.

2011c *Limited Subsurface Investigation Report 214-220 S. Union Street, Alexandria, VA*. Report prepared for: Carr Hospitality LLC, Washington, DC by ATC Associates Inc., Columbia, MD.

Bruulsema, Tom, Steve Phillips and Mike Stewart

2013 *Stewarding Work Reserves of Fertilizer*. Paper presented at the Mid-Atlantic Crop Management School in Ocean City, Maryland, November 2013. Electronic Document, <http://midatlanticcropmanagementschool.pbworks.com/w/file/fetch/71227416/World%20Fertilizer%20Reserves%20and%20Supply.pdf>, accessed June 25, 2014.

Cranch, William

1852 *Reports of Cases Civil and Criminal: In the United States Circuit Court of the District of Columbia, from 1801 to 1841, Volume 4*, Little, Brown and Company, New York.

Crowl, Heather and Bryana Schwarz

2013 *Phase I-III Archaeological Investigation, The Baggett Slaughterhouse, Site 44AX219, Jefferson-Houston School Project, Alexandria, Virginia*. Report Prepared For: Alexandria City Public Schools, by URS Corporation of Germantown, Maryland.

Daspit, Tom

2014 *Herbert Bryant, Inc: 75 years of Southern Service*, Electronic Document, <http://southern.railfan.net/ties/1960/60-2/bry.html>, accessed April 29, 2014.

Department of Historic Resources (DHR)

2003 *Guidelines for Conducting Cultural Resource Surveys in Virginia. Additional Guidance for the Implementation of the Federal Standards Entitled Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines*. Virginia State Department of Historic Resources, Richmond, Virginia.

Engineering Science, Inc.

1993 *Maritime Archaeology at Keith's Wharf and Battery Cove (44Ax119): Ford's Landing, Alexandria, Virginia*. Washington, D.C.

Evening Star (ES) [Washington, DC]

1899 "Fertilizer Company Chartered" 6 May:2

Twohig, Dorothy [editor]

1987 *To George Washington from Richard Marshall Scott, 15 June 1789*, Founders Online, National Archives. Source: *The Papers of George Washington*, Presidential Series, vol. 2, 1 April 1789–15 June 1789, ed. Dorothy Twohig.

- Charlottesville: University Press of Virginia, 1987, pp. 497–498. Electronic Document, <http://founders.archives.gov/documents/Washington/05-02-02-0359>,
- Heintzelman-Muego, Andrea
- 1983 *Construction Materials and Design of 19th Century and Earlier Wharves: An Urban Archaeological Concern*. Paper presented at the Society for Historical Archaeology Conference, January 6-9. Manuscript on file at Alexandria Archaeology.
- McKinley, Shepherd W.
- 2014 *Stinking Stones and Rocks of Gold: Phosphate, Fertilizer, and Industrialization in Postbellum South Carolina*, University Press of Florida.
- Miller, T. Michael [editor]
- 1987 *Pen Portraits of Alexandria, Virginia, 1739-1900*. Heritage Books, Bowie, Maryland.
- Miller, T. Michael
- 1993a The 1810 Fire. Supplement to the September/October 1993, *The Fireside Sentinel*, Vol. V, No. 7. Alexandria Library Vertical Files, Alexandria Library Special Collections, Alexandria, Virginia
- 1993b Wandering Along the Waterfront: The Prince to Duke Street Corridor. *The Fireside Sentinel*, September/October 1993 Vol. V, No. 7, Electronic Document, http://alexandriava.gov/uploadedfiles/historic/info/history/OHAHistoryWFPrincetoDuke_PartI.pdf, accessed March 26, 2014.
- Moore, Gay Montague
- 2009 *Seaport in Virginia*. Electronic document, <http://archive.org/stream/seaportinvirgini30747gut/30747.txt> accessed March 30, 2014. Reprinted, 1972, The University Press of Virginia. Originally published 1949, The Rector and the Visitors of the University of Virginia.
- Pulliam, Ted
- 2011 *Historic Alexandria: An Illustrated History*. Historic Publishing Network, San Antonio, Texas.
- 2006 *Point Lumley: It's Location, Appearance, and Structures 1749-1809*. Manuscript on file with Alexandria Archaeology.
- 2007 Gunpowder, Flour, Fire and Heirs: A Waterfront Block from Duke to Wolfe Streets. In *The Alexandria Chronicle*, Fall 2007. Alexandria Historical Society, Alexandria, Virginia.
- n.d. *Possible Early Use of Point Lumley Warehouse*. Alexandria Archaeology vertical files

Ring, Constance K and Wesley E. Pippenger

2008 *Alexandria, Virginia Town Lots, 1749-1801, Together With Proceedings of the Board of Trustees, 1749-1780*. 1996. Heritage Books. Westminster, Md.

Riker, Diane

2008 *A Timeline of Alexandria's Waterfront*, Electronic Document, <https://www.alexandriava.gov/uploadedfiles/historic/info/history/OHAHistoryTimeline.pdf>), accessed May 2, 2014).

2009 *Fiery Night*, Electronic Document, [http://alexandriava.gov/uploadedFiles/historic/info/history/OHAHistoryWFFieryNight\(1\).pdf](http://alexandriava.gov/uploadedFiles/historic/info/history/OHAHistoryWFFieryNight(1).pdf), accessed March 5, 2014).

Shephard, Steven J., Ph.D., RPA

2006 Reaching for the Channel: Some Documentary and Archaeological Evidence of Extending Alexandria's Waterfront. *The Alexandria Chronicle*, Spring 2006. Alexandria Historical Society, Alexandria, Virginia.

Smith, William F. and T. Michael Miller

1989 *A Seaport Saga: A Portrait of Old Alexandria, Virginia*. Donning Company, Norfolk, Virginia.

Southern Farm and Home

1873 On the Cultivation of Sumac. *Southern Farm and Home: A Magazine of Agriculture, Manufactures and Domestic Economy*, Volume IV (3) 96. Princeton University.

Sparacio, Ruth and Sam Sparacio

1992 *Abstracts of Land Causes Prince William County, Virginia*. The Antient Press, McLean, Virginia.

Appendix I

Scope of Work for Documentary Study

**Union Street Hotel
220 South Union Street and 210 Strand Street
City of Alexandria, Virginia
DSUP #2012-0019**

**Scope of Work for a Documentary Study,
Public Summary and Historic Marker Test**

March 12, 2014; revised March 21, 2014

This scope of work is for a Documentary Study for the properties located at 220 South Union Street and 210 Strand Street in Alexandria, Virginia. The goals of the research are to understand the land use history of the project area, to develop a historical context for the interpretation of the site, and to identify the potential locations of archaeological resources that may be preserved. Ultimately, the research will result in a recommendation as to whether an archeological investigation is needed on the property prior to development. In addition, the consultant shall work with the developer, architect, and landscape architect to potentially integrate themes and elements of the historic character of the property into the design of open space/landscape for the project.

Alexandria's waterfront represented the heart of the city's economic activity from the time of its founding until after the turn of the 20th century. This property occupies a portion of Lumley Point, a promontory that, with West's Point to the north, formed the two ends of the original crescent bay that characterized Alexandria's waterfront before the eastward expansion of the shore line that began in the late 18th century. Point Lumley was utilized as a large-vessel mooring point due to its proximity to the deep Potomac River channel and was a site for shipbuilding activity. John Carlyle built a public warehouse within the property or its immediate vicinity in 1752, and other warehouses and buildings are shown within the project area in Civil War period photographs. By the turn of the century the A. Bryant Fertilizer Company occupied the property. The building currently standing in the project area was built in the second half of the 20th century.

Lying partly on the original Point Lumley and partially on artificially created land, the project area has a high likelihood of containing deeply buried archeological deposits from the 18th century including wharves and vessels scuttled and filled to extend the usable land along the waterfront. The remains of several warehouses dating from the 18th and 19th centuries may also be extant on the property.

This work is being done to satisfy requirements of the City of Alexandria Archaeological Protection Code prior to development on the property. All aspects of this investigation will comply with the *City of Alexandria Archaeological Standards* dated January 1996 and the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation*.

Documentary Study and Recommendations

The Documentary Study will consist of maps, plus primary and secondary source information. The ultimate goal of the research is to identify, as precisely as possible, the potential locations of archeological resources that may be preserved within the project area and to develop a historical context for the interpretation of these potential resources.

The archival research shall include, but is not limited to, a search of 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, and county histories); historical maps; newspaper articles; previous archeological research; pedological, geological and topographic maps; modern maps, previous construction plans and photographs that can indicate locations of previous ground disturbance; and information on file with Alexandria Archaeology and the local history sections of public libraries in northern Virginia.

The archival research shall result in 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. It will include the development of research questions that could provide a framework for the archeological work and the development of historic contexts for the interpretation of the site. The work will present the potential for the archeological work to increase our understanding of Alexandria's past and will highlight the historical and archeological significance of the property.

In addition to the narrative, the work shall include the production of a map or series of overlay maps that will indicate the impact of the proposed construction activities on all known cultural and natural features on the property. 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, previous construction activities), and the locations and depths of the proposed construction disturbances (including, but not limited to, structures, roads, grading/filling, landscaping, utilities).

From this information, a final overlay map shall be created that indicates the areas with the potential to yield significant archeological resources that could provide insight into Alexandria's past, and presents specific recommendations for the archeological testing strategy. This map shall indicate locations for backhoe scraping or trenching, hand excavation, and/or monitoring. The recommendations will be based upon the specific criteria for evaluating potential archeological significance as established and specified in the Alexandria Archaeological Protection Code.

Public Interpretation

The *City of Alexandria Archaeological Standards* require that a public summary be prepared as part of the Documentary Study. The public summary will be approximately 4 to 8 pages long with a few color illustrations. This should be prepared in a style and format that is reproducible for public distribution and use on the City's web site. Examples of these can be seen on the Alexandria Archaeology Museum website. A draft of the summary should be submitted to Alexandria Archaeology for review along with the draft of the Documentary Study report. Upon approval, a master copy (hard copy as well as on CD or computer disk) will be submitted to Alexandria Archaeology. The summary and graphics should also be e-mailed to Alexandria Archaeology for publication on our web site.

In addition, the archeological consultant will work with the developer and the City staff to develop themes that could be used to integrate the historic character of the property into the design of open space/landscape for the project. If required by the City Archaeologist, the archeological consultant will supply the written text and graphics for a potential historic marker. The text should be up to 200 words in length with a paragraph on the historical significance of the site and a paragraph on findings from the archeological investigation. The graphics (minimally four, with captions) need to be high-quality copies (scanned at a minimum of 600 dpi and saved separately as jpeg or tiff files) of line drawings (e.g., site maps, feature drawings), historic photographs and maps, or other illustrations (e.g., site or artifact photos) in black and white or color. All copyright releases need to have been obtained and credit provided for each graphic. The text and graphics must be submitted to Alexandria Archaeology on a CD.

The consultant will coordinate with the City Archaeologist before writing the text and selecting images.

Tasks

The following is a summary of the tasks to be completed:

1. Visit Alexandria Archaeology and other locations to gather information, including to-scale historical maps, site reports, and secondary compilations and indexes, and complete research on primary sources.
2. Analyze the compiled data to evaluate the potential for the recovery of significant archeological resources on the property.
3. Produce recommendations and communicate (i.e, by email or phone) these to Alexandria Archaeology staff.
4. Produce and submit two copies of draft Documentary Study to Alexandria Archaeology, including the public summary document.

5. Make required revisions, and deliver to Alexandria Archaeology four hard copies of the final report (three bound, 1 unbound), one digital version of the report on a CD, a separate CD of the approved public summary and text and graphics for the interpretive signage, plus digital copies of field notes, photographs, and records on a CD. The spines of all bound reports will include the report title, firm name and date of completion. The public summary shall also be e-mailed to Alexandria Archaeology for posting on the web site.

Formats for Digital Deliverables:

- | | |
|--------------------------------|--|
| 1. Photographs: | .jpg. |
| 2. Line Drawings: | .gif or .jpg as appropriate. |
| 3. Final Report/Public Summary | Word, PageMaker and/or PDF |
| 4. Oral History | Word |
| 5. Catalogue: | Word, Access or Excel |
| 6. Other Written material: | Word, Access, Excel, or PDF as appropriate |

Appendix II Chain of Title

Chain of Title—220 South Union Street

1963 July 30

Cummings Investment
Associates Inc.

Carlyle R. Boguess
Virginia A. Boguess
T. P. Boguess
Ella B. Boguess

Deed—City of Alexandria Deed Book 581:231

1945 January 30

Carlyle R. Boguess
T. P. Boguess

Edward G. Schmidt,
Receiver of the Sales Corporation

Deed—City of Alexandria Deed Book 214:204

1899 May 17

Bryant Fertilizer Co.

J. C. Herbert Bryant

*Transferred ownership of the City Tract, Marsteller Tract, Violet Tract, Lyles Tract,
and enclosed alley, in addition to other parcels, to the Bryant Fertilizer Company

Deed—City of Alexandria Deed Book 42:512

1892 October 15

J. C. Herbert Bryant

City of Alexandria

“City Parcel”

Deed—City of Alexandria Deed Book 28:384

1892 April 2

J. C. Herbert Bryant

William S. Moore

“Marsteller Parcel”

Deed—City of Alexandria Deed Book 28:27

1891 October 29

J. C. Herbert Bryant

Anthony W. Armstrong,
Special Commissioner

“Muncaster/Violet
Parcel”

*Property sold by decree in chancery suit *Amanda M. Violet v. William A. Kramer et. al.*
Court records indicate that a brick warehouse stood on the property at time of sale.

Deed—City of Alexandria Deed Book 26:422

1891 October 14

J. C. Herbert Bryant

Joanna Lyles,
widow of Enoch H. Lyles

“Arell/Lowe Parcel”

Deed—City of Alexandria Deed Book 26:404

Arell Parcel

1891 October 14

J. C. Herbert Bryant

Joanna Lyles,
widow of Enoch H. Lyles

70' by 56'1" lot,
corner Duke and Union

Deed—City of Alexandria Deed Book 26:404

Circa 1880

Joanna Lyles

Enoch H. Lyles

70' by 56'1" lot,
corner Duke and Union

Will—City of Alexandria Will Book 1:228

1868 May 18

Enoch H. Lyles

William H. Bacon

35' by 56'1" lot,
corner Duke and Union

Deed—City of Alexandria Deed Book Y3:415

1851 June 20

Ebenezer Bacon

Nehemiah Hicks

Susan (Bayne) Bacon

Betsey (Bayne) Hicks

35' by 56'1" lot,
corner Duke and Union

Deed—City of Alexandria Deed Book O3:110

1826 n.d.

Susan Bayne

Henry Bayne

Betsey Bayne

35' by 56'1" lot,
corner Duke and Union

Will—City of Alexandria Will Book 3:220

1819 June 4

Henry Bayne

Richard Arell(II)

35' by 56'1" lot,
corner Duke and Union

Deed—City of Alexandria Deed Book K2:56

Circa 1800

Richard Arell (II)

Richard Arell (I)

35' by 56' 1" lot,
corner Duke and Union

Division of Estate—Document Not Located

Lowe Parcel

1891 October 14

J. C. Herbert Bryant

Joanna Lyles,
widow of Enoch H. Lyles

70' by 56' 1" lot,
corner Duke and Union

Deed—City of Alexandria Deed Book 26:404

Circa 1880

Joanna Lyles

Enoch H. Lyles

70' by 56' 1" lot,
corner Duke and Union

Will—City of Alexandria Will Book 1:228

1873 June 2

Enoch H. Lyles

Richard Windsor et. al.
(heirs of Christiana A. Lowe)

35' by 56' 1" lot,
35' north of Duke

Deed—City of Alexandria Deed Book 3:92

Circa 1800

Christiana Lowe

Richard Arell (I)

35' by 56' 1" lot,
35' north of Duke

Division of Estate—Document Not Located

Muncaster/Violett Parcel

1891 October 29

J. C. Herbert Bryant

Anthony W. Armstrong,
Special Commissioner

30' frontage on Union,
120' east toward river

*Property sold by decree in chancery suit *Amanda M. Violett v. William A. Kramer et. al.*
Court records indicate that a brick warehouse stood on the property at time of sale.

Deed—City of Alexandria Deed Book 26:422

Prior to 1853

Robert G. Violett

Elizabeth Muncaster

30' frontage on Union,
120' east toward river

*Prior to 1853, the Muncasters and Marstellers divided the parcel, and Robert G. Violett
purchased the Muncaster's portion.

Document Not Located

Circa 1800

Elizabeth Muncaster
Christiana Marsteller

Richard Arell (I)

30' frontage on Union to river

Estate Division—Document Not Located

Marsteller Parcel

1892 April 2

J. C. Herbert Bryant

William S. Moore

30' by 60' parcel between
Muncaster/Violett and Strand

Deed—City of Alexandria Deed Book 28:27

1892 April 2

William S. Moore

Old Dominion Boat Club

30' by 60' parcel between
Muncaster/Violett and Strand

Anne S. Moore

*Moore receives full title to the property west of Strand in exchange for rights to property east of Strand.

Deed of Partition—City of Alexandria Deed Book 28:30

1891 January 21

William S. Moore

Lewis McKenzie

undivided ½ interest

Deed—City of Alexandria Deed Book 25:109

1853 July 6

Benjamin H. Lambert

Christopher Neale,

30' by 60' parcel between

Lewis McKenzie

Commissioner

Muncaster/Violett and river

*Parcel sold by decree during the chancery suit *Cyrus C. Marsteller V. Marsteller et. al*

Deed—City of Alexandria Deed Book P3:101

Prior to 1853

Christina Marsteller

Elizabeth Muncaster

30' by 60' parcel between
Muncaster/Violett and river

*Prior to 1853, the Muncasters and Marstellers divided the parcel, Marsteller receiving the eastern portion.

Document Not Located

Chain of Title--Lot 69 in the 18th Century

Ca. 1800

Christiana Lowe

Richard Arell (I)

Lot 69

Richard Arell (II)

Elizabeth Muncaster

Christiana Marsteller

*Richard Arell (I)'s estate is divided among many heirs—the above four received property within the study area

Division of Estate—Document Not Located

1775

Richard Arell

Nathaniel Harrison

Lot 69

Deed—Fairfax County Deed Book M:33

1752

Nathaniel Harrison

Trustees of Alexandria

Lot 69

*George Fairfax, having failed to develop the lot per the purchase agreement, lost the lot which was resold to Harrison

Deed—Fairfax County Deed Book C:312

1749

Col. George Fairfax

Trustees of Alexandria

Lot 69

Grant—City of Alexandria

Chain of Title—210 The Strand

2006 May 17

City of Alexandria

Russell S. Crenshaw, Jr.

Flavienne G. Crenshaw

30' wide parcel from
Strand to river

Deed—City of Alexandria Instrument #060013597

1974 February 28

Russell S. Crenshaw, Jr.

heirs of William Lawson Davis

30' wide parcel from

Flavienne G. Crenshaw

(17 individuals)

Strand to river

Deed—City of Alexandria Deed Book 772:859

1928 January 10

William L. Davis

Old Dominion Boat Club
and Trustees

30' wide parcel from
Strand into river

Deed—City of Alexandria Deed Book 93:100

1896 January 16

Lycurgus E. Uhler et. al.

Israel C. Oneal, Trustee

30' wide parcel from

Trustees of the Old Dominion

Strand into river

Boat Club

Deed—City of Alexandria Deed Book 36:4

1892 June 9

Israel C. Oneal

Old Dominion Boat Club
and Trustees

30' wide parcel from
Strand into river

Deed of Trust—City of Alexandria Deed Book 27:533 (Deed Book Missing)

1892 April 2

Old Dominion Boat Club

William S. Moore
Anne S. Moore

30' wide parcel from
Strand into river

*ODBC exchanges full title to the property east of Strand in exchange for rights to property west of Strand.

Deed of Partition—City of Alexandria Deed Book 28:30

1892 April 2

Old Dominion Boat Club

J. C. Herbert Bryant

Northern half of alley

*ODBC and Bryant agree to split the 18' 4" alley east of Strand

Deed of Partition—City of Alexandria Deed Book 28:28

1891 January 21

William S. Moore

Lewis McKenzie

undivided ½ interest

Deed—City of Alexandria Deed Book 25:109

1883 August 28

Old Dominion Boat Club

William H. Lambert, et. al.
(nine heirs of Benjamin Lambert)

undivided ½ interest

Deed—City of Alexandria Deed Book 13:203

1853 July 6

Benjamin H. Lambert
Lewis McKenzie

Christopher Neale,
Commissioner

30' by 60' parcel between
Muncaster/Violett and river

*Parcel sold by decree during the chancery suit *Cyrus C. Marsteller V. Marsteller et. al*

Deed—City of Alexandria Deed Book P3:101

Appendix III

Proposed Scope of Work for Archeological Investigations

Scope of Work for Archeological Evaluation 220 South Union Street And 210 The Strand City of Alexandria, Virginia

A Documentary Study of 220 South Union Street and 210 The Strand was completed by Thunderbird Archeology in June 2014 in anticipation of the planned redevelopment of the properties. Based on our review of the history and archeology of Alexandria's waterfront, it is likely that evidence of 18th and 19th century wharves and portions of the circa 1756 John Carlyle warehouse may be present beneath the property. This Scope of Work is for conducting an **Archeological Evaluation** (Excavations) within the project area.

This scope of work will be implemented in coordination with construction activities on the property and calls for a combination of machine trenching, backhoe stripping of soils, and the excavation of shovel test pits and test units, in order to determine if significant archeological resources are present within the project area. If significant resources are found, a Resource Management Plan will be prepared

If a significant site or sites are discovered as a result of the fieldwork, the sites must be registered with the Virginia Department of Historic Resources and copies of the site form registration sent to Alexandria Archaeology. Any additional archeological investigations beyond the backhoe trenching and scraping, if required, will be conducted under a separate scope of work.

All personnel must be approved in advance by Alexandria Archaeology. Alexandria Archaeology staff will conduct site inspections throughout the course of the fieldwork. All aspects of this investigation will adhere to OSHA regulations and will comply with the *City of Alexandria Archaeological Standards* dated January 1996 and the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation*. Miss Utility must be informed before excavations are begun.

Background

The properties at 220 South Union Street and 210 The Strand are located along the historic waterfront of Alexandria. At the time of the city's founding in 1749, all of the 210 The Strand property and approximately half of the Union Street property lay within the Potomac River; the remaining areas were subject to development as early as 1752. The first confirmed structure within the properties was a public warehouse constructed in 1756 by John Carlyle; documentary evidence confirms other buildings were present on the property by circa 1800, and that the majority of the current Union Street property had been "banked out" and made available for use by that time. Numerous industries, warehouses, businesses, and residences occupied the Union Street property during the

late 18th and 19th centuries, including blacksmiths, carpenters, coopers, grocers, iron foundries, and commission merchants. Late in the 19th century, the fertilizer manufacturing plant of the Bryant Fertilizer Company occupied the entirety of the Union Street property. Several disastrous fires, most notably in 1810 and 1897, destroyed numerous buildings on the block during the 19th century. Today, a brick commercial building is located on the property, which was last in use as rented commercial space and as an art studio.

The property at 210 The Strand was not dry land until sometime in the mid-20th century. From the 1880s until 1922, the clubhouse of the Old Dominion Boat Club stood on piers in the location, accessed by a wooden foot bridge from The Strand. The clubhouse was destroyed by fire several times in the 19th and 20th centuries before the club moved to its current location near the foot of King Street. A small building resting on a concrete slab foundation is currently located on the property.

Remnants of 18th and 19th century buildings may be present beneath the 220 South Union Street property; most notably, the 1756 Carlyle warehouse in the southeast portion of the parcel. Additionally, 18th and 19th century wharves and other structures by which land was created within the original course of the Potomac are almost certainly extant within the property; in Alexandria and elsewhere, these are typically timber structures retaining earth and stone fill. There is also a possibility of encountering sunken canal, river, or ocean-going vessels, the hulls of which may have been used as part of the frame and fill for the “banking out” of land on the waterfront.

Archeological Excavations – 220 Union Street

Following demolition of the existing building and prior to new construction, a combination of archaeological monitoring and machine trenching of soils will be conducted; this archeological work is designed to:

- Examine the cross-site stratigraphic profile to identify the original ca. 1749 shoreline
- Determine the presence/absence of 18th and 19th century wharves and structures associated with the “banking out” process of land creation along the waterfront
- Determine the presence/absence of structural foundations and features associated with the 1810 brick building at the corner of Duke and Union, the series of brick warehouses along the northern edge of the property, and various 19th century buildings in the central and eastern portions of the property
- Determine the presence/absence of structural remains associated with the 1756 Carlyle warehouse

Monitoring of Foundation Removal and Utility Relocation

An archeologist shall monitor all ground-disturbing activities within the property including the removal of building foundations, grading, and underground utilities installation or removal. The archeological monitoring will be conducted in concert with the development demolition/construction schedule.

Machine Trenching

Using a backhoe equipped with a flat-bladed, smooth bucket, the consulting archeologist will direct the excavation of a series of trenches diagonally across the project area. The trenches will be approximately four feet in width and will total approximately 550 linear feet. Trench depth will not exceed the depth of the anticipated impacts of the proposed construction, approximately 12.5 feet below current ground surface. It is anticipated that culturally sterile natural soils will be encountered prior to reaching this depth in most portions of the property. If necessary, the excavations will be stepped/ expanded following OSHA guidelines to allow for safe hand excavation and evaluation.

At least one soil strata column profile will be drawn for every trench. Photographs will be taken. Trenches will be back filled after recordation of the soil profiles if features/buried surfaces are not located. In the event that features or buried ground surfaces are encountered, additional work (hand excavation of shovel test pits or test units) will be needed to assess the significance of the findings. For investigation of the surface and/or features see below.

No features will be fully excavated at this time, unless necessary to determine the nature or significance of the feature. Decisions regarding the significance of features and the need for additional testing will be made in consultation with Alexandria Archaeology. The horizontal extent of the features discovered during this process will be drawn and photographed in preparation for further investigation in the next phase of archaeological work.

A Resource Management Plan and Scope of Work for additional archeological services beyond the monitoring and backhoe trench exploration will be presented at a meeting to Alexandria Archaeology. A full report will not be written until the completion of all fieldwork. If no significant features are discovered by the fieldwork, a full report will be written as detailed below.

Archeological Monitoring –210 the Strand

An archeologist shall monitor all ground-disturbing activities within the property including the removal of building foundations, grading, and underground utilities installation or removal. Particular attention will be made to the removal of the concrete slab building foundations and the removal of any subsurface architectural elements of the

building. The archeological monitoring will be conducted in concert with the development construction schedule.

The goal of the archeological monitoring will be to determine the presence or absence of significant archeological features. If features are found, work must stop in the area of these finds until the archaeologist evaluates their significance, in consultation with Alexandria Archaeology. All features will be recorded, mapped and photographed.

Shovel Test Pit Excavations

If a buried ground surface is identified during the machine stripping or trenching within the project area, the archeological consultant will first make a determination of the presence/absence of archeological resources within this surface. Shovel test pits (STPs) will be excavated within the buried surface at 20-foot intervals to identify the extent of any archeological resources. STPs will measure at least 12 inches (30 cm) in diameter and will be excavated by natural soil levels. All soils within the test pits will be screened through 1/4-inch mesh hardware cloth screens and artifacts will be bagged and labeled by unit number and by soil horizon. Soil profiles will be made of representative units, with soil descriptions noted in standard soil terminology (A, Ap, B, C, etc.). Soil colors will be described using the Munsell Soil Color Chart designations. The location of each shovel test pit will be mapped and documented with field notes.

Test Unit Excavations

The hand excavation of 3 x 3 foot test units may be required to test and evaluate potentially significant archeological features or buried ground surfaces that are located during archeological stripping or trenching. The need for test unit excavation will be at the discretion of the archeologist but in consultation with Alexandria Archaeology staff. The test units will be excavated stratigraphically by natural or cultural levels or by arbitrary sub levels. All soils will be screened through 1/4-inch mesh hardware cloth. Representative soil profiles will be drawn using the Munsell Soil Color Chart designation. All work will be documented by field notes, sketch plans and photographs.

Laboratory Work and Curation

Archaeological artifacts recovered from significant soil layers within the project area will be retained, cleaned, stabilized (if necessary), cataloged, labeled and packaged in accordance with the guidelines set forth in the *City of Alexandria Archaeological Standards*. Organic materials that may require conservation may be recovered; however, the cost proposal will not include conservation services. Conservation may be added as an additional service.

Archeological collections recovered as a result of the Alexandria Archaeology Resource Protection Code must be curated at a facility which meets Federal standards for archeological curation and collections management as described by 36CFR Part 79. The

Alexandria Archaeology Storage Facility meets these standards, and the property owner is encouraged to donate the artifact collection to the City for curation. The archeological consultant is responsible for arranging for the donation of the artifacts with the owner and will deliver the artifacts and signed forms to the appropriate storage facility.

At the conclusion of the project, all images, field notes and forms and other field records will be submitted in digital format on a CD. In addition, the artifacts, if they are to be donated to the City, will be delivered to Alexandria Archaeology.

Archeological Evaluation Report and Resource Management Plan

The Archeological Evaluation Report will include the following: a public summary; a map of the project area; a map with trench locations and significant features; a summary of the procedures; results of the field investigation and artifact analysis, including a distribution map or other graphics which indicate potentially significant archeological areas; an integration of the field and analysis data with the historical record; and recommendations for additional work, if needed. The Resource Management Plan will present any further preservation measures which may be necessary on the site.

When the fieldwork is completed, two draft copies of the full Archeological Evaluation Report will be submitted to Alexandria Archaeology, as is required by Alexandria Archaeology. Once the report is approved by the City Archaeologist, revisions will be made, and four copies of it, one unbound with original graphics, will be submitted to Alexandria Archaeology. The report will also be submitted on a CD. All site maps and drawings will be inked or computer-generated so as to produce sharp and clear images that will result in clear photocopies or microfilms.

Public Interpretation

The *City of Alexandria Archaeological Standards* require that a public summary be prepared as part of an Archeological Evaluation Report. The public summary will be approximately 4 to 8 pages long with a few color illustrations. This should be prepared in a style and format that is reproducible for public distribution and use on the City's web site. Examples of these can be seen on the Alexandria Archaeology Museum website.

A draft of the summary should be submitted to Alexandria Archaeology for review along with the draft of the Archeological Evaluation Report¹. Upon approval, a master copy (hard copy as well as on CD or computer disk) will be submitted to Alexandria Archaeology. The summary and graphics should also be e-mailed to Alexandria Archaeology for publication on our web site.

In addition, if determined to be warranted by the City Archaeologist, the developer will be required to erect a historical marker on the property. The archeological consultant will supply the written text and graphics for the marker¹. The consultant will coordinate with the City Archaeologist before writing the text and selecting images. The text should be up

to 200 words in length with a paragraph on the historical significance of the site and a paragraph on findings from the documentary study and archeological evaluation. The graphics (minimally four, with captions) need to be high-quality copies (scanned at a minimum of 600 dpi and saved separately as jpeg or tiff files) of line drawings (e.g., site maps, feature drawings), historic photographs and maps, or other illustrations (e.g., site or artifact photos) in black and white or color. All copyright releases need to have been obtained and credit provided for each graphic. The text and graphics must be submitted to Alexandria Archaeology on a CD.

Tasks

The following is a summary of the tasks to be completed:

1. Meet with Alexandria Archaeology staff to finalize the field strategy based on the results of the Documentary Study.
2. Notify Alexandria Archaeology of the demolition monitoring start date. Conduct the field monitoring, trench excavation and stripping to identify and expose features. Note that an **Archeological Certification** will be required prior to beginning the fieldwork.
3. If significant finds are made, produce a Resource Management Plan that will include an executive summary of fieldwork, to-scale maps showing features and excavated areas and a scope of work for the next phase of fieldwork. Meet with Alexandria Archaeology to present the results.
4. Register all sites with VDHR and submit copy of the registration forms to Alexandria Archaeology.

If no significant finds are made complete the following tasks:

1. Process all significant artifacts and complete the analysis.
2. Produce and submit two draft copies of the Archeological Evaluation Report to Alexandria Archaeology, including the public summary document and the text and graphics for the historic marker, if warranted.
3. Deliver to Alexandria Archaeology four copies (including one unbound copy) and CD of the final report, final versions and CDs of the public summary and historic marker text and graphics, plus all field notes, copies of historic documents, photographs, slides, digital images, cassette tapes, transcriptions, forms and associated records. In addition, arrange for the donation and delivery of the artifacts to an appropriate storage facility. Alexandria Archaeology is the preferred repository and requires a City of Alexandria Deed of Gift form.

Formats for Digital Deliverables:

- | | |
|--------------------------------|--|
| 1. Photographs: | .jpg. |
| 2. Line Drawings: | .gif or .jpg as appropriate. |
| 3. Final Report/Public Summary | Word, PageMaker and/or PDF |
| 4. Oral History | Word |
| 5. Catalogue: | Word, Access or Excel |
| 6. Other Written material: | Word, Access, Excel, PageMaker or PDF as appropriate |

L:\\22000s\\22300\\22392.01\\Admin\\03-ARCH\\Scope of Fieldwork\\2014-06-16 SOW.docx

ⁱ If additional archeological work is required, production of these public documents can be delayed until the completion of all archeological investigations. As a result, these tasks should be budgeted separately and not included in the overall budget for this phase of work.