

**ARCHEOLOGICAL INVESTIGATIONS
AT THE PROPOSED
LINDSAY LEXUS STORAGE YARD
(3650 WHEELER AVE.)
ALEXANDRIA, VIRGINIA**

PREPARED FOR:

**SIMPSON DEVELOPMENT COMPANY, INC. 2121
EISENHOWER AVENUE, SUITE 300
ALEXANDRIA, VIRGINIA 22314**

**R. CHRISTOPHER GOODWIN & ASSOCIATES, INC.
241 EAST FOURTH STREET, SUITE 100 ▪ FREDERICK, MD 21701**

**Archeological Investigations
at the Proposed
Lindsay Lexus New Car Service Facility,
Alexandria, Virginia**

Final Report

A handwritten signature in cursive script, reading "Suzanne Sanders", is positioned above a horizontal line.

**Suzanne Sanders, M.A.
Principal Investigator**

by

Jennifer L. Evans, M.A. and Martha Williams, M.A., M.Ed.

**R. Christopher Goodwin & Associates, Inc.
241 East Fourth Street, Suite 100
Frederick, Maryland 21701**

February 2015

for

**Simpson Development Company, Inc.
2121 Eisenhower Avenue, Suite 300
Alexandria, Virginia 22314**

ABSTRACT

This technical report presents the results of archeological testing and documentation associated with the development of the Lindsay Lexus New Car Service Facility in the City of Alexandria, Virginia. The project area comprises a parcel located on Wheeler Avenue, within the southwestern portion of the City of Alexandria. The roughly trapezoidal parcel is bounded on the north by Wheeler Avenue, on the south by the CSX Railroad right of way, and on the west by another commercially developed property. The property is bounded on the east by the offices of Flippo Construction Company, which are housed in a historic building known as the Old Dominion Mill. The majority of the property is asphalt surfaced and is used by Lindsay Lexus as an automobile storage facility. The foundation of a previously demolished ca. 1948 single story service facility was located near the southern boundary of the property. Planned improvements to the property include the construction of a car servicing facility on the mid-section of the property.

Archeological investigations were conducted on behalf of Simpson Development Company, Inc. by R. Christopher Goodwin & Associates, Inc. of Frederick, Maryland. The project extended from November 2008 through December 2008. The investigations were performed in compliance with the archeological ordinance of the City of Alexandria and in conformity with the *City of Alexandria Archaeological Standards* and the Secretary of Interior's *Standards and Guidelines for Archaeology and Historic Preservation*.

The objectives of this project were to: monitor demolition of existing buildings within the project area, conduct archeological testing to determine the presence and integrity of premodern historic resources, conduct archival investigations to prepare a cultural

context for occupation of the property; laboratory processing of cultural materials collected during testing; prepare a technical report that details the findings of archeological investigations. Mechanized trench excavation revealed evidence of extensive land modification in the southern, western, and central portions of the project area. Evidence of at least two distinct twentieth century filling episodes was identified. This included an early to mid-twentieth century episode, possibly associated with the construction of the ca. 1948 service facility, and a later twentieth century episode possibly associated with parking lot expansion and maintenance. Potentially intact soils located near the previously demolished building in the southern portion of the project area were tested, but failed to yield pre-modern material. Intact cultural features, in the form of brick foundation and floor remains were identified in the northeast corner of the project area and designated Site 44AX0206.

Based on preliminary findings, a plan for further investigations at Site 44AV0206 was developed in consultation with Alexandria Archaeology. Mechanical excavation and removal of the concrete and asphalt overburden was undertaken to more fully expose the brick foundation and floor. Two brick foundation walls were uncovered as well as surviving portions of a brick floor. Four disturbance areas, identified within the brick floor were excavated, as was a builders' trench south of the northern foundation wall. Two post holes were identified during the excavation of the disturbance areas. Nineteenth century cultural material was recovered from Site 44AX0206 including cut nails, window glass, whiteware, and pearlware. Additional archival investigations were conducted and all features were photographed, documented, and mapped. Examination of the disturbance areas, features and cultural materials did not offer

information that contributed to the interpretation of the structural feature. Archival investigations suggest that the structure may have been a support building associated with the mill.

Additional investigations of the area immediately west of the structure are planned to coincide with future phases of construction. Additional investigations will include the mechanical removal of the existing asphalt and concrete parking lot and related overburden to expose any remnant portions of the foundation associated with Site 44AX0206 not identified during the current investigation. The current investigation also did not identify/locate the mill race. While an examination of twentieth century aerial photographs suggests the mill race was located north of the current project area, some nineteenth century maps suggest a more southerly course placing the mill race near the center of the current parcel. An additional 30 to 50 ft trench will be excavated in the central portion of the property to investigate the possibility the mill race may have been located further south on the parcel. Future investigations for the site also will

include the development of an approach for public interpretation of the data from current investigations.

Additional archival research will be conducted into outbuildings associated with grist mills during the nineteenth century. This research will examine types of outbuildings and their uses, with a particular focus on building configuration and construction methods. This research will include, but not be limited to, an examination of barns, stables, and weathouses. Research will include an examination of these buildings utilization in relation to nineteenth century milling practices. Research into building construction techniques will explore the use of cobble footings underlying brick foundations. This research will include an examination into drainage techniques and systems utilized by builders in the nineteenth century including, but not limited to, an examination of French drains. This research will compare the foundation remains at Site 44AX0206 to other sites including the bakery located on Lee Street in the City of Alexandria.

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CHAPTER I

INTRODUCTION

Project Location and Description

This technical report presents the results of archeological testing and documentation associated with the development of the Lindsay Lexus New Car Service Facility in the City of Alexandria, Virginia. The project area comprises a parcel located on Wheeler Avenue, within the southwestern portion of the City of Alexandria. The roughly trapezoidal parcel is bounded on the north by Wheeler Avenue, on the south by the CSX Railroad right of way, and on the west by another commercially developed property. The property is bounded on the east by the offices of Flippo Construction Company, which are housed in a historic building known as the Old Dominion Mill. The majority of the property is asphalt surfaced and currently is used by Lindsay Lexus as an automobile storage facility. The foundation of a previously demolished ca. 1948 single story service facility was located near the southern boundary of the property.

Archeological investigations were conducted on behalf of Simpson Development Company, Inc. by R. Christopher Goodwin & Associates, Inc. of Frederick, Maryland. The project extended from November 2008 through December 2008. The investigations were performed in compliance with the archeological ordinance of the City of Alexandria and in conformity with the *City of*

Alexandria Archaeological Standards and the Secretary of Interior's *Standards and Guidelines for Archaeology and Historic Preservation*.

Objectives

The objectives of this project were to: 1) monitor demolition of existing structures within the project area; 2) evaluate subsurface integrity through the mechanized trench excavation; 3) document remnant features and deposits, and excavate selected features, in consultation with City archeologists; and, 4) review archival material related to historic used of the property.

Organization of the Report

Chapter I of this technical report explains the nature and objectives of the Lindsay Lexus project. Chapter II presents a summary of the historic context for this property in the City of Alexandria. The methods of investigation for the project are described in Chapter III. Chapter IV presents the results of the investigations, and the entire project is summarized in Chapter V. Appendix I contains the artifact inventory and Appendix II contains the VDHR site form for 44AX0206. Appendix III includes map overlays done for the preliminary map study. Appendix IV contains resumes of key project personnel.

CHAPTER II

NATURAL AND CULTURAL SETTING

Introduction

The major elements of the natural environment were important determinants of prehistoric and historic settlement and subsistence patterns. In particular, the earliest European settlers sought out soils with properties that were suited for particular agricultural practices, and they selected parcels that were close to major waterways to facilitate trade and commerce. Thus, in general, the factors of climate, distribution of fauna and flora, the nature and distribution of soils, terrain and topography, and proximity to water sources all have determined in part where people have settled and how they have exploited their surroundings (Evans 1978).

Natural Setting

The 1.76 acre Lindsay Lexus project parcel is located on Wheeler Avenue, within the southwestern portion of the City of Alexandria (Figure 1). Topographically, the project area lies at the foot of a toe-slope that descends from an upland ridge named Normandy Hill to the floodplain of Cameron Run. The roughly trapezoidal parcel is bounded on the north by Wheeler Avenue, on the south by the CSX Railroad right of way, and on the west by another commercially developed property. The property is bounded on the east by the offices of Flippo Construction Company, which are housed in a historic building known as the Old Dominion Mill. The boundary between the former mill site and the subject property is marked by a narrow tree line.

The online database maintained by the National Resources Conservation Service

depicts the Urban Land soil type within the project area by (USDA-NRCS 2008). Urban Land is characterized by “areas covered by impervious material, such as roads, commercial buildings, industries, schools, churches, parking lots, streets, and shopping centers (Harper 2007:42). Additional soil series mapped nearby include: Codorus and Hatboro soils mapped along the floodplain of Cameron Run, south of the project area; the Sassafras-Marumsc complex on the slope to the north; and, the Grist Mill-Woodstown complex along the ridge top to the north (USDA-NRCS 2008).

Cultural Setting

Previously Identified Cultural Resources

The Lindsay Lexus project area is located within the Cameron and Backlick Run Archaeology Resource Area #8, an area designated by the City of Alexandria as sensitive for archeological resources. The City’s cultural resources overview for this area states that it is “one of the most likely places in Alexandria to contain evidence of American Indian life,” and that “the filling of certain areas within the Eisenhower Valley may provide a protective cover to Indian sites dating back 10,000 years.” The discussion of this resource area also cites the presence of several mills (one of which still is extant), as well as major transportation thoroughfares, including the Little River Turnpike and the roadbed of the Orange and Alexandria (now CSX) Railroad (Office of Historic Alexandria 2006).

No archeological sites or architecturally significant resources have been identified within the Lindsay Lexus property. However, review

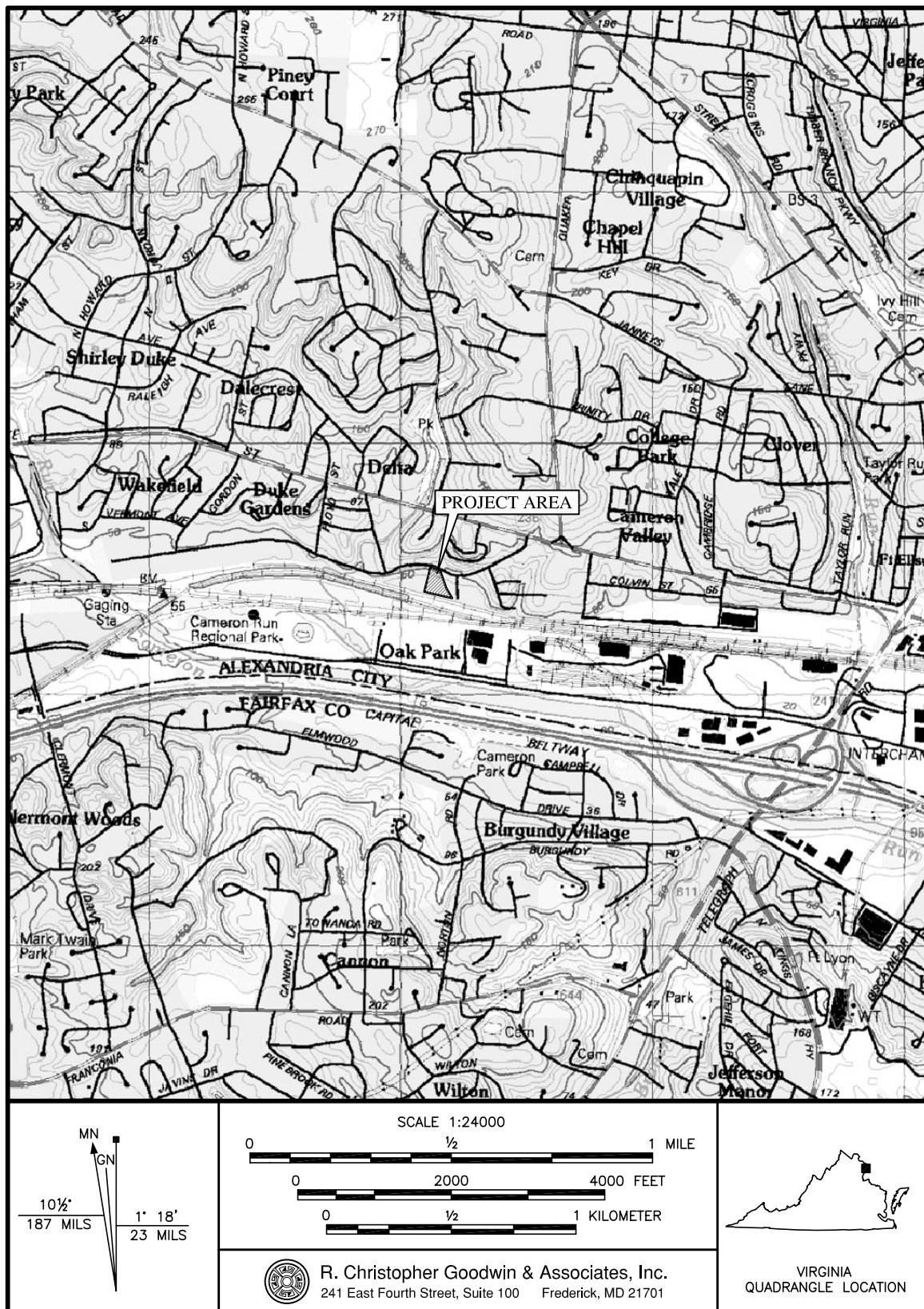


Figure 2. Excerpt from the U.S.G.S. 7.5 minute Alexandria, Virginia - Maryland - D.C. Quadrangle showing the locations of the project area in Alexandria, Virginia.

of the Data-Sharing System (DSS) files maintained by the VDHR revealed that 32 previously identified archeological and architectural resources are located within an approximately one-mile radius of the project parcel (Table 1). These resources are located within both the City of Alexandria and Fairfax County. Chronologically, the sites presented in Table 1 include both prehistoric and historic resources. None of the prehistoric resources, all of which are located in Fairfax County in upland settings overlooking the Eisenhower Valley, has been assigned to any particular time period.

The time frame for the historic resources begins in the third quarter of the eighteenth century and extends through to the early twentieth century. Although many of the listed architectural resources were dwellings, a good proportion also represented structures or remains associated with the Union occupation and fortification of Alexandria during the Civil War. Three major components of the Union's perimeter defenses of Washington--Forts Williams, Worth, and Ellsworth--together with their subsidiary batteries and earthworks--were located north of Little River Turnpike and just east of the project area. In addition, the Orange and Alexandria Railroad, which bordered the southern boundary of the property, was a crucial transportation link for Union armies as they sought to move their forces west into venues such as the Shenandoah Valley (Figure 2). It is likely that some Civil War activity occurred in the vicinity of the historic mill and along the railroad.

Moderately extensive archeological investigations have been undertaken on several of these military sites (Balicki and Corle 2006; Jirikowic et al. 2004; Balicki et al. 2005 and 2006; Daugherty et al. 1989). Two of these investigations documented a previously unknown type of Civil War feature--the so-called "Crimean Oven," a partially buried heating furnace with long, buried brick-lined flue. Such devices generally were installed at permanent fortifications to provide heat for hospital tents where injured soldiers were recuperating. However, most of the remains of Civil War fortifications in this area have been documented primarily as remnants of

earthworks that have survived subsequent development, or, in the case of Fort Williams, a remaining brick ammunition magazine (Cooling and Owen 1988). Most of these fort sites have yielded only scattered Civil War militaria that lacked any significant degree of integrity, due in part to relic-hunting in the past.

The most significant cultural resource in the vicinity of the project area is the Old Dominion (Phoenix) Grist Mill, listed in VDHR resource files as #100-0277. This structure occupies the property immediately east of the present project area. Figure 3 shows a photograph of this mill taken during the Civil War. Alterations to the building during the twentieth century include the removal of its interior machinery and exterior overshot wheel, and taking out the four dormers that originally pierced its roof. Despite these modifications, the Old Dominion Mill remains an important historic resource for the Alexandria community, since it represents the last remaining grist mill within the City (Office of Historic Alexandria 2006).

Cultural Context

Prehistory

Regional archeological studies generally have suggested that sustained and intensive occupation of the Northern Virginia area probably began during the Late Archaic period, although scattered small campsites dating from earlier eras have been identified throughout the region. The relatively level floodplain expanses along major waterways like the Potomac and estuaries such as Hunting Creek would have attracted at least seasonal prehistoric interest, due to the presence of aquatic resources and seasonally available migratory waterfowl. The rather large encampment found at Jones Point, at the juncture of Hunting Creek and the Potomac River, contained diagnostic materials that evidenced occupation from the Late Archaic through the Late Woodland periods.

However, prehistoric occupation has been more difficult to identify within inland settings such as that surrounding the project area. Extensive excavations conducted at major development sites in the Eisenhower Avenue corridor (e. g., the Hoffman Center, the Federal Courthouse, and the United States

Table 1. Previously Identified Cultural Resources in the Vicinity of the Lindsay-Lexus Project Area

Site #	Site Name/ Alt. #	Chronology	Function	Comments
Archeological Sites				
44FX517	82-1 P7	Prehistoric: Unknown	Tool manufacture or processing	Upland setting; quartzite cores and reduction flakes; quartz flakes
44FX519	82-1 P11	Prehistoric: Unknown	Tool manufacture or processing	Quartz and quartzite flakes, hammerstones; broken bifaces and points
44FX520	82-1 P13	Prehistoric: Unknown	Lithic processing	Possible expedient tool production; many cores, few flakes. Quartzite predominates
44FX523	82-2 H-2 (Tyler-Johnson Farm)	Historic: 1850-20 th cent Prehistoric: Unknown	Historic: domestic-agricultural complex Prehistoric: resource processing station	Historic map located only; prehistoric site contained scatter of tools
44FX524	82-2 P-6	Prehistoric: Unknown	Lithic processing	Sparse assemblage; very eroded site
44FX525	82-2 P-14	Prehistoric: Unknown	Lithic processing	Quartz and quartzite cores; no flakes present
44FX526	82-2 P-15	Prehistoric: Unknown	Quarry; resource processing	Abundant utilized and modified flakes. Quartzite predominant
44FX527	82-2 P-16	Prehistoric: Unknown	Lithic scatter	Quarry debris; primarily quartz
44FX559	82-2 P-7	Prehistoric: Unknown	Artifact scatter	Quartz bifaces and tools; quartz and quartzite flakes
44FX560	82-2 P-18	Prehistoric: Unknown	Artifact scatter	Assemblage includes flakes, FCR, possible tool
44FX2331	H2-2 H-4 Burgundy Farm	Historic: 1675-1900	Domestic	Site includes cistern; sheet midden
44FX2705	“Maine Camp”	Historic: 19 th – 20 th century	Trash scatter	Midden around 19 th century dwelling. Civil War association established by map research. Severely pothunted.
44AX118	Unknown	Historic: Unknown	Unknown	No further information
44AX173	Protestant Episcopal Seminary in Va.	Historic: 19 th – 20 th century	Religious and educational institution	19 th century domestic artifacts (not specified)
44AX173A	Fairfax Seminary Hospital	Historic: 1861-1865	Military	Militaria included buttons, bullets, melted lead
44AX186	Fort Williams	Historic: 1861-1865	Military	Military earthwork
44AX191	Unknown	Historic: 1861-1865, 20 th century	Military, domestic	Campsite yielded bullets, bottle glass (cavalry post?); 20 th century house site
44AX193	Quaker 1 (206 N Quaker Lane)	Historic: 1861-1865	Military camp	Close to Civil War fortifications and defensive positions. Tent platforms identified. Brick heating feature identified.
44AX195	Carr Homes I	Historic: 1861-1865	Military	Site of picket post on Duke Street yielded musket balls, buttons, knapsack parts
44AX 199	Smucker	Historic: 1861-1865	Military	Military and domestic artifacts assemblage typical of campsite
Architectural Resources				
100-0014	Fort William (200-300 Quaker Lane)	1862	Military	Part of perimeter defenses of Washington
100-0179	Virginia Police Association 3001 Colvin Street	Ca. 1900	Commercial	Two-story brick store with additions and alterations
100-0180	3220 Colvin Street	Ca. 1910	Domestic	Side-gabled single story vernacular dwelling with central chimney

Site #	Site Name/ Alt. #	Chronology	Function	Comments
100-0182	3020 Duke Street	Ca. 1930	Domestic	Mid-19 th century vernacular style; 2 story wood frame modified for commercial use
100-0192	1001A Janneys Lane	1840	Domestic	Two-story Late Victorian style frame house; probable farm dwelling
100-0253	108 Quaker Lane	1924	Domestic	Two story, three bay vernacular dwelling; property contains some remains of Fort Williams
100-0254	208 N. Quaker Lane	1909	Domestic	Dutch Colonial with gambrel roof; stained glass windows on projecting bay
100-0255	Clarens 318 N. Quaker Lane	1814	Domestic	Dwelling on Stump Hill with outbuildings and ornamental gardens intact. Modified and added in 20 th century
100-0258	504 N. Quaker Lane	1858/1900?	Domestic	Board and Batten Victorian cottage, possible former slave quarters. Moved to this site in 1929.
100-0226	Muckross	Ca. 1830	Domestic	Modified frame house with Neo-Classical portico
100-0257	The Cottage 502 N. Quaker Lane	1793	Domestic	Italianate styleing and expansions to earlier house core built by Edward Stabler
100-076	House: 1105 Vassar Road	Ca. 1930	Domestic	Eclectic architectural style; offset from surrounding subdivision organizational framework
100-0277	Old Dominion Mill (Phoenix Mill)	Ca. 1793	Industrial	Converted and adapted as office space; interior framing and bracing intact; machinery removed; mill race and gear pit in basement
100-5005	House: 43 Cockrell Avenue	1967	Domestic	No further information
029-5507	Burgundy Farm Country Day School	19 th century – 1946	Domestic, educational complex	14 buildings in complex; 20 th century farm buildings converted to educational use; progressive integrated school. Register eligible



Figure 2. Excerpt from an 1865 military “Map of Northeastern Virginia, etc.” showing the location of the project area in relation to Forts Worth and Williams



Figure 3. Copy of a Civil War era photograph of the Old Dominion Mill (erroneously identified as Cloud's Mill), orientation northeast (from Davis 1985)

Patent and Trademark Office) have yielded a few scattered items of prehistoric lithic material, but to date have produced no evidence of sustained or major prehistoric occupation. Nothing appears in the more recent literature about this area that would support a reassessment of the *status quo* expressed by Polglase et al. (2002:7): “The data that have been accumulated from sites north of Cameron Run and its tributaries suggest that **sporadic** prehistoric activity probably did occur on gentle upper slopes and on terraces and benches adjacent to small streams, where lithic and food resources most likely would have been readily available” (emphasis added). Late twentieth century commercial development within the Cameron Stream Valley, including that within the present project area, generally has involved moderate to severe disturbance of earlier landscapes. This disturbance has affected significantly the prehistoric archeological potential of this area.

Historic Context

The 1.76 ac Lindsay Lexus project area originally was included in the property

associated with the Old Dominion or Phoenix Mill discussed above. Below is a summary history of the property. A more detailed discussion of the ownership history and development of the Old Dominion/Phoenix Mill property can be found in Chapter IV.

Late Eighteenth – Mid-Nineteenth Century (1789-1860). Fairfax County land records (Fairfax Deeds Book R-1:353) indicate that George Gilpin and William Hartshorne had purchased the mill seat in 1789, and had constructed a mill on the site by 1792 (Wigglesworth 1976:49-50). By 1813, Hartshorne had become the sole owner of the enterprise, but he had used the property as collateral for an \$11,400 loan. When Hartshorne defaulted in 1812, the property was sold at public auction to Thomas Wilson (Fairfax Deeds M-2:141-143).

Ten years later, pursuant to a request from his heirs, Thomas Wilson's 204½ acre property, including the mill, was surveyed and partitioned (Fairfax Deeds Book U-2:407). The survey plat filed in connection with that partition (Figure 4) showed not only the Wilson property, but also adjoining properties

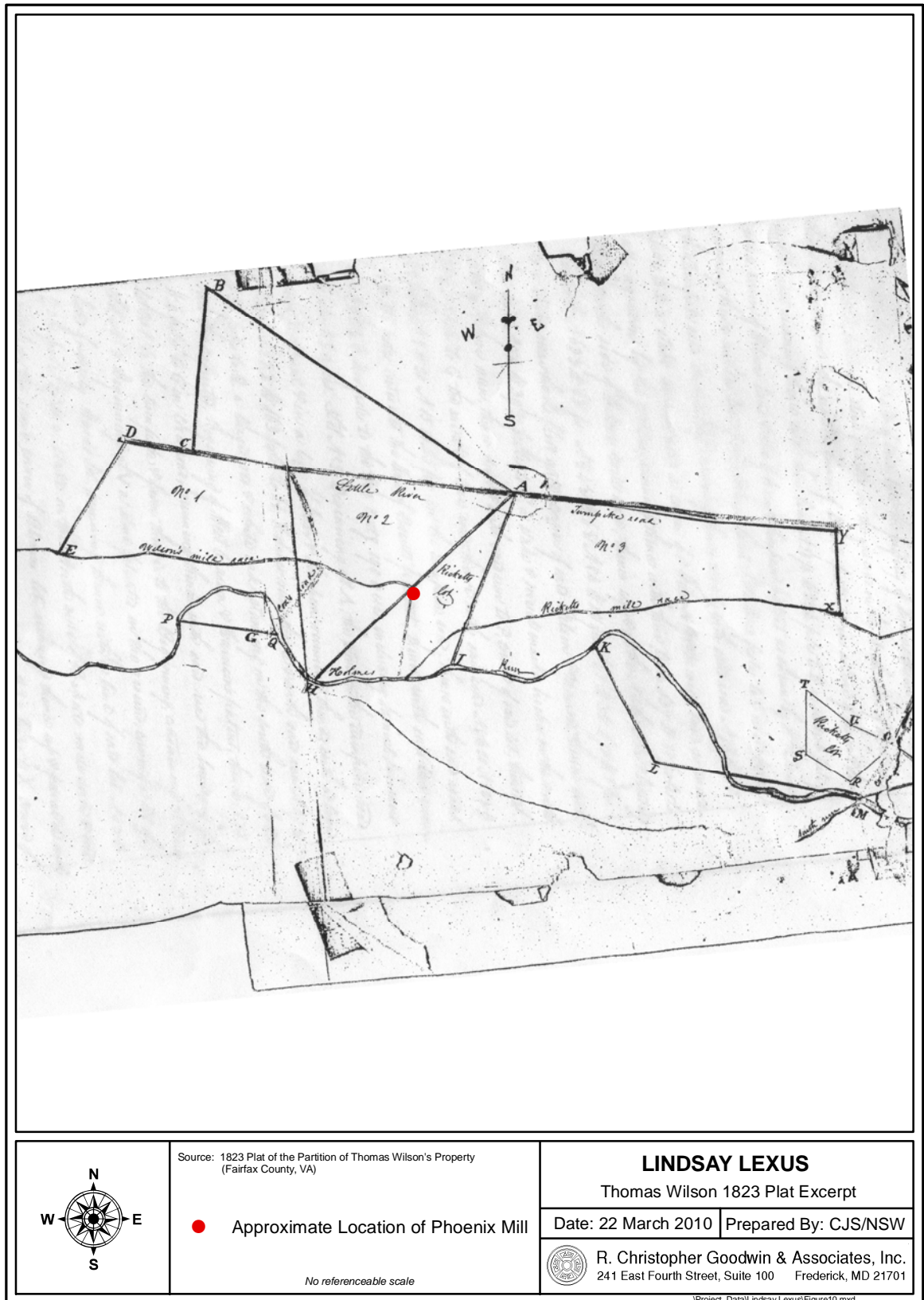


Figure 4. An 1823 plat of the partition of Thomas Wilson's property, showing Wilson's and Ricketts' mill races, and the approximate location of the Phoenix Mill (Fairfax County Deeds Book U-2:407).

and two mill races, of which “Rickets’ race” supplied water to the Cameron Mills, located farther east along Cameron Run. By terms of the partition agreement, the 56-acre “Ph(o)enix” mill property, which was designated as Lot #2 on the plat, went to David and Hannah Wilson and William and Martha Brown; this parcel included the present project area. Sworn depositions filed in the chancery case of *William Brown and others vs. the heirs of David Wilson* (Fairfax County Causes in Chancery:# CFF 4bb) suggest that the Wilsons themselves may not have operated the mill; in an affidavit dated 1837, Joseph Janney testified that he rented the mill from David Wilson “during his (Wilson’s) lifetime.”

During the three decades that followed, the mill property exchanged hands several times (Table 2). Just before the Civil War, three members of the Watkins family, who also owned several other tracts in the City’s West End, acquired the mill property. Three years later, they also purchased a contiguous parcel of 27 ac, “adjacent to Richard Windsor” (the former Rickets property). From that point until the twentieth century, these two parcels were conveyed as one property. Although the Watkins family retained control of the mill until the late nineteenth century, they also apparently leased the property to others. The 1860 census indicated that Leonard, John, and Alphas (?) Brown all were working as millers in this vicinity (United States Census, Population Schedule, Fairfax County). Although, Watkins owned the mill at this time, one or more of the Browns may have operated Phoenix Mill during this period; this may explain why the Phoenix mill was identified as “Brown’s Mill” on one Civil War map of the area (Figure 5).

Civil War Period (1800-1865). In general, impacts to the western portions of the City of Alexandria during the Civil War were the result of the occupation of the town by Union forces. This was particularly true of areas adjacent to vital transportation links such as the Orange and Alexandria Railroad (O&A RR), whose right-of way bordered the mill property on the south. Because the continued uninterrupted operation of this railroad was vital to the maintenance of Union supply lines,

the corridor was patrolled constantly by the Union (and harassed by the Confederates). According to Mary Frobel, who lived across the Cameron Valley from the mill, Union general Winfield Scott ordered the removal of all trees “within 10 miles of the railroad” to deny the element of surprise to would-be Confederate raiders (Lancaster 1992:89). This may be one explanation for the treeless landscape shown in the photograph in Figure 3. The individual in that photograph was standing in an area that would have been just west of the current project area and north of the O&A RR right-of-way.1860:70). Whether because of cultivation or due to Scott’s order, it is clear that the project area was devoid of trees by the mid-nineteenth century.

Late Nineteenth – Mid-Twentieth Century (1865-1950). G. M. Hopkins’ (1878) *Atlas of Fifteen Miles Around Washington: Falls Church District* (1878) (Figure 6) was the first document to apply the name “Dominion” to the former Ph(o)enix Mill, and also the first since the 1823 plat to depict the trajectory of the mill’s tail race, which now emptied into the common headrace that supplied both the Hunt and Roberts’ Cameron Mill and the Alexandria Water Company’s pumping station. The trajectory of the Dominion Mill tail race is significant, for it appears to coincide almost precisely with the angle of the eastern property boundary of the current project area (Figure 7). The last family to own both parcels associated with the Old Dominion Mill were Charles and Maggie Cockrell, who purchased the combined parcels from Frank M. Hill in 1903 (Fairfax Deeds Book L-6:659).

By the early 1920s, Cockrell, identified in the 1920 and 1930 censuses as a middle-aged farmer, began to subdivide this larger tract. In 1920, Luvenia McDonald bought 8.54 acres which she and her husband Baylous (residents of the Del Ray section of Alexandria) (Census, Population Schedule, Alexandria 1920) subsequently partitioned and re-sold to a variety of owners (Fairfax Deeds Books P-8:509; U-8:236; V-8:572). A 1.92 ac portion of that larger property became the present project area; it remained largely undeveloped through the 1930s (Figure 7), although the 1937 aerial

Table 2. Chain of title for Lindsay Lexus property

Year	Grantor	Grantee	Area	Reference	Comments
1973	Rudd and Rudd	City of Alexandria	1.76 ac	Alex Deeds Book 766:727, 740-741	Re-subdivides land parcels in area to accommodate realignment of Wheeler Ave and Early St. Creates parcel 3120-03-01 (Present project area)
1958	H. Herfurth, JR. Inc. and Betty Herfurth (widow)	Gordon and Kenneth Rudd	1.92 ac	Alex Deeds Book 686:683-685	Entails transfer of four separate parcels, this being Parcel #1 of the four
1949	Hugo Herfurth	Betty Herfurth and H. Herfurth, Jr. Inc.	1.92 ac	Alex Wills Book 23:63	Will stipulates that Betty, widow, was to receive ½ of his estate; remainder to be held as Herfurth Jr. Inc. in trust administered by bank.
1948	Hugo and Betty Herfurth.	H. Herfurth, Jr. Inc	1.92 ac	Ffx Deeds Book 629:f 488	Property described as “beginning on SW side of Mill Road, going SE to Cockrell property, then with Cockrell across the mill race to railroad; then west with Railroad; then returning to beginning”
1947	E.E. and Grace Fordham	Hugo Herfurth, Jr.	1.92 ac	Ffx Deeds Book 596:94	Same description as above
?	Luvenia McDonald	E. E. Fordham	1.92 ac	?	Unable to locate transaction. Implied by exclusion of a 1.92 ac outparcel as described above from transfer between Luvenia and Baylous McDonald to William and Maude Waybright in 1922 for 8.524 ac (Ffx Deeds LX8:f. 399)
1921-1922	John and Bevie Newton	Luvenia and Baylous McDonald	8.24 ac	Ffx Deeds Book V8:572; Book X8:145;	Includes previously cited 1.92 ac outparcel May represent a defaulted Deed of Trust
1921	Noah and Hattie Sinclair	Luvenia and Baylous McDonald	1.92 ac	Ffx Deeds Book U8:236	This instrument is a Deed of Trust; Sinclairs may have defaulted on it.
1920	Charles B. and Maggie Cockrell	Luvenia McDonald	8.24 ac	Ffx Deeds Book P8:509	Deed references two separate portions of a larger property, including an “eastern portion” that likely included the present project area
1912	Edwin Cockrell (res of DC)	Charles and Maggie Cockrell	?	Ffx Deeds Book L7:403	Transfers back to Charles and Maggie “all those portions of property not previously conveyed to them.”
1903	Charles and Maggie Cockrell	Edwin Cockrell	56 ac and 27+ac	Ffx Deeds Book P6:251	<p>“All those pieces of land and premises known as the Old Dominion Mills, including two parcels.</p> <ul style="list-style-type: none"> Parcel A, 56 acres, included the Phoenix Mills, and was designated as Lot #2 on Thomas Wilson’s plat. Parcel B was a 27 ac triangular parcel lying between the Little River Turnpike and Holmes Run
1903	Frank and Elizabeth Hill	Charles and Maggie Cockrell	56 ac and 27+ac	Ffx Deeds Book L-6:659	Conveys the Old Dominion Mills and all the lands attached thereto. Also conveys rights to race, dam, and other appurtenant structures, as well as a right of entry for purposes of maintaining these structures. Price: \$7,000

Year	Grantor	Grantee	Area	Reference	Comments
1896	John M. Johnson, Trustee	Frank M. Hill	56 ac and 27+ ac	Ffx Deeds Book X5:303	John and Annie Brown defaulted on a \$5,000 promissory note. Properties sold at public auction; Frank Hill was highest bidder
1888	Francis Smith; Elizabeth, John, Mary, and Edgar Watkins	John Brown	SAA	Ffx Deeds Book H5:50	Mill property sold to John Brown for \$6,500 to satisfy the debts of the D. G. Watkins Company. Court decision in case of <i>Citizen's National Bank v. Watkins</i> .
1856	William Cazenove and S. T. Stuart, Trustees	David and John N. Watkins	27+ ac	Ffx. Deeds Book Z3:270	Described as the "lower parcel of land" adjoining the property of Richard Windsor (former property of Ricketts)
1853	John Wheat (executor for Benoni Wheat)	David, John and James Watkins	56 acres	Ffx Deeds Book S-3:397	Executes stipulations in the will of Benoni Wheat to sell property at public auction. Peter Trexler purchases for \$9,000, then transfers interest to Watkins
1846	Henry Thomas and Richard Henderson, Trustees	Benoni and John Wheat	56 acres	Ffx Deeds Book G-3:140	Public sale of Phenix Mill to settle case of <i>Brown v. Wilson</i> , concerning indebtedness of David Wilson, deceased. Joel Harper purchased the property, and then resold to Benoni Wheat for \$6,000.
	Surviving heirs of Thomas Wilson	David and Hannah Wilson and Martha Brown	56 acres	Ffx Deeds Book U2:407	Result of partition of the property of Thomas Wilson, deceased. The 56 acres contained the Phenix Mill
1813	Taylor and Wise, commissioners	Thomas Wilson	204½ ac	Ffx Deeds Book M-2:141-143	William Hartshorne (previous owner) had mortgaged the merchant mill to Mordecai Lewis of PA (deceased). Lewis' executors demanded payment of the \$11,400 debt. Property sold at sheriff's sale. Property had a dwelling house and the mill on it when Wilson acquired it.
1789		George Gilpin and Thomas Hartshorne	?	Ffx Deeds Book R-1	Initial purchase of mill site

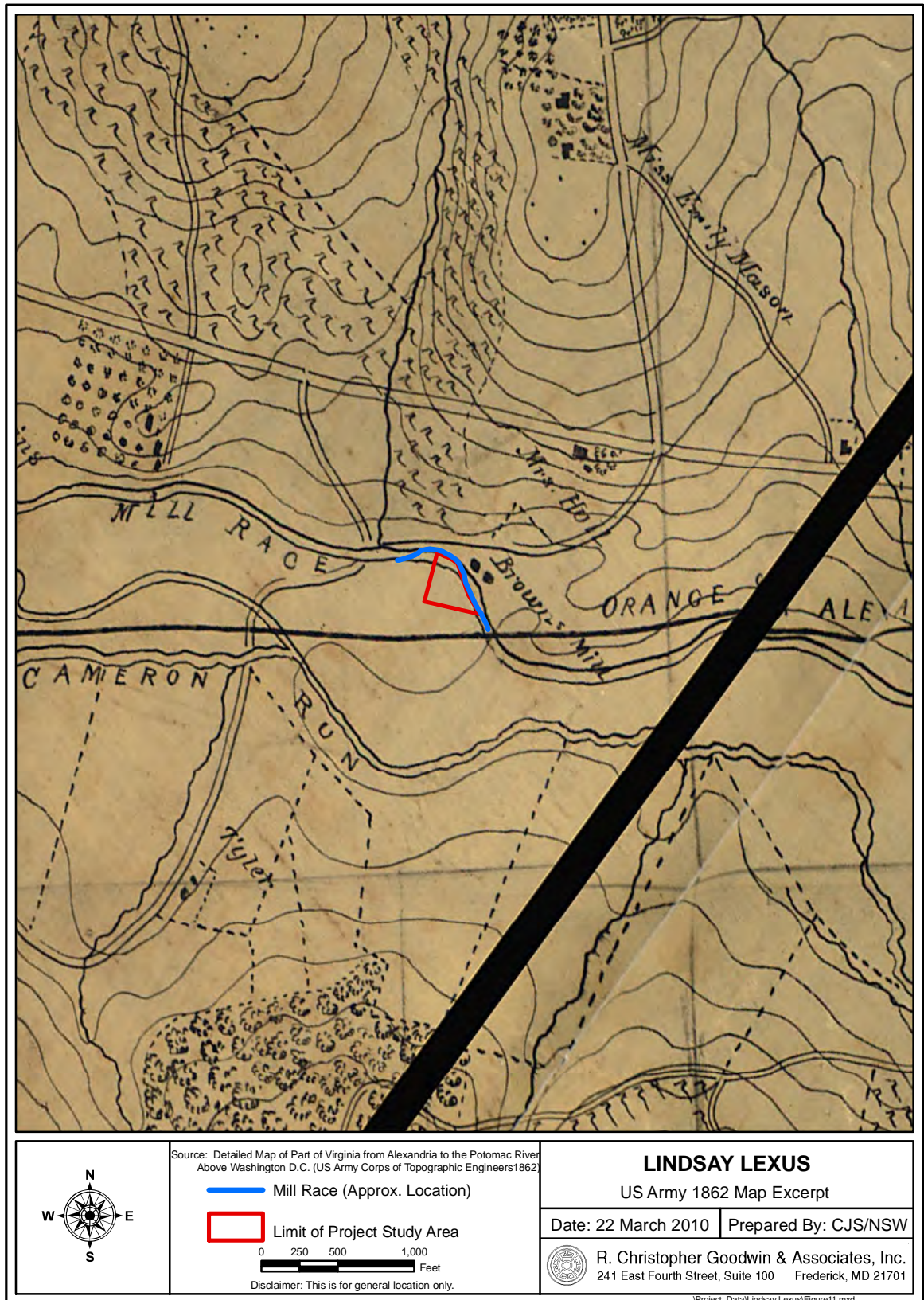


Figure 5. Excerpt from a “Detailed map of part of Virginia from Alexandria to the Potomac River above Washington, D.C.,” showing the location of Brown’s Mill at the site of the Old Dominion/Phoenix Mill, and the approximate boundaries of the project area.

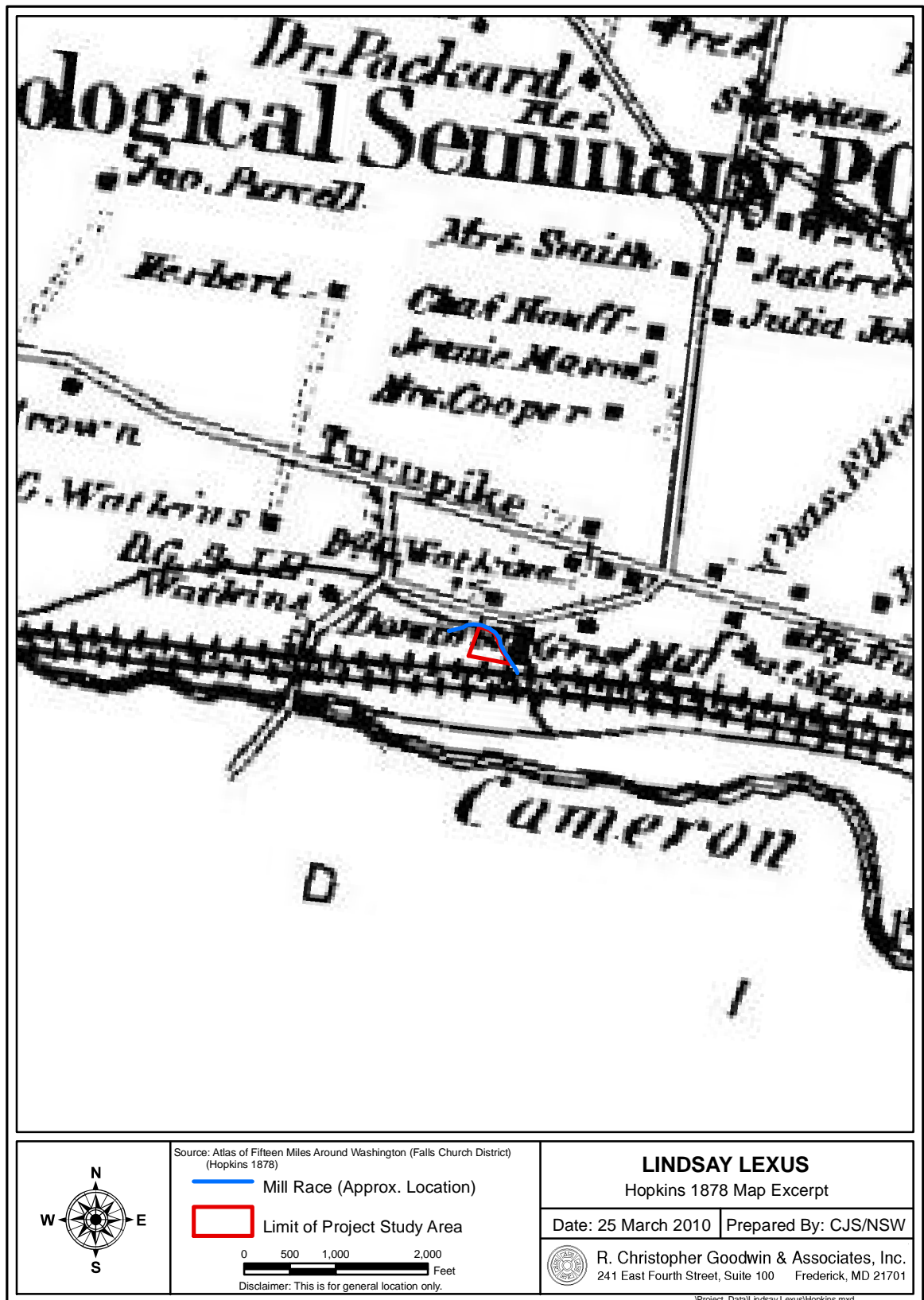


Figure 6. Excerpt from G.M. Hopkins' 1878 Atlas of Fifteen Miles Around Washington (Falls Church District), showing the location of the Dominion Grist Mill and the current project area.



Figure 7. Excerpt from the 1951 aerial photo series, showing the Dominion Mill and its mill race overlaid with modern parcel boundaries and road alignment

photo does show what may be some grading activity in the northern half of the tract.

The Old Dominion Mill reportedly stopped producing flour and meal in the 1930s (Wigglesworth 1976:50). According to one undated newspaper account (Luggiero n.d.), the owner who purchased the mill property from Cockrell modified the building considerably, including sandblasting the exterior and reconfiguring the roof. The present occupant, Flippo Construction, has renovated the interior, but has preserved intact the old support beams with their mortise-and-tenon joints and the names that were inscribed on them through the years.

In 1947, the 1.92 project parcel, described as “adjoining Cockrell’s property,” was acquired by Hugo Herfurth (Fairfax Deeds Book 596:94). During this period, a one-story building was constructed near the southern boundary of the property, according to Alexandria’s online property tax assessment records. The date and scope of the construction effort were confirmed by a 1951 aerial photograph (Figure 8), which showed the

building; a partially graded or disturbed area between the extant building and what was then termed “Mill Road” (present day Wheeler Avenue); and a possible small house and outbuilding located in the northern half of the property. A 1960 USGS aerial photograph depicts the entire parcel (Figure 9). This photograph depicts a residential structure in the northwestern corner of the property. Significant changes in the width and alignment of Wheeler Avenue were revealed, when modern parcel boundaries and road alignments were overlaid on this photograph. In 1968, the Herfurth family interests sold the property to Gordon and Kenneth Rudd (Alexandria Deeds Book 766:740-741). Shortly after this sale, the City of Alexandria realigned Wheeler Avenue and reduced the size of the parcel to 1.76 ac (Alexandria Deeds Book 766:727). It is likely that the residential structure depicted in the northeastern corner of the 1960 aerial photograph was removed and the present day sloped entrance into the property was engineered at that time (Figure 10).

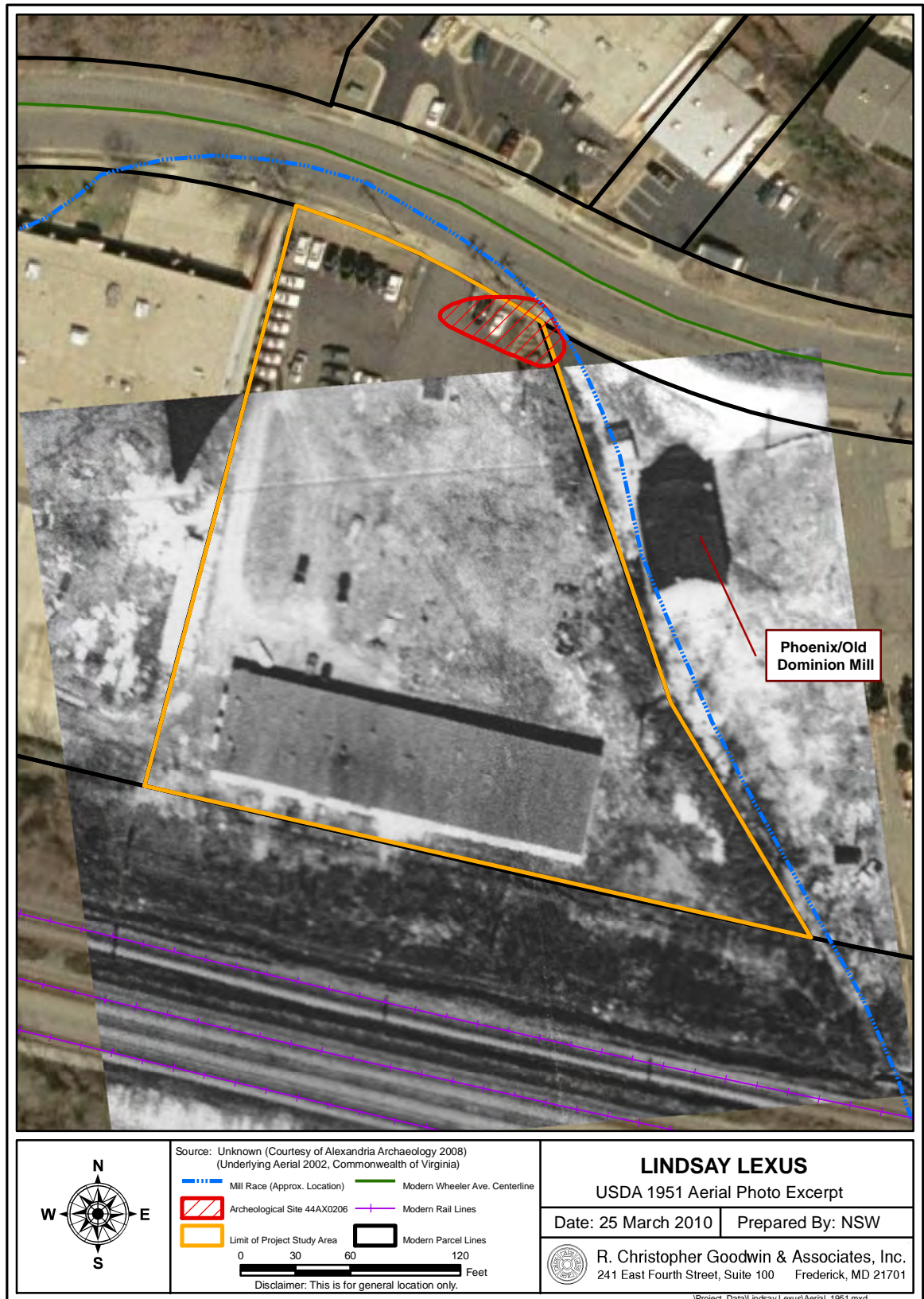


Figure 8. Partial aerial view of the Lindsay Lexus property in 1951, showing the position of the recently demolished one-story structure and graded areas within the property (Courtesy of Alexandria Archaeology).

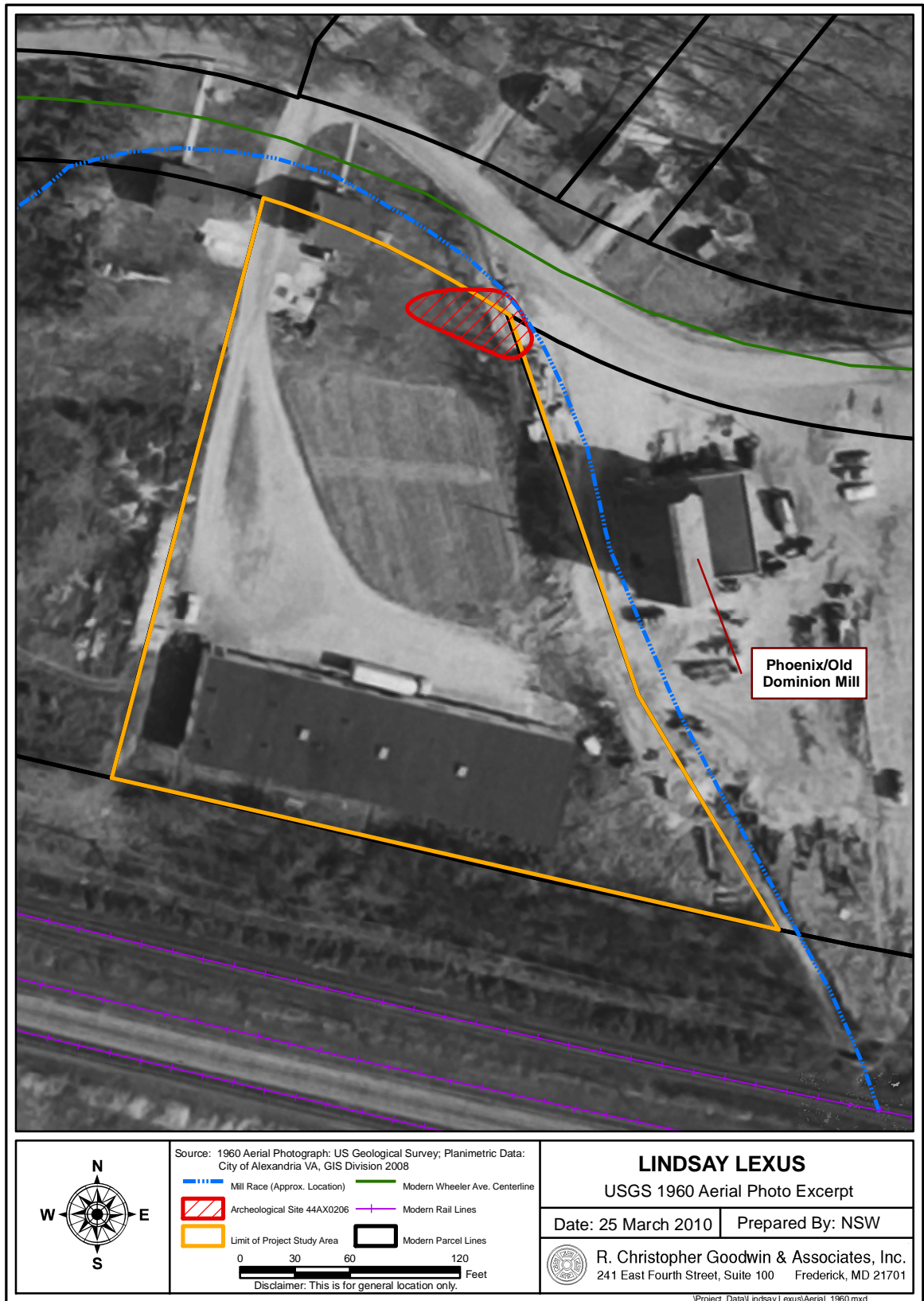


Figure 9. Excerpt from a 1960 aerial photo showing the Dominion Mill and its mill race overlaid with modern parcel boundaries and road alignment

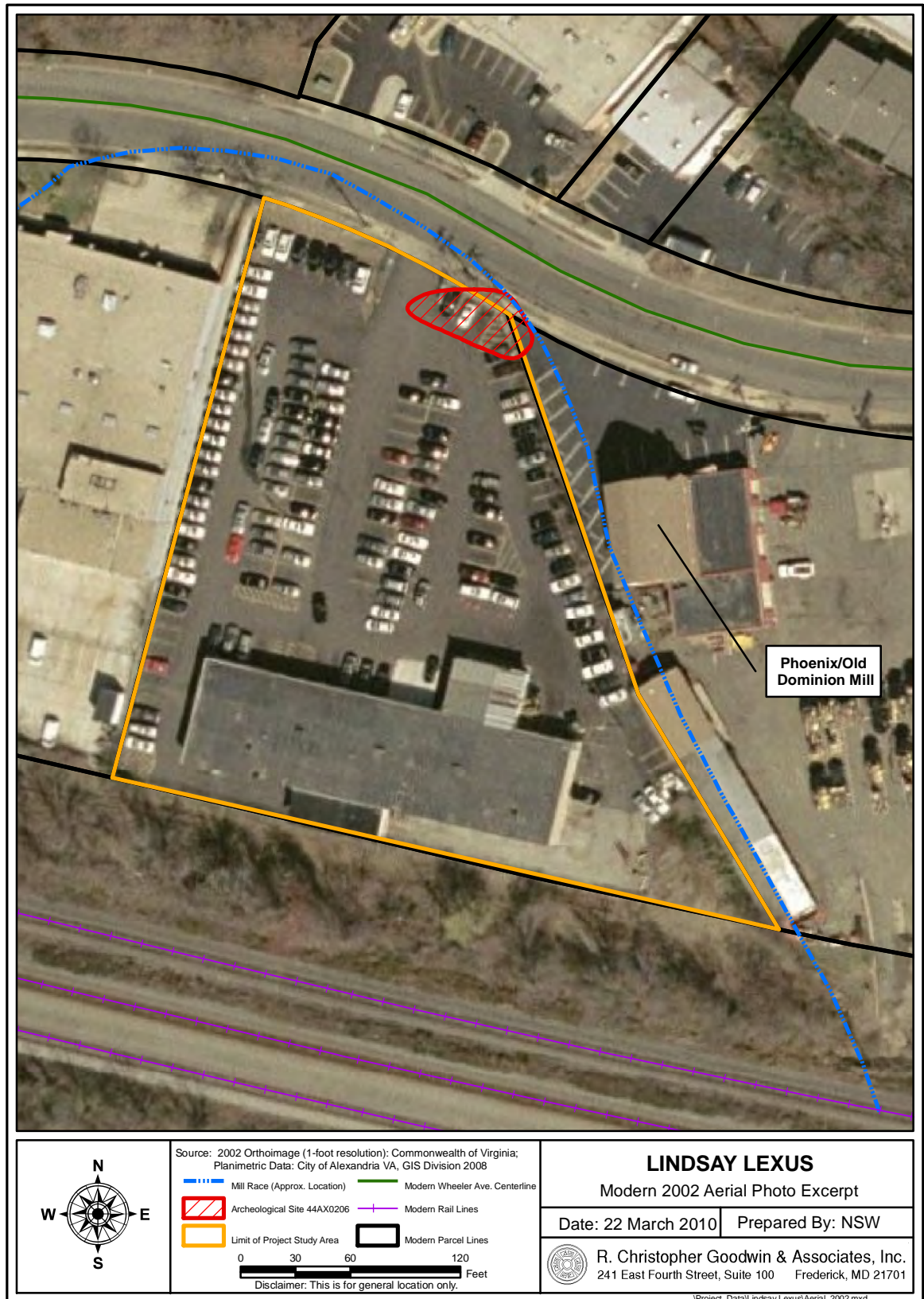


Figure 10. Excerpt from a 2002 aerial photo showing the Dominion Mill and its mill race overlaid with modern parcel boundaries and road alignment.

CHAPTER III

METHODS OF INVESTIGATION

Archival Methods

Background archival research was conducted at a variety of repositories. The DSS on-line cultural resources database maintained by the Virginia Department of Historic Resources (VDHR) provided information on previously identified cultural resources within and in the vicinity of the project area (Table 1). Alexandria Archaeology provided copies of reports on previously conducted archeological work in the vicinity of the project area. Online digitized cartographic resources, including the American Memory web site of the Geography and Map Division of the Library of Congress and the historic USGS topographic map series from MapTech.com, provided some coverage of the project area; these were supplemented by map collections located in the Virginiana Room of the Fairfax County Public Library. Electronic images of 1937 aerial photographs of the project area were provided through the GIS program of the Fairfax County Park Authority. Secondary sources about the historic development of the western portion of Alexandria, particularly about milling and Civil War activities in that area, were reviewed at the Virginia Room of the Alexandria Public Library. Land records and real property tax lists, proceedings in chancery, and wills were accessed at the Clerks of Court Offices in Alexandria and Fairfax County; the research into Fairfax County's chancery cases, however, was incomplete, because the original case files between 1848 and 1896 had been sent out for scanning. Online sources (Ancestry.com) provided access to population census records, while industrial census data

(United States Department of the Census [Census] 1850-1930) were obtained from the microfilm holdings located at the Virginia Room of the Fairfax Library. These data sets then were combined to develop a general history of the property and its owners.

Field Methods

Archeological investigations were conducted in November and December 2008. The initial investigations comprised the monitoring of the removal of an extant building located in the southern portion of the project area. Upon completion of monitoring, a plan was developed in consultation with the City archeologists for testing and investigations of the remainder of the project area. The original work plan called for the mechanized excavation of eight 50 x 3 foot trenches. In consultation with the City archeologists, this plan was modified during the course of the investigation.

Demolition Monitoring

Building demolition was limited to the above-ground structure; the slab and all footings were left in place pending subsequent archeological investigations. For this phase of the project, the objectives of archeological monitoring were to observe construction; to record evidence for previous disturbance within the project area; to investigate any evidence of intact surfaces, features or deposits; and, to examine and record any potentially intact cultural features or deposits within the demolition area. A qualified archeological monitor observed all demolition,

and archeological monitoring forms were completed. Data recorded on these forms included soil strata, exposed cultural materials and features, the current construction objectives, and other pertinent information. Hand-drawn plans and profiles were supplemented with black and white and digital color photography. No potentially intact features or deposits were encountered during demolition and the investigations proceeded to the mechanized testing phase.

Mechanized Trench Excavation

Initial investigations consisted of mechanical excavation of a series of trenches designed to expose and document the stratigraphic sequence of soils present beneath the asphalt parking lot. Trench placement was determined in consultation with the City archeologists, and focused on identifying resources associated with the Old Dominion Mill, with a particular emphasis on locating the mill race. Data from this stage of testing was used to guide and focus later testing and documentation. After the removal of overlying asphalt and concrete, fill materials were mechanically removed in controlled increments within soil strata. Archeological monitoring forms were used to record soil characteristics, artifacts and features, and other pertinent information. Black and white and color 35 mm photographs and digital photography were supplemented by hand drawn plans and profiles that depicted representative stratigraphic sequences within the excavations. Soil characteristics were described using standard soil nomenclature and Munsell (2000 revised) Soil Color Chart designations. All trench locations were recorded using a Trimble GeoXT mapping grade GPS receiver employing a UTM Zone 18 north map projection (NAD 83 datum).

During this stage of investigations, a total of seven trenches were excavated mechanically to investigate vertical soil integrity, as well as to identify any subsurface features. Five of the original eight planned 50 x 3 foot trenches were excavated in or near their original locations; two trenches were shortened to approximately 10 x 3 foot due the presence of significant disturbance in the planned

locations. In consultation with the City archeologists, one trench was not excavated; the additional square footage from that trench and the two shortened trenches was reallocated in order to more fully investigate the foundation and floor (Site 44AX0206) identified during the excavation of Trench 4.

Investigation of Site 44AX0206

Site 44AX0206 was identified in the northeast corner of the project area. The site included two brick foundation walls and a brick floor. All brick features were carefully cleaned, drawn, and photographed. In addition the site was video recorded. Investigations of Site 44AX0206 included the hand excavation of four disturbance area. These disturbance areas were excavated stratigraphically, to a minimum depth of 4 inches into sterile subsoil. All soil from these disturbance areas were screened through ¼ inch hardware mesh. All disturbance area and cultural features were recorded, photographed, and drawn. Features associated with Site 44AX0206 including the foundation, floor, and disturbance areas were mapped using a Topcon GTS-303 total station connected to a HP48-GX data collector. Two permanent site datums were placed within exposed foundation; these datums consist of 18 inch rebar driven flush with the brick masonry.

Laboratory Methods

All cultural materials were transferred to the laboratory of R. Christopher Goodwin & Associates, Inc. in Frederick, Maryland, for cleaning, cataloguing and analysis. Laboratory procedures were performed in accordance with state and federal curation guidelines. The condition of individual artifacts was assessed for degree of stability prior to carrying out any of the processing procedures. Artifacts first were sorted into those that could be wet washed or dry-brushed by hand; these then were air dried and sealed in clean, archival, re-sealable plastic bags. Provenience data were recorded on the outside of each bag as well as on acid-free paper tags placed inside each bag.

Analysis was directed at establishing the chronology of features or archeological deposits identified within the project area.

Only historic period materials (with two exceptions), including some faunal remains, were collected during this study; the procedures for inventorying and analyzing the recovered historic materials and faunal remains are summarized below.

Analytical Methods

The coded catalogue system for historic artifacts incorporates artifact attribute data, artifact counts, comments, and manufacture date range information, in a manner that allows for more accurate and detailed analysis of parts or all of the artifact data. The hierarchically-arranged artifact classification system includes four major classification levels: the Category, the Group, the artifact Type, and the Subtype. The initial classification, the **Group**, separates each sub-assemblage by raw material types, including Biological, Ceramic, Glass, Metal, Stone, Synthetic and Manufactured. In the second category, **Class**, artifacts within each material type category are subdivided to refine the classification further; for example, ceramics are divided based on ware type (i.e. earthenwares and stonewares). In the next two classes, Type and Sub-type, the identification becomes more detailed and the artifacts are classified based on more detailed criteria, including glaze types, manufacture techniques, and decorative treatments. For example, vessel form for ceramics and glass is described in the Sub-type category. The criteria for classifying kitchen ceramics and glass in the Type and Subtype categories have been developed using a variety of current reference literature, including Miller (1980, 1991), Noël Hume (1976), Worthy (1982), and others. More detailed classifications, based on manufacture date ranges and functional classifications, follow the identification of these main groupings. When determining manufacture date ranges, standard references are used, and where possible, manufacturer's marks are used in conjunction with ceramic type and manufacture techniques to refine temporal associations.

Where applicable, a modified version of South's (1977) functional classifications also is used to supplement the analysis of historic period artifacts. For the purposes of analysis

and interpretation, the Architectural group includes objects related to the construction or maintenance of buildings and structures, such as brick, mortar, window glass, nails, and construction hardware. Nails were categorized as hand wrought, cut, or wire, depending upon manufacturing method. The Kitchen functional group includes any objects related to the preparation, service, consumption, or storage of food, such as ceramic and glass. In addition, materials such as faunal remains, shell (oyster, clam, egg, etc.) also are represented in this category. The classification of kitchen glass is predicated on the identification of manufacturing techniques used to produce the vessel, after models established in Jones and Sullivan (1989) and others.

The Clothing group includes materials for clothing manufacture such as pins and needles, scissors, fabric, thread, as well as fasteners and decorations, such as snaps, hooks, buttons, and buckles. Material types for these sorts of artifacts include bone, shell, various types of metal, and plastic. The furniture-functional group consists of materials and objects related to household furnishings. Archeologically, this group is typically composed primarily of furniture hardware such as hinges, drawer pulls, locks, keyhole escutcheons, and tacks.

Objects classified as Personal include those products used for personal hygiene, as well as jewelry, coins, and other personal possessions. Items for hygiene include grooming products such as combs and brushes, curlers, toothbrushes, chamber pots, as well as pitchers, basins and other vessels used for personal hygiene. Objects related to the use of tobacco, such as pipes and associated equipage are also typically included in this category.

Transportation-related materials include items related to transportation, such as harness equipage and horseshoes, wagon and carriage parts, and automobile parts. The Arms group includes any objects related to arms or weapons, such as gun parts, ammunition, and tools for gun or weapon repair and maintenance.

The Activities group is comprised of artifacts related to non-domestic activities. These may include toys, tools, or products related to recreation, hobbies, non-architectural

construction, repair and maintenance. Miscellaneous artifacts include non-cultural stone and various metals whose function cannot be ascertained.

Curation

Archaeological artifacts recovered from the project area will be cleaned, stabilized (if necessary), cataloged, labeled and packaged in accordance with the guidelines set forth in the *City of Alexandria Archaeological Standards*. At the conclusion of the project, all original photographs, negatives, slides, digital images, videotapes, copies of historical documents,

field notes and forms (original copy and a duplicate copy), other field records, as well as the artifacts if they are to be donated to the City, will be delivered to Alexandria Archaeology. Archaeological collections recovered as a result of the Alexandria Archaeology Resource Protection Code must be curated at a facility which meets Federal standards for archaeological curation and collections management as described by 36CFR Part 79. The Alexandria Archaeology Storage Facility meets these standards, and the property owner will be encouraged to donate the artifact collection to the City for curation.

RESULTS OF INVESTIGATIONS

Archival Background

The Phoenix (Dominion) Mill was closely associated with the present project area for nearly a century and a half. Constructed ca. 1792, the mill remained in operation until the 1930s. Thus, archival research focused on the eighteenth and nineteenth century milling industry in Northern Virginia; this research included an investigation of basic gristmill technology presented below. Archival research also examined the development of the industry in Northern Virginia, with a focus on the four mills located within the City of Alexandria constructed along the Holmes Run Watershed, including the Phoenix (Dominion) Mill. The discussion of archival research concludes with site-specific information about the Phoenix Mill property, its owners, and what is known about its configuration and operation.

Development of Mills and Milling Technology

By the time that the Phoenix Mill was erected in the late eighteenth century, two types of grist mills had developed in the Northern Virginia region, merchant mills and smaller operations meant to serve a local market. Because they produced bulk commodities for sale in regional or even international markets, merchant mills were sizable enterprises that included not only a large-capacity mill complex, but often warehouses and/or commercial sales outlets. Such mills were strategically placed at or near the juncture of larger streams and major roadways or other transportation networks. Neighborhood mills were smaller less

sophisticated operations that generally served the needs of a strictly local clientele; located on smaller watercourses, they frequently were operated in conjunction with sawmills. Regardless of their size, both merchant and neighborhood mills benefited greatly from technological advances made during the late eighteenth and nineteenth centuries.

Mill Mechanics. The typical late eighteenth century gristmill was arranged in a vertical fashion. In the traditional system, sacks of unprocessed grains were hoisted directly from a delivery wagon to the top floor; from there, the grain was poured into a hopper and it descended onto the millstones on the floor below. At the very bottom, housed in a wheelpit, were the gears and shafts that powered the millstones. The arrangement was extremely labor-intensive, and required several laborers to hoist and shovel the grain, carry sacks, and so on, as Diderot's *Encyclopedia* depicted in 1763 (Figure 11).

Oliver Evans' introduction of the automated flourmill, which he promoted in his 1795 book, *The Young Millwright and Miller's Guide*, revolutionized the milling industry at that time, and these important technological advances were adopted by many Northern Virginia mill owners. Evans' mechanized mill works utilized a system of elevators and 'descenders' to move grain through the several stories of the mill (Figure 12). He also devised a system of horizontal movers based on the principle of the Archimedean screw. Evans' hopper boy utilized a revolving rake and spreader that dried and cooled the flour before it was bolted or sifted into grades. The bolting machine invented by Evans consisted of a long rectilinear frame that held a revolving hoop

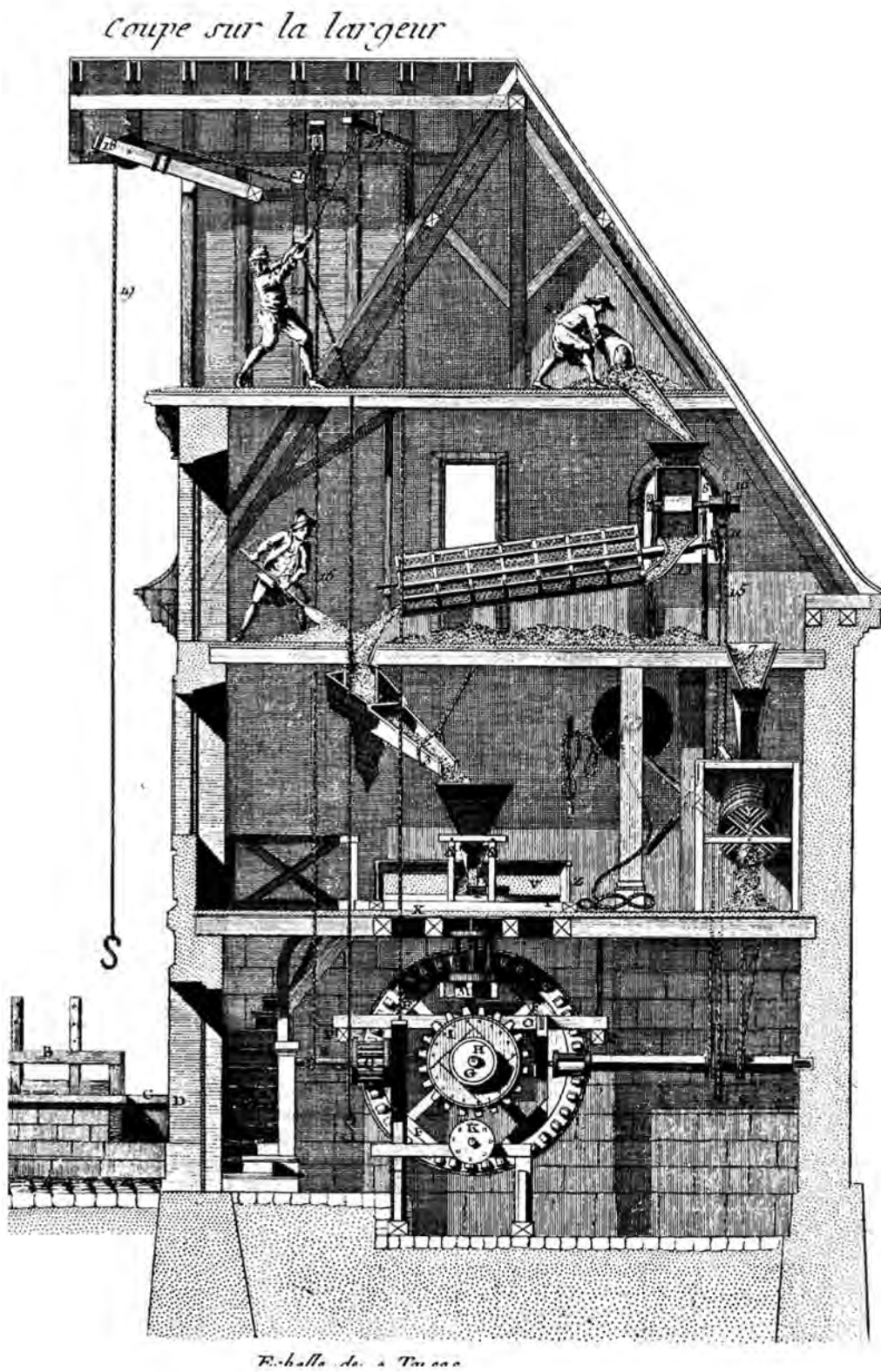


Figure 11. Diderot schematic drawing of mill workings.

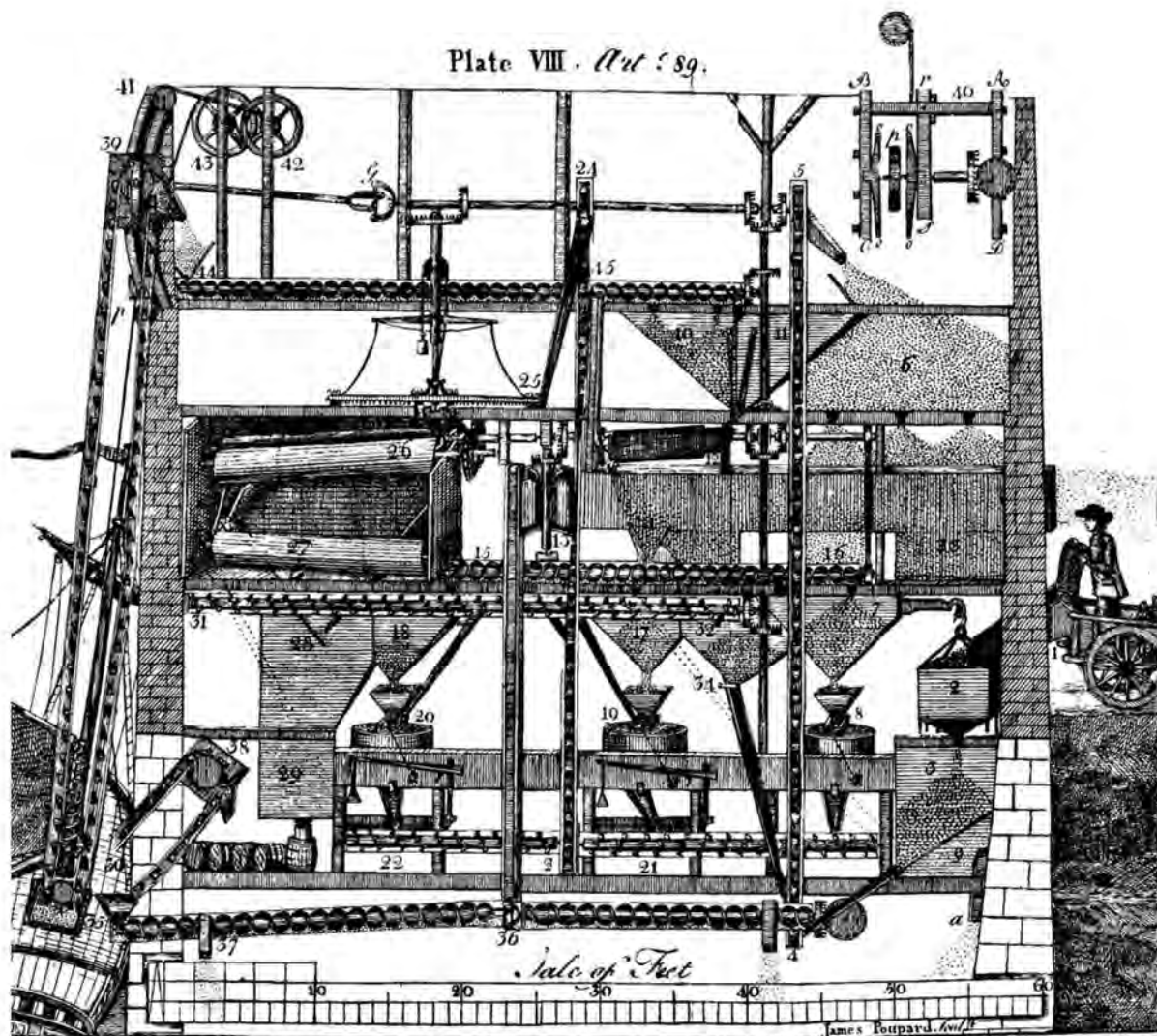


Figure 12. Schematic drawing of Oliver Evans' automated mill.

covered with four fabrics of varying weave. The coarsest weave separated the shorts or dregs, while the finest weave separated the finest flour. Sacks placed under each grade collected the flour (Zimiles 1983:36-38). The adoption of Evan's system significantly reduced the manpower needs and labor costs of a typical mill, while sharply increasing its output and the quality of its product (Fox et al. 1976:141-142).

Roller milling, a much more efficient process, was perfected in the 1880s. Roller mills replaced the traditional grinding stones with two serrated steel rollers that shredded the grain as it passed through and popped the wheat kernels open rather than grinding them to powder. The combination of the large wheat crops of the Midwestern states, the speed of production, and the brighter, whiter appearance of the flour produced by roller mills began to drive Eastern flour mills, with their reliance on millstones and soft yellowish winter wheat, out of business (McGrain 1980:9; Zimiles 1983:39; Hobbs 1985:19).

Power. Mills in colonial North America were powered in a variety of ways. Some relied on wind power, adopting a technology that had been utilized in Europe for centuries, while mills in coastal settings harnessed the tides to provide power for turning millstones. By far the most common type, however, was the mill that was powered by the force of water moving over a large, vertically mounted wheel. Table 3) presents some comparative data on the technology and power sources employed in mills of the greater Northern Virginia region; however, these data are limited in that they represent the results of a series of non-systematic surveys of extant mill buildings and or ruins (Lundegard n.d., 2001a, 2001b, 2002).

Vertical waterwheels were classified as overshot, breast, or undershot wheels, depending on whether the wheel received the water from above, at its breast or center, or near the bottom. The overshot wheel was the most efficient, reaching up to 75 per cent efficiency; breast wheel efficiency was about 65 per cent, while undershot arrangements were only about 30 per cent efficient (Zimiles 1983:11, 15; Hobbs 1985:9-10). The diameter of the overshot wheel had to be from 2-1/2 to 3

ft. less than the total fall available, "fall" being the distance from the surface of the forebay over the wheel down to the surface of the tailrace. In overshot wheels, water actually met the top of the wheel about ten inches behind the vertical centerline; this arrangement allowed the buckets to fill just as they passed over the top of the wheel. The power of an overshot wheel depended on both its diameter and its width. The larger the diameter, the more power would develop with the same amount of water; the wider the wheel, the more water it could accommodate (Fitz Water Wheel Company 1928:7).

Beginning in the 1840s, the Fitz Water Wheel Company began making steel overshot wheels based upon the same principles as wooden wheels. Due to their improved design, the Fitz wheels were able to develop more than 90 per cent efficiency. By 1928, over 750 mills and factories in the State of Virginia were powered by Fitz water wheels (Fitz Water Wheel Company 1928:7).

However, water power presented many difficulties, most of which related to maintenance of the water supply. As a result, experiments were initiated to provide an alternative motive force for mill wheels. The first steam-powered flourmill in America began operation in Lexington, Kentucky in 1807, when Oliver Evans installed a steam engine there. However, the use of steam power was slow to be adopted, perhaps due to expense; not until 1890 were half of the flour mills in the United States powered by steam engines rather than by traditional water power (Fox et. al. 1976:145-46). There is no evidence to suggest that the Phoenix Mill ever utilized steam power; the 1880 industrial census indicated that the mill complex still relied upon water power to turn its two 40.5-ft diameter overshot wheels (United States Census [Census], Census of Manufactures, Falls Church Township 1880).

Location/water supply. Whatever the mill's size, its proper location was of the utmost importance if the system was to operate efficiently. Contemporary photographs illustrate the details of such a system at Colvin Run Mill, a restored operational merchant mill

Table 3. Comparative Data on the Technology and Power Sources Employed in Mills in the Greater Northern Virginia Area (Martha's V-1)

County	Mill	Date	Size	Type (Merchant or Local)	Runs of millstones	Wheel Type, Size, HP	Structure	Miscellaneous Comments
Fairfax	Briggs	1797	53' x 27", 4-chambered	Merchant	3	inside	Stone	Part of Potomac Canal complex at Great Falls
	Cabell's (Lane's; Rocky Run, Tripplett's, Pittman's)	1759; early 1800s					2-story stone	Also operated as a sumac mill in late 19th century
	Colvin Run	1802-11			2 now; 3 possible	outside; 20' overshot 27 hp	4-story brick	roller milling and 2 steam turbines installed 1880s; now has 20' overshot wheel generating 27 hp
	George Washington	18 th C; reconstructed	46' x 16'		2	inside; 16' breast		Washington's mill was second at site; stone construction is unusual for the tidewater area
	Robey (Piney Branch; Hope Park)	1790 - 1804			2	~18'	3-story timber frame	Stone foundation
District of Columbia	Barcroft	1848-1866				36'		
	Pierce	1820-29			2 now; 3 possible	outside		Mills in area had from 2-11 run of stone; 1840-original undershot wheel replaced with overshot wheel; 1876-40' Loeffler turbine wheel added
	John Quincy Adams			Merchant	3	12' overshot		
Fauquier	Daniel / Teneriffe	1886				turbine	2.5-story frame	Fourth mill on the site; converted to rollers and turbine added in 1890s
	Fleetwood Roller / Nathaniel Grigsby's / Delaplane				3; 4 rollers		2-story stone w/ frame gable	Original wheel later powered by steam engine and diesel
	Gaines' / Holmes						2.5 story w/ frame gable	Site also accommodated a sawmill
	Hatcher / Brown				5		2.5-story stone & frame	

County	Mill	Date	Size	Type (Merchant or Local)	Runs of millstones	Wheel Type, Size, HP	Structure	Miscellaneous Comments
Loudoun	Kingsley	1794					3-story timber frame	Reportedly built on stone foundations of older mill; old photos show an attached stone granary
	Milan / Lampkin / Triplett	~1764					3-story stone	Later powered by water-driven turbine
	Minter / Spilman	~1833		Custom	2	outside; 22' steel overshot		
	Monroe			Custom		inside	2.5 -story frame	Stone foundation
	Neavil / Auburn	~1768				inside-overshot	1-story stone	
	Thompson / Old Mill Under the Hill	ca. 1810(?)				outside; steel overshot	1.5-story frame	Original equipment was wooden exterior wheel; modernized.
	Aldie (Mercer and Cooke)	1807		Merchant	6 (originally)	2- tandem 16' steel overshot	3-story brick	Mill also ground gypsum as fertilizer
	Farlin/Ball	Late 18th C					2-story frame	
	Beaverdam / Grubb's/ Beaverton	early 19th C			3-2 buhr, 1 country	exterior-overshot	2-story stone	
	Catland	early 19th C					3-story brick	Two story addition
	Cider Mill		~15' x 20'	Custom			stone	
	Clifton / Palmer / Slack / Lewis	~1765; after Civil War		Custom			2 story frame	Distillery associated with this operation ca. 1795; burnt during Civil War; rebuilt; sawmill operated in post-war period, as did cider/grape pressing operation
	Clover Hill	1804	~28' x 45'				1.5-story frame	Also ground limestone for use as fertilizer; sawmill operated with gristmill
	Coe's	late 18th C		Merchant			fieldstone	
	Coton / Lee / Elizabeth's / Lentz / Herndon	Prior to 1803		Merchant and Custom	later 3 buhr		2-story stone; later 4-story brick	Distillery also operated with this mill

County	Mill	Date	Size	Type (Merchant or Local)	Runs of millstones	Wheel Type, Size, HP	Structure	Miscellaneous Comments
	Downey / Stoneburner / Hamilton / Fornan/ Loudoun / House	~1803	44' x 50'	merchant		2-overshot - replaced ca. 1875 Leffel double turbine	3-story stone	Sawmill and distillery also operated with this mill at various times under various owners
	Evergreen / Ball / Cox / Ellzey	ca. 1770		merchant			3-story stone & frame	Sawmill also operated in conjunction with this mill
	Francis / Gulick / Ellzey / Cochran	early 1700s						Sawmill and quarry also operated at this site
	Franklin / Yankee / Tripplett's / Duer	ca. 1773		Merchant				Mill rebuilt after 1818. Site also accommodated a sawmill and a distillery; mill apparently ground limestone at one time.
	Gregg / Nathan Greegg / John Brown	ca. 1815	~45' x 56'				3-story stone & brick	
	Janney	1740; 1830					logs; later 3- story brick	Mill site moved in mid- 18th century; included both saw- and grist-mill. Present mill is third in general vicinity
	Oatlands	prior to 1800		custom			3 1/2-story stone	Both grist and sawmill operated at this complex, which also included a brick addition
	Potts-Neer	Late 18th – early 10th C				inside-overshot	2-sto masonry & frame	
	Leven Powell / Sally / Love / Peyton / Mill Hill	1771					3-story stone	
	Smith / Bean / Peugh / Norwood / Welch / Baker	prior to 1823; rebuilt ca. 1870		merchant			3-story stone & frame	complex operated both grist and sawmill
	Taylorstown	1730-log; late 1700s				overshot	2-1/2 story stone and frame	

County	Mill	Date	Size	Type (Merchant or Local)	Runs of millstones	Wheel Type, Size, HP	Structure	Miscellaneous Comments
	Waterford	1740s; rebuilt ca. 1830				overshot	3-story brick	Sawmill also operated in conjunction with this mill; proximate mill sites housed limestone, fulling and textile mills as well
	Moses Pascall Watson	1761				"upper and lower Wheels"		Mill ground lime, and a sawmill was present
	Weaverton (River / Preston's / Canal / Wever's)	ca. 1839		merchant	3 buhr, 1 country	2 tandem ??	2.5-story	Possible earlier mill constructed ca. 1825;
	Woodburn / Nixon	1777					2.5-story stone & frame	
	Beverly Chapman	1757; 1858			2 stone; 4 rollers	outside - 29' overshot; diesel	6-story stone	Original mill on site 1742; rebuilt twice; also functioned as a "plaster" mill grinding limestone; rollers installed later
	Buckland/Calvert's	ca. 1850		merchant		inside-turbine	3-story frame	Probable rebuild of original mill constructed by John Love ca. 1790
Prince William/Stafford	Tackett's	1827			"Several" runs of stones	14' overshot	2-story frame	Mill building moved in 1982 to present site near Woodbridge, Prince William County

in Fairfax that is similar in many respects to the Phoenix Mill (Figure 13).

The river or stream tapped as a power source needed to be studied throughout the year to determine whether there was a continuous flow of water and to determine how much head of fall the stream could provide. To ensure predictable water flow and to establish a strong enough head of power, dams were built to impound stream flow, thereby creating a millpond whose size and height determined its storage capacity and head; the pond and dam that powered Colvin Run Mill, for example, originally was located approximately one-half mile west of the mill itself (Netherton 1976:15). A banked millrace (Figure 14) conveyed the water from the dam to a sluiceway (Figure 15); in later mills, one or two racks were placed across the race to prevent debris from falling into the water stream and damaging the wheel. Mill races also typically had outlets spaced at intervals along their lengths to allow for the escape of excess water that could damage the race, since maintaining the integrity of the race was crucial to assuring a steady force of water. Because the terminus of the mill's head race also had to be elevated to ensure a sufficient fall of water onto the wheel, mills generally were constructed at or near the bottom of a hillside (Figure 16); at Colvin Run Mill, the elevation north and west of the mill is ca. 25 ft higher in elevation than the building's ground floor (Netherton 1976:16). A wooden sluiceway provided the final passage through which the water flowed before reaching the wheel, this structure frequently had a sluice gate that could be opened or closed to control the amount of flow. The wheel pit itself and the mill foundation (Figure 17) were reinforced to prevent undermining by the force of the falling water, which then exited through a tailrace (Figure 18).

The Phoenix Mill, like the other roughly contemporary mill complexes in western Alexandria, tapped the flow of Holmes Run/Cameron Run to provide power, as shown in an 1823 plat made for the partition of Thomas Wilson's property among his heirs (Figure 11). The mid-nineteenth century photograph of the Phoenix Mill (Figure 3),

probably taken during the Civil War, also depicts the wooden sluiceway that supplied water to its overshot wheel.

Milling in Northern Virginia

General History. The Phoenix Mill initially was established at a crucial time in Northern Virginia's economic development—that is, when the agricultural base of the region began to shift from dependence upon tobacco to the production of grains, a surplus of which were slated for export. Establishing a mill seat was a public process that required official permission. Surveyors were sent out by the county courts to view proposed mill seats and determine the extent to which establishing a mill would inconvenience others or deprive them of property. Mill seats and mill rights also were transferable as property. Thus, mills and their owners entered the public records from a number of perspectives: through formal petitions to the county court; through official surveys conducted by selected commissioners; through deeds; through chancery cases; and through inheritance vehicles such as wills and estate accounts. Thus, the official records provide an overview and extrapolate some basic trends in mills and milling during the late eighteenth and early nineteenth centuries in Northern Virginia.

Table 4 presents such an overview, organized by major watersheds within Northern Virginia. The listing was acquired through review of indices of early Fairfax County court records and other documentary data, but does not include those mills (e.g., Mason's mill on Spout Run in present day Arlington County) that would have been established and operated under the jurisdiction of the District of Columbia. Also, no attempt was made to ascertain whether specific mill seats were re-licensed. Therefore the table cannot be considered exhaustive.

Nonetheless, this research does provide some insight into general trends within the region. First, mills were established within nearly every major watershed that could be harnessed to provide a sufficient head of power. Secondly, although milling always had been practiced within the region, it experienced tremendous growth in the period



Figure 13. Contemporary view of north façade of the Phoenix Mill, now the main office of Flippo Construction (orientation southeast) (photo: RCGA)



Figure 14. The (contemporary) reinforced headrace of Colvin Run Mill, which channels water eastward toward the mill from an impoundment of Colvin Run (Orientation west) (Photo: RCGA)



Figure 15. Junction of mill head race and wooden flume at Colvin Run Mill (orientation east). Note control gate at head of flume (left) and elevation of the race above the tailrace in the background (Photo; RCGA)



Figure 16. View of mill wheel and elevated wooden flume at Colvin Run Mill (orientation northwest) (Photo: RCGA)



Figure 17. View of the exterior wheel-pit at Colvin Run Mill and the stone-reinforced upper portion of the mill's tail-race (RCGA)



Figure 18. View east along the embanked (not reinforced) tailrace of the Colvin Run Mill (Photo RCGA)

Table 4. Overview of basic trends in mills and milling in the early nineteenth century in Northern Virginia (Martha's V-2)

Watershed/ Drainage	Miller/ Mill Owner	Year	Ref. Source	Comments
Accotink	Stepoe	1754	Ffx Index	Long Branch of Accotink Run
	William Payne	1783	Ffx Index	Rock Hill Mill
	John Ward	1788	Ffx Index	
	Daniel McCarty Chichester	1801	Ffx Index	
	Dean and Gardiner	1803	Surveys, p. 257; Wigglesworth 46	Dam seat. Advertised for sale in 1841; four burrs produced 100 bbl. Of flour per day.
	Janney	1839	Ffx Index	
	Ruchard Windsor	?	Ffx Index; Wigglesworth 46	Former Gardner and Dean Accotink Mill
	Jacob Troth	1847	Wigglesworth 46	Accotink Mill
Pohick	Robert Boggess	1748	Ffx Index	
	George Mason	1793	Surveys, p. 169	Dam seat survey: "Pohick Creek, Land of Robert Boggess"
	"Mr. Adams"	1806	Surveys p. 277	Dam seat, reference to "old" mill race
	Keene's	1808	Ffx Index	North Branch Pohick
	Simpson and Jones	1816	Ffx Index	
	Holsapple and Westfall	1849/50	Ffx Index	"Near Burke"
	Suddath	1856	Ffx Index	On South Run of Pohick
Dogue	George Washington	1748	Surveys, p. 37	Survey to establish site for a mill dam
Hunting Creek/ Cameron	John Colville	1741	Ffx Index	
	Gilpin and Hartshorne	1789	Deeds R-1:353	This is the original Phoenix Mill, later acquired by Wilson, Watkins and others
	William Bird	1790	Deeds	Rights to build mill race through Thomas West's land
	Stump and Ricketts		Deeds	Cameron Mills
	Richard Windsor	1830s	Deeds	Purchases Stump and Ricketts' Cameron Mills
	Reuben and Robert Roberts	1848	Deeds	Purchase Cameron Mills
• Holmes Run	John Bruts/Thomas Halley	1733	Ffx Index	
	Thomas Herbert	1783/88/90	Ffx Index	
	Wise, Dulaney, Hartshorne	1798	Ffx Index	North side Holmes below Backlick
	William/John Douglass	1810	Ffx Index	
	Thornton & Terrett	1813	Ffx Index	
	George North	1813	Ffx Index; Wigglesworth 50	Grist and saw mill later acquired by Barcroft family
	Abijah Janney, David Lupton, Peter Saunders	1813-1817	Wigglesworth 48-49	Named the Triadelphia Mill, located at Little River Turnpike and Holmes Run

Watershed/ Drainage	Miller/ Mill Owner	Year	Ref. Source	Comments
	James Cloud	1835	Deeds C-3:147	Purchases the Triadelphia Mill
	Minor/Thornton	1846	Ffx Index	
• <i>Backlick</i>	Hepburn and Dundas	1788	Ffx Index	
<u>Four Mile Run</u>	John Colville	1754	Ffx Index	
	John Carlyle	1756	Ffx Index	
	Robert Adams	1756, 1763	Surveys, p. 114	“opposite Carlyle,” complex included mill, millhouse and storehouse
	Charles Alexander	1770	Ffx Index	
	William Carlin	1797	Ffx Index	
<u>Pimmit Run</u>	John Ballendine	1763	Ffx Index	At the Falls Landing (near chain bridge)
	Samuel Adams	1783	Ffx Index	
	Robert Adams	1783	Ffx Index	
	Samuel Adams, Jr.	1804	Surveys, 248	Dam seat at confluence of Pimmit Run and Little Pimmit Run, on Thomas Ballendine’s land
	Samuel and Benjamin Childs	1829	Ffx Index	Sale of right ? to Edward Castell
	Jacobs, Wren, and Childs	1830	Ffx Index	Transfer of right? to Nelson
<u>Scotts Run</u>	William Shorridge	1788	Ffx Index	“Old” mill
	John Turberville	1794	Surveys, p. 179	Dam seat on southwest side of Scott’s Run on Robert Carter’s land
	S. M. Ball/Magarity	1844/1880	Ffx Index	Turberville’s old mill seat?
<u>Difficult Run</u>	Stephen Lewis	1743	Ffx Index; Colby and Corcoran 1981	
	Edward Masterson	1749	Ffx Index	
	William Fairfax	1751	Ffx Index	
	John Trammell	1763	Ffx Index	
	Capt. Charles Broadwater	1770	Ffx Index; Colby and Corcoran 1981	Possibly same as Coleman’s mill seat
	Thomas Lewis	1771	Ffx Index	On Wolf Trap Run
	Amos Fox	1783, 1791	Ffx Index	
	James Coleman	1791, 1792	Surveys, p. 166	Dam seat located “one mile below old mill dam”
	Daniel Lewis	1807	Surveys, p. 199	Dam seat on Land of Thomas Lewis
	Samuel Coleman	1819	Ffx Index	
	____ Trammell	1819	Colby and Corcoran 1981	Former mill seat of Lewis in 1743
	____ Hawxhurst	1858	Ffx Index; Colby and Corcoran 1981	Rebuild of older (ca. 1840) mill on site
	Thomas Lewis	1860	Ffx Index	

Watershed/ Drainage	Miller/ Mill Owner	Year	Ref. Source	Comments
	____ Waple	1866	Ffx Index; Colby and Corcoran 1981	Fox's old mill seat, also known as Difficult Mill. Waple's Mill was flour, grist and sawmill combined
Sugarland Run	Richard Coleman	1748	Ffx Index	
Bull Run/Ocoquan				
• <i>Great and Little Rocky Run</i>	Willoughby Newton	1746	Ffx Index; Mitchell 1958	Sold to William Carr Lane
	Benjamin Suddoth	1800	Surveys p. 233	Two dam seats on Great Rocky Cedar Run adjacent Coleman Brown and William Lane, Jr.
	Benjamin Talbott	1809	Ffx Index	
	Thomas Blackburn	Ca. 1814	Mitchell 1958	
• <i>Pope's Head</i>	Daniel Thomas	1749; 1753	Ffx Index; Mitchell 1958	Possibly Hope Park Mill
	Thomas Pollard	1769	Ffx Index	
	Thomazin Ellzey	1798	Ffx Index	
	John Dye	1809	Ffx Index	
	Kincheloe Family	1830	Ffx Index	Union Mills
• <i>Wolf Run</i>	George Lamphir	1770	Ffx Index	
	Benjamin Suddoth	1797	Surveys, p. 194	Dam site on Richard Clark's land

around the turn of the nineteenth century, particularly during and after the improvement of transportation systems like the Little River Turnpike. Thirdly, milling seems to have been, for some families, an occupation that was engaged in by more than one generation, as the Adams family enterprises on Four Mile and Pimmit runs and the Coleman and the Lewis family operations on Difficult and Sugarland runs suggest. Finally, it was not unusual for millers to operate more than one establishment on several different creeks; Benjamin Suddoth licensed mill seats on Wolf Run (1797), in the Rocky Run watershed (1800), and on the South Run of Pohick Creek (1856), while Richard Windsor had mills on both the Accotink Creek and Cameron Run in the early nineteenth century.

Milling in the Holmes Run Watershed

Documentary sources indicate that the lower reaches of the Holmes Run watershed, including that portion now known as Cameron Run, historically accommodated at least five mills, four of which were located within what are now the boundaries of the City of Alexandria. Barcroft's Mill was located farthest upstream near Bailey's Crossroads, just east of Columbia Pike in Fairfax County. Cloud's Mill stood on the south side of Holmes Run near present-day Paxton Street, while the Phoenix Mill was located just south of present-day Pickett Street. Further east along the Cameron watershed were two other milling establishments: the twin Cameron mills and an early (possibly by 1733) gristmill commonly known as Brutt's (or Bruff's) Mill (Mitchell 1987:45, 96); the latter mill in 1760 was owned by John Carlyle and leased to Thomas Boswell (Figure 19). Significantly, four of these mills were established during the late-eighteenth to early nineteenth century resurgence in grist-milling in Northern Virginia (Wigglesworth 1976/77:48-50); of the five, only the Phoenix Mill still stands.

Barcroft Mill. Possibly established on an earlier mill seat, the Barcroft mill probably was constructed ca. 1811. When it was sold to George North, it was converted to a grist and saw mill. The Barcroft family acquired the property some time after 1838, and the mill

continued to operate through at least the 1880s (Wigglesworth 1976/77:51). Hopkins' (1878) map of the Falls Church District depicted the facility as a "grist and saw mill;" but by 1894, the mill no longer appeared on local maps (Hopkins 1894). The Alexandria Water Company later established its Lake Barcroft Reservoir immediately upstream from this mill seat.

Cloud's (Triadelphia) Mill. Documentary sources indicate that Abijah Janney, David Lupton, and Peter Saunders were the probable builders of this facility sometime between 1813 and 1817. Cloud acquired the mill, whose headrace reportedly was some 2,000 ft long, in the 1830s. Although Edward Delehay reportedly bought the mill in 1863, both of Hopkins' late nineteenth century maps still identified the property with the name Cloud and/or the designation "Triadelphia" (Hopkins 1879, 1894). Robert Pickett acquired the property in 1899 (Fairfax Deeds Book D-6:50). The operation reportedly went bankrupt, and the mill seat was acquired briefly by the Alexandria Water Company in 1915, when that company was seeking to obtain easements for tapping Lake Barcroft (Wigglesworth 1976/77:48-49).

The Cameron Mills (Hunt and Roberts). The twin mills at Cameron were constructed ca. 1794 by William Bird and John Ricketts on land purchased from Thomas West. The mills subsequently were owned by a variety of other entrepreneurs, most notably the Roberts family. In 1851, the eastern mill was sold to the Alexandria Water Company, which converted it into a water pumping station, utilizing water drawn from the long millrace. The Roberts mill was one of the larger and more successful merchant mills in the region. The 1880 Federal Industrial Census indicated that, during the previous year, this mill employed eight people with a total payroll of \$3,000; that the total value of the mill and all materials on hand was \$62,800; that the mill produced primarily cornmeal, feed and flour, 95 per cent of which was destined for the commercial market through the family's feed and grain store; and that the 22 ft fall over the mill's single 18 ft-wide overshot wheel was

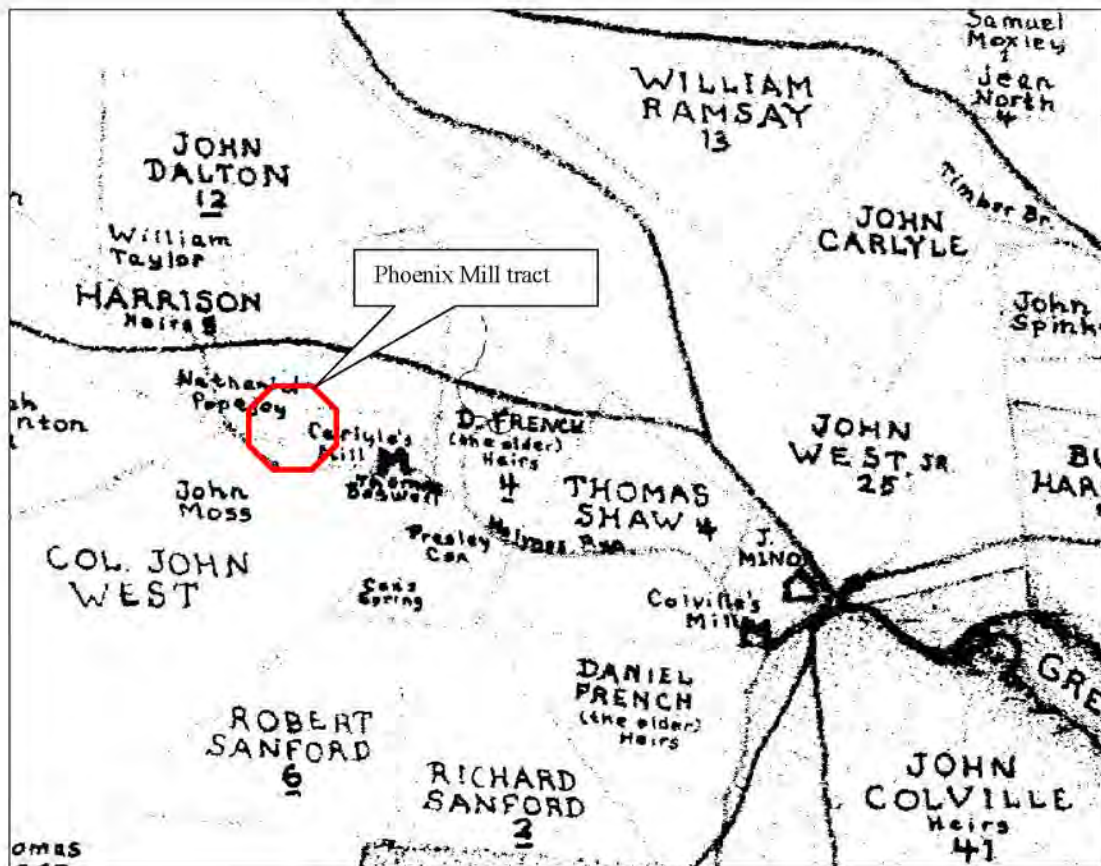


Figure 19. Excerpt from Mitchell's 1760 map of landowners in Fairfax County, showing the location of Carlyle's Mill (Thomas Boswell) and the general location of the future Phoenix Mill tract.

capable of producing 40 hp (Census of Manufactures, Falls Church District 1880:492).

Old Dominion (Phoenix) Mill. The Phoenix or Old Dominion Mill, the only one of the four Holmes Run/Cameron Run mills that still is extant, reportedly was constructed in or prior to 1792 by William Hartshorne and George Gilpin (Fairfax Deeds Book R-1:353; Wigglesworth 1976/1977:49).

Hartshorn and Gilpin. Fairfax County land records (Fairfax Deeds Books M-1:143-147, 227, 243, 320; P1333; Q-1:418; R-1:340, 353) indicate that George Gilpin and William Hartshorne began to assemble the mill property during the 1770s in a series of six land purchases. These purchases included portions of land previously owned by Isabella Harrison, John West, Daniel French, and Presley Cox, all of whom are depicted on Mitchell's landownership map of 1760 (Figure 19). In 1789, Gilpin conveyed his half interest in the combined tracts to William Hartshorne (Fairfax Deeds Book R-1:351-356).

Hartshorne subsequently used the mill property as collateral for an \$11,400 loan from Mordecai Lewis, a resident of Pennsylvania, whom land tax records list as the sole property owner after 1793 (Fairfax County Land Tax Records 1793-1813). When Hartshorne defaulted on the loan, the property was sold at public auction (Fairfax Deeds M-2:141-143). The 1812 sale notice in the *Alexandria Gazette* described the tract as:

"That Valuable new Mill and Farm now occupied by William Hartshorne, known by the name of Strawberry Hill, situated on Holmes's Run and the Little River Turnpike Road in the County of Fairfax about three miles from Alexandria; the tract contains 236 acres, of which 30 are in young thriving timber, 70 in good meadow, the greater part of which may be watered from the Creek and Mill Race - and the residue is well improved arable Land. There are on the premises, one peach and two apple orchards, a productive garden of two acres handsomely laid off - A

framed dwelling House two stories high, 30 feet by 20 with two wings, a large Kitchen, a pump of good water at the door; Stables, Stone Spring House, &c. Also a large well finished new Brick Mill 55 feet by 45, four stories high with three pair of large Burr and one pair of country Mill Stones, capable of manufacturing ten thousand barrels of flour annually. The stream is large and constant, and affords a fall sufficient for water wheels 19 feet in diameter.

Thomas Wilson. Thomas Wilson took control of the Phoenix Mill property in 1813. Ten years later, pursuant to a request from his heirs, Wilson's (now) 204½ acre property, including the mill, was surveyed and partitioned (Fairfax Deeds Book U-2:407, 410A). The survey plat filed in connection with that partition (Figure 4) showed not only Wilson's property, but also adjoining properties and two mill races, of which "Ricketts' race" supplied water to the Cameron Mills, located further east near the head of the Great Hunting Creek estuary of the Potomac River. The terms of the partition agreement stipulated that the 56-acre "Ph(o)enix" mill property, which was designated as Lot #2 on the plat, went to David and Hannah Wilson and William and Martha Brown; this parcel included the present project area. Sworn depositions filed in the chancery case of *William Brown and others vs. the heirs of David Wilson* (Fairfax County Causes in Chancery: #CFF 4bb) suggest that the Wilson's themselves may not have operated the mill; in an affidavit dated 1837, Joseph Janney testified that he rented the mill from David Wilson "during his (Wilson's) lifetime." Given the principal occupation of the subsequent purchaser, Benoni Wheat, an Alexandria merchant (Census, Population Schedule, Alexandria 1850), it also is probable that others operated the mill during the period between 1846 and 1853; for example, the 1850 census shows that William Bloxham, a 77-year old English immigrant, was working as a miller in the general vicinity of the Phoenix

Mill (Census, Population Schedule, Fairfax County 1850:11)

D. G. Watkins. In 1854, three members of the Watkins family, who also owned several other tracts in the area and at the city's West End, acquired the mill property (Wilson's Lot #2) from an interim owner Peter Trexler, again at public auction. The corresponding *Gazette* advertisement described the tract as follows:

No. 8. The Brick Water Mill, formerly called Phenix Mill, being 2 miles from Alexandria, on the Little River Turnpike, together with 56 acres of land, more or less, subject to a dower of \$60 to Mrs. Hannah Wilson. This mill has four run of burrs, and is capable of grinding 100 barrels of flour per day. The Rail Road runs within 50 yards on the South, and the Turnpike on the north and its nearness to the City, renders it desirable to those wishing to engage in milling. Upon the Farm are two comfortable frame dwellings [and] a large Brick Barn and Stable, capable of stabling 20 horses.

Three years later, the Watkins' purchased a contiguous parcel of 27 ac, "adjacent to Richard Windsor" (the former Ricketts property). From that point until the twentieth century, these two tracts were conveyed as one property.

Although the Watkins family retained control of the mill until the late nineteenth century, they too apparently leased the property to others. For example, the 1860 census indicated that Leonard, John, and Alphas (?) Brown all were employed as millers in this vicinity (Census, Population Schedule, Fairfax County, 1860:70), which may explain why one Civil War map of the area identified the complex as "Brown's Mill." On the other hand, Fairfax County Land Tax records through the 1860s suggest that the tenant on the mill property was named Schofield or Scofield, although corresponding census records do not reflect that fact (Fairfax Land

Tax 1861, 1869; Census, Population Schedule, Fairfax County 1860, 1870).

During the two decades between the onset of the Civil War and 1880, when the Watkins family relinquished control of this property, documentary and photographic sources suggest that both the mill and the surrounding landscape underwent slight but significant changes. During the Union occupation of the Alexandria area during the Civil War, tracts adjacent to vital transportation links such as the Little River Turnpike and the Manassas Gap railroad, whose right-of way bordered the mill property on the south, were of particular interest. Because the uninterrupted operation of the railroad was vital to the maintenance of Union supply lines, its corridor was patrolled constantly by the Union (and harassed by the Confederates). Mary Frobel, who lived across the Cameron Valley from the mill, noted that Union General Winfield Scott ordered the removal of all trees "within 10 miles of the railroad" to deny the element of surprise to would-be Confederate raiders (Lancaster 1992:89). This may be one explanation for the treeless landscape shown in the photograph in Figure 3. The individual in that photograph was standing southwest of the mill, a location that would have been in the southern half of the current project area and north of the railroad right-of-way. Whether because of cultivation or due to Scott's order, it is clear that the mill property was devoid of trees by the end of the war.

In the decade following the Civil War, David Watkins and his associates entered into two property transactions that resulted in other modifications to the landscape surrounding the mill. In 1866, they concluded an agreement with the Alexandria Water Company that re-routed the trajectory of the latter party's intake canal (formerly, Ricketts' mill race for the Cameron Mill) across the lower portion of the Watkins property (Fairfax Deeds Book G-4:142). The wording of this deed is significant, for it demonstrated clearly that the relative positions of Watkins' tail race and the head race of the water company's intake canal had not changed since the Thomas Wilson property partition in 1823 (Figure 4). The deed describes the new course of the intake canal as

beginning at a point located “opposite Watkins’ tail race,” and extending for a distance of 430 yards to rejoin the company’s former canal race. The new intake right-of-way was 30 ft wide, and the realigned race itself measured 12 ft in width.

Fairfax County court and land records show that Watkins also lost a portion of his mill tract through condemnation proceedings that created a right-of-way for the Alexandria and Fredericksburg Rail Road. The Fairfax Circuit Court ordered a team of surveyors to visit the property and determine fair compensation for the seizure; their survey report (Fairfax Deeds Book O-4:168) estimated the value of the land taken and the collateral damages caused by construction at a total of \$1,300. Watkins finally received this payment in June of 1871 (Fairfax Court Minutes 1869-1871). It is likely that rail construction across the lower half of the mill tract interfered with, among other things, the mill’s tail race. G. M. Hopkins’ (1879) *Atlas of Fifteen Miles Around Washington: Falls Church District* (Figure 6), which was the first document to apply the name “Dominion” to the former Ph(o)enix Mill and also the first since the 1823 plat to depict the mill’s tail race, shows the railroad’s right-of-way and suggests that the configuration of the tail race may have been realigned once again. Instead of entering directly into Holmes/Cameron Run, it now emptied into the headrace that supplied Hunt and Roberts’ Cameron Mill and the Alexandria Water Company’s pumping station. The general trajectory of Dominion’s tail race, however, continued to coincide almost precisely with the angle of the eastern property boundary of the current project area.

Industrial census data and Fairfax County Land Tax records for this period suggest that the mill itself also may have undergone some modifications during this period. The 1870 Industrial Census had characterized Watkins’ mill as water-powered, with a wheel that generated 35 hp. Its work force of 5 males and 9 females over 15 years of age could produce, among other things, 56,000 bushels of corn meal and 6,325 bushels of mixed feed annually (Census, Products of Industry, Fairfax County, Falls Church Township 1870:2). Fairfax

County Land Tax records show that the assessed value of the structures on Watkin’s mill property increased significantly between 1861 (\$1,000) and 1870 (\$1,500). Unfortunately, the reason for the \$500 increase between these two years cannot be ascertained, since the tax lists simply record building valuations as a lump sum, and do not offer specific building descriptions (Fairfax County Land Tax Records [Land Tax] 1861; 1869-1870).

By 1880, there appear to have been further changes. Most importantly, the census returns indicated that the mill now had two overshot wheels capable of generating 80 hp; calculating the difference in output, however, is difficult, since the output data in 1880 were expressed in terms of weight (pounds) instead of volume (bushels or barrels)(Census of Manufactures, Fairfax County 1880:492). Land Tax returns for 1878 also indicate a significant increase in the value of the buildings on the property; in aggregate, they now were assessed at \$5,000 (Land Tax 1878). Again, the precise reason for the increased valuation remains unclear.

John Brown/Frank Hill. In 1888, the heirs of David G. Watkins were forced to sell the family’s properties to satisfy estate debts. John Brown, the purchaser, paid \$6,500 for the “Old Dominion” mill, its water rights, and a total of 83 acres of land (Fairfax Deeds Book H-5:50), but apparently defaulted on the deed of trust. As a result, in 1896, Frank M. Hill, who resided at 209 Lee Street in Alexandria, purchased the property (Census, Population Schedule, Alexandria 1900). It is unlikely that Hill himself operated the mill, but just who would have been retained to run the enterprise is unclear. Although the 1900 census for Falls Church District listed entries for several millers, none could be linked specifically to the Dominion operation.

Charles Cockrell. The last family to own both parcels associated with the Old Dominion Mill were Charles and Maggie Cockrell, who purchased them from Frank M. Hill in 1903 (Fairfax Deeds Book L-6:659). The 1910 census shows that Cockrell farmed the property, while Newton Carr, listed as a boarder in Cockrell’s household, apparently

operated the grist mill (Census, Population Schedule, Falls Church District 1910:209). By the early 1920s, Cockrell, also identified in the 1920 and 1930 censuses as a middle-aged farmer, began to subdivide this larger tract.

The Old Dominion Mill reportedly stopped producing flour and meal in the 1930s (Wigglesworth 1976:50). According to one undated newspaper account (Luggiero n.d.), the owner who purchased the mill property from Cockrell modified the building considerably, including sandblasting the exterior and reconfiguring the roof. The present occupant, Flippo Construction, has renovated the interior, but has preserved intact the old support beams with their mortise-and-tenon joints and the names that were inscribed on them through the years.

Lindsay Lexus Property

In 1920, Luvenia McDonald bought 8.54 acres of Charles Cockrell's land, which she and her husband Baylous (residents of the Del Ray section of Alexandria)(Census, Population Schedule, Alexandria 1920) subsequently partitioned and re-sold to a variety of owners (Fairfax Deeds Books P-8:509; U-8:236; V-8:572). A 1.92 ac portion of that larger property became the present project area; it remained largely undeveloped through the 1930s, although a 1937 aerial photo (Figure 7) does show what may be some grading activity in the northern half of the tract. This photograph also shows clearly the trajectory of the Phoenix Mill's head and tailrace, which remained essentially as they had been throughout the nineteenth century.

In 1947, the 1.92 project parcel, described as "adjoining Cockrell's property," was acquired by Hugo Herfurth (Fairfax Deeds Book 596:94). During this period, the one-story building that was demolished as part of the current project was constructed, according to Alexandria's online property tax assessment records. The date and scope of the construction effort were confirmed by a 1951 aerial photograph, which showed the building in its former location (Figure 8); a partially graded or disturbed area between the building and what was then termed "Mill Road" (present day Wheeler Avenue); and a possible small

house and outbuilding located in the northern half of the property. A 1960 USGS aerial photograph shows a residential structure in the northwest corner of the parcel (Figure 9). In 1968, the Herfurth family interests sold the property to Gordon and Kenneth Rudd (Alexandria Deeds Book 766:740-741). Shortly after this sale, the City of Alexandria realigned Wheeler Avenue and reduced the size of the parcel to 1.76 ac (Alexandria Deeds Book 766:727). The 1960 USGS aerial photograph has been overlaid with the modern road alignment to show the changes in Wheeler Avenue (Figure 9). The present day sloped entrance into the property probably was engineered at that time; it is likely the residential structure located at the northwest corner of the parcel was demolished during this period.

Mechanized Trench Excavation

Archeological investigations were designed to examine the Lexus parcel for evidence of former industrial and domestic activity. As indicated in Chapter III, the work plan called for the excavation of eight trenches. Of the original eight 3 x 50 ft trenches, six were modified in some fashion (Figure 20). The locations of Trenches 1, 2, and 6 were changed slightly due to ground conditions; however the size of these trenches was not altered. Trench 1 was moved approximately 20 ft south to avoid a chain link fence. Concrete was encountered in the original Trench 2 location; excavation was halted and the location was designated Trench 2A. A new location, designated Trench 2B, was excavated approximately 10 ft to the north. Trench 6 was relocated approximately 20 ft east due to the presence of a concrete ramp in the original planned location. Both trenches remained 50 ft in length and three feet wide. Trenches 5 and 8 were shortened from their original planned length of 50 ft. Trench 5 was shortened in consultation with Alexandria Archeology due to the presence of disturbed soils. Trench 8 was shortened due to the presence of multiple layers of asphalt in the southern portion of the trench. Trench 7 was not excavated. In consultation with Alexandria Archeology, the combined square footage for

planned Trench 7, as well as that not excavated in Trenches 5 and 8 were used to expand Trench 4. A summarization of the findings for each trench is presented below.

Trench 1

Trench 1 was located in the southeastern corner of the property. The trench was placed perpendicular to the eastern boundary of the property in an effort to identify intact cultural horizons, particularly those related to the mill race associated with the Old Dominion Mill. This 50 x 3 ft trench, excavated to a depth ranging from 4 to 6 feet revealed evidence of extensive landscape modification during the 20th century as well as grading related to the construction of the current asphalt parking lot.

Soils. The soil profile in Trench 1 was composed of a total of nine strata. The matrix in the uppermost three strata comprised sand and gravel (Figure 21). No cultural materials were present in these strata. Below the recent fill, Strata IV and IVa have been interpreted as mid-to-late 20th century deposits. Stratum IV was characterized by brown sand loam with moderate concentrations of brick fragments; the matrix in Stratum IVa was similar, with the addition of pockets of yellow clay (Figure 21). Stratum V, in the western portions of Trench 1, was dark yellowish brown sand loam with gravel (Figure 21), and has been interpreted as an additional layer of 20th century fill.

Below the fill were two strata of clay above subsoil; these may have been disturbed or re-deposited because neither stratum extended across the entire testing area. Stratum VI, in the eastern half of the trench was grayish brown clay. Stratum VII, in the western half of the trench, consisted of olive yellow clay. Underlying these strata, Stratum VIII consisted of dark gray clay subsoil. A utility trench also was present in the western end of Trench 1; the trench fill associated with the utility trench consisted of dark bluish gray (10B 4/1) sand and gravel.

Features. Twentieth century filling and activities related to the construction of the existing parking lot appear to have resulted in the removal of all natural soils to subsoil and replacement with fill and redeposited soils. Cultural materials were present only in fill

soils and no intact features or deposits were noted.

Cultural Materials. Cultural materials were present in Strata IVa and IVb, the late 20th century fill. In these soil layers included brick, concrete (some reinforced with rebar), automobile parts (1 tire, 2 oil filters, 4 exhaust pipes, and one partial engine cover), heavy grade wire, miscellaneous plastic, and fragments of heavy landscape cloth.

Trench 2A and 2B

Trenches 2A and 2b were located in the eastern half of the project area, perpendicular to the eastern boundary of the property. An extensive and very thick concrete pad was found beneath the asphalt in the planned Trench 2 location. This pad appears to be associated with a remnant cinderblock foundation located on the adjacent property (Figure 22). No pre-twentieth century material was observed in association with the concrete pad.

Excavation of Trench 2A was halted and Trench 2B was excavated slightly to the north to avoid the concrete pad (Figure 20). This second location, perpendicular to the property line, was selected in order to test for evidence related to the mill race or other pre-modern cultural activities in the area. The trench was mechanically excavated to a depth ranging from 4 to 5 feet, until sterile, non-cultural strata were reached. Excavation at this location revealed evidence of extensive disturbance, similar to that observed in Trench 1.

Soils. The profile in this trench exhibited two major episodes of historic/modern filling, dating to the early-to-late 20th century (Figure 23); these fill episodes were separated by a thin layer of decaying asphalt. The upper, late 20th century filling episodes (Strata I-III) were composed of a series of sand and aggregate gravel layers; these reflect parking lot construction and maintenance. As indicated in Figure 23, the matrix for all three strata was sand; the differences among the strata were in color and content. Stratum I was only sand, Stratum II was sand and gravel (Figure 23); these two strata included pockets of yellow cement and gray gravel. The sandy matrix in

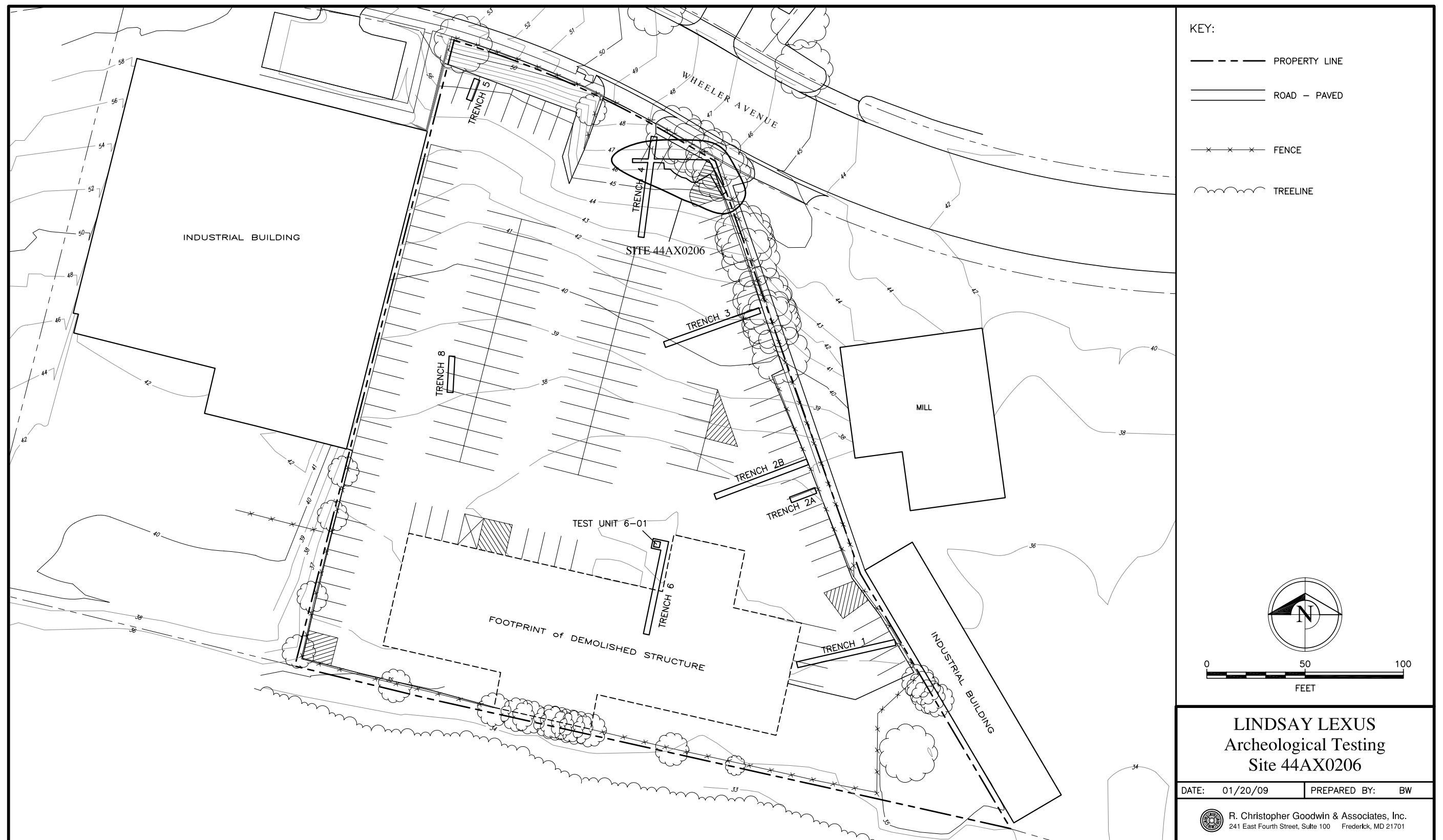
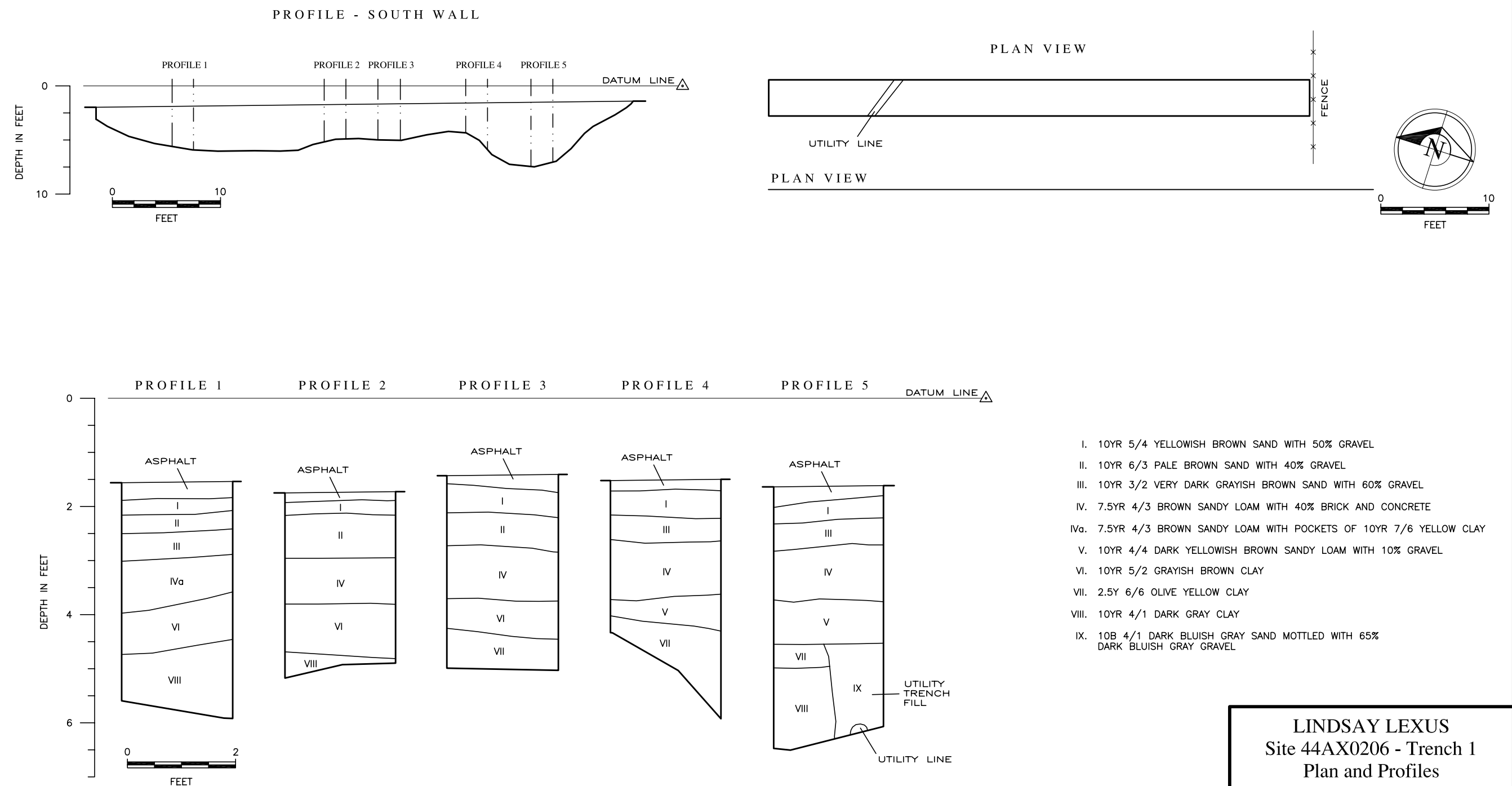


Figure 20. Project area map.



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 Site 44AX0206 - Trench 1
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Figure 21. Trench 1, South Wall Profile.



Figure 22. Photograph showing Trench 2A and associated cinderblock foundation on adjacent property. (Exp 32)

Stratum III included brick fragments, not present in the upper two strata.

A thick secondary layer of decaying asphalt separated the upper fill episodes from those below. Below the asphalt, the lower strata (Strata IV-X) were characterized by a series of mottled soils that contained a few cultural materials, aside from brick and concrete fragments. As indicated in Figure 23, in the lower profile, light olive brown sandy clay and gravel (Stratum IV) overlay several layers of clay that varied in color and content. A pocket of black sandy clay loam (Stratum V) was noted in the western end of the trench. Stratum VI consisted of very dark gray clay. Below this, Strata VII and VIII consisted of grayish brown and bluish gray clay; brick fragments comprised a significant portion of the matrix in Stratum VII, but were not present in Stratum VIII. Strata IX and X also were

clay, these were composed of olive gray and bluish gray clay. The difference between the strata was a slightly lighter hue for the olive brown clay.

Features. No pre-modern cultural features or deposits were identified in Trench 2. While evidence of extensive 20th century land modification was recorded; no evidence for the mill race or other features potentially associated with the mill were identified

Cultural Materials. Trench 2 contained few cultural materials and all were interpreted as re-deposited materials. The upper, later fill episodes contained a recent make automobile oil filter, noted in Stratum III. In the lower fill strata, two pieces of crown cap, bottle glass (1892-present) were recovered from the top of Stratum VIII, near the interface with Stratum VII (Figure 24).

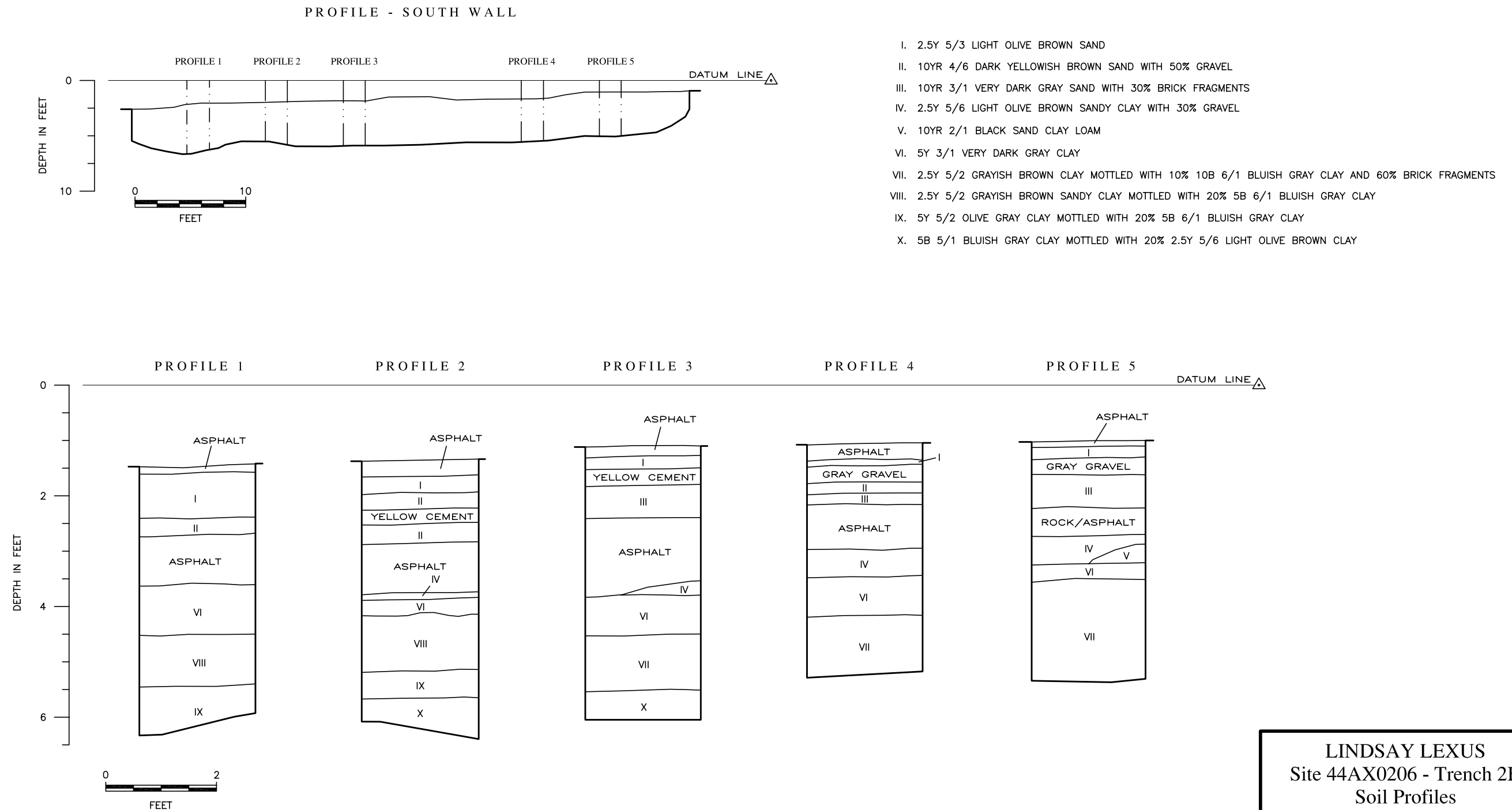


Figure 23. Trench 2B Plan and Profiles.



Figure 24. Photograph showing bottle glass recovered from Trench 2B, Stratum VIII.

Trench 3

Trench 3 was excavated in its original planned location, perpendicular to the eastern boundary of the property (Figure 20). Measuring 50 x 3 feet, the trench was excavated to a depth of between 2 and 3 feet. In the western end of the trench excavation was halted when sterile subsoil was reached. Excavation in the eastern end of the trench was halted upon the discovery of a buried utility trench.

Soils. Strata within the trench consisted of layers of asphalt, aggregate material, and modern fill overlying sterile subsoil, suggestive of extensive grading and landscape modification (Figure 25). Ten distinct fill deposits were identified; these included deposits of sand and gravel (Strata I, II, III, VI,

and VIII), a layer of ground asphalt (Stratum IV), and a deposit of poured cement fragments (Stratum IX). Other fill deposits (Strata VII and X) were characterized by the presence of brick flecks, wire and rebar, gravel, and concrete. Sterile subsoil in the central and western portions of the trench was characterized as strong brown (7.5YR 4/6) loam clay and light olive brown (2.5Y 5/3) clay; a utility trench occupied the eastern end of the trench.

Features and Cultural Materials. No intact natural soil strata were present above subsoil; no cultural features or deposits were present in the subsoil. Aside from the asphalt, cement, and brick that comprised a portion of the fill material, no pre-modern cultural materials were present in this trench.

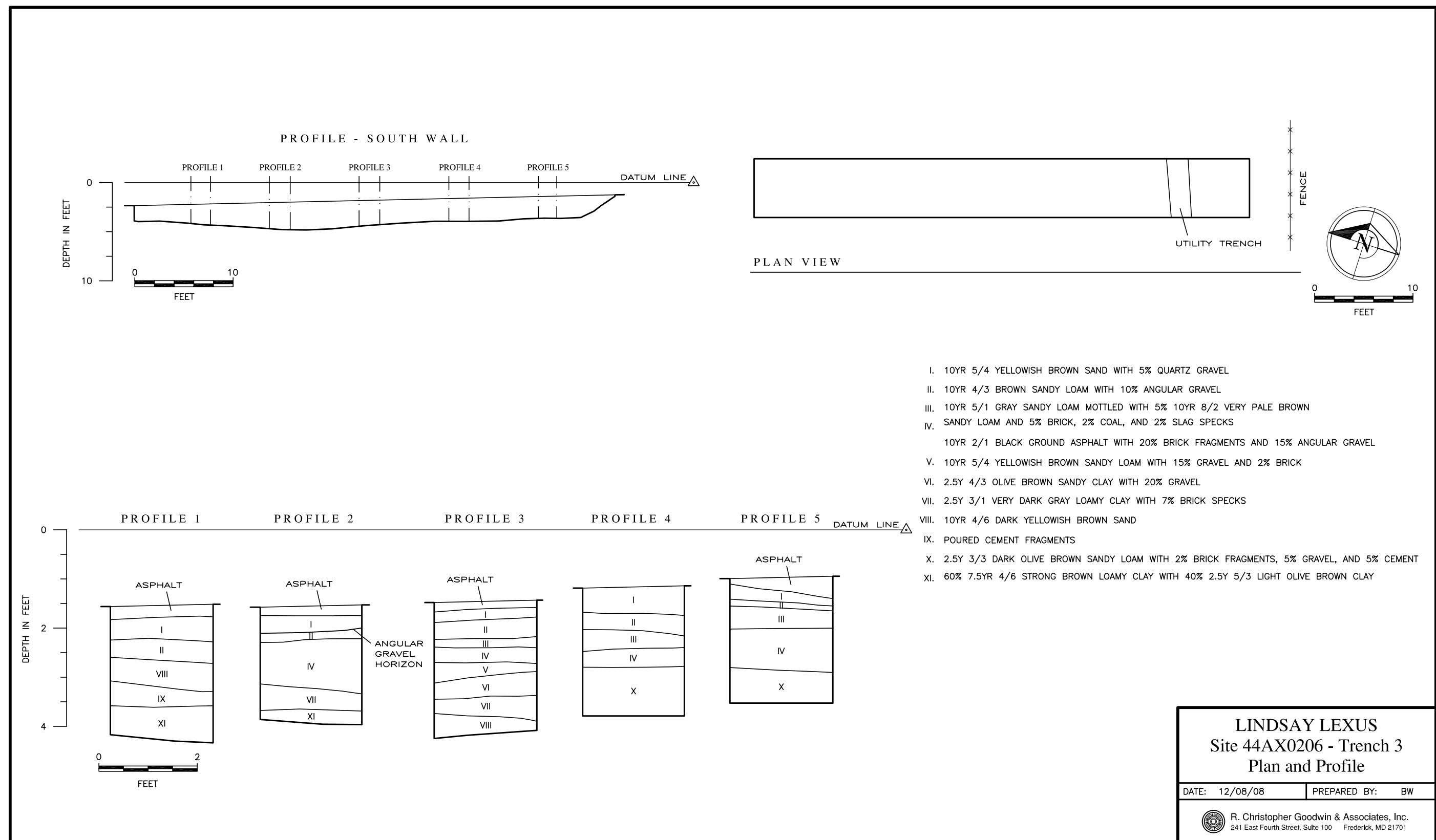


Figure 25. Trench 3 Plan and Profiles.

Trench 4

Located in the northeastern corner of the property, the Trench 4 was aligned roughly north/south (Figure 20). In this location, a thick layer of concrete was present beneath the asphalt; the concrete was broken up with an air hammer to allow for excavation. This test originally measured 50 x 3 feet, but was greatly expanded to more fully expose the brick foundation designated as Feature 4-01. This feature later was recorded as Site 44AX0206; Trench 4 and Site 44AX0206 are discussed in detail below.

Trench 5

In consultation with Alexandria Archeology, it was determined that extensive landscaping activities, including cutting and grading of the surface to a level significantly below street grade, may have resulted in the destruction of pre-modern cultural material or features in the northwestern portion of the project area. To verify this supposition, Trench 5 was excavated between the marked utility, a capped gas line belonging to Washington Gas, and the retaining wall associated with the adjacent property (Figure 20). The trench measured 10.5 x 4 ft and was excavated to a total depth of 3.75 feet, sufficient to ascertain the horizontal and vertical extent of disturbance in the northwestern portion of the testing area.

Soils. Stratigraphic sequences in Trench 5 reflected extensive landscape modification in the north western portion of the project area. The uppermost 1.5 to 2 feet of material (Strata I-IV) were composed of a series of asphalt and aggregate gravel deposits distinguished largely by color and texture and percentage of gravel content (Figure 26). Beneath the gravel layers was a 0.8 foot deposit of dark gray clay. At a depth of roughly 2.5 feet light olive brown and strong brown sandy clay subsoil was encountered (Stratum VI); these soils extended to a depth of 3 feet, and were underlain by two additional strata of clay (Stratum V) (Figure 26).

Features and Cultural Materials. The soil profile reflects removal of natural soils to subsoil and replacement with re-deposited fill materials. No intact pre-modern features or

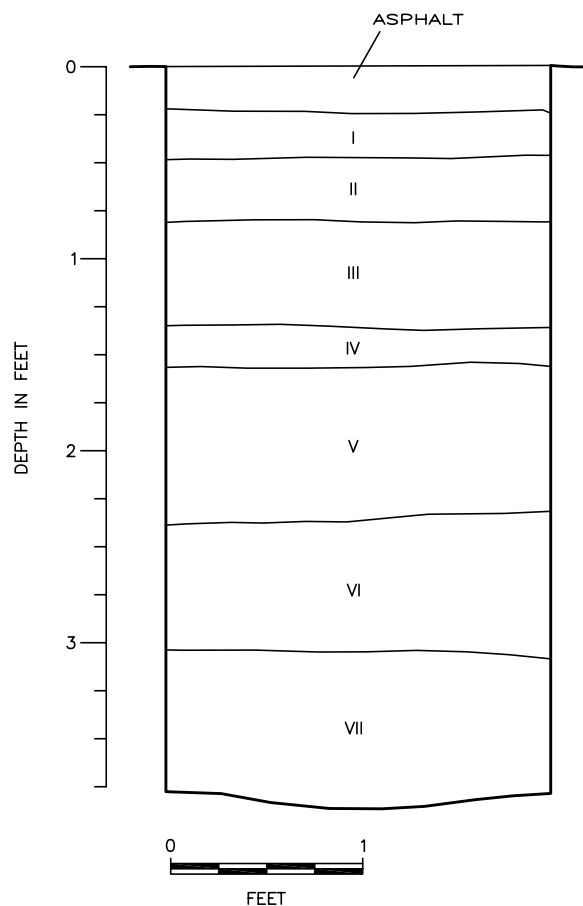
deposits were present in either the fill episodes or the natural soils in this trench. Only two artifacts were noted in this trench; a thin piece of rebar and a wire nail were noted in Stratum V.

Trench 6

Trench 6 was located partially within the footprint of the demolished building (Figure 20). Depth of the trench ranged from 1 to 3 feet (Figure 27). Soil deposits within the trench were heavily disturbed by activities related to the construction of the building and adjacent parking lot, and were in large part, characterized by the presence of gravel and aggregate material and crushed brick. Excavation was shallowest within the footprint of the building, where previous construction and demolition activities resulted in significant soil disturbance.

Soils. The profile in the southern end of the Trench consisted of yellowish brown clay underlain by light brownish gray and strong brown clay. The profile in the northern end of the trench was dominated by a series of seven thin, sandy fill horizons, likely associated with construction activities related to the building and parking lot. Beneath the sand lenses was a stratum of very dark grayish brown sandy clay. Stratum IX consisted of yellowish brown clay and was culturally sterile.

Features. In consultation with Alexandria Archeology, it was determined that further testing of Stratum XIII within the northern portion of Trench 6 was necessary. Additional testing was undertaken to determine if the Stratum was a buried living surface and as such might contain cultural material. In order to fully test this soil horizon, a 5 x 5 ft extension was excavated west of the northern end of Trench 6. The backhoe removed the overburden of modern fill to a point just above the stratum in question. A 3 x 3 foot test unit was hand excavated to fully examine the deposit (Figure 28). All soil was screen through ¼ inch mesh and the test unit was excavated 4 inches into sterile subsoil. In this test, Stratum I consisted of brown sandy loam; this cobble laden strata was interpreted as modern fill. Stratum II was characterized by very dark grayish brown silt loam. Large



- I. 2.5Y 6/4 LIGHT YELLOWISH BROWN SAND WITH 60% GRAVEL
- II. 10YR 5/3 BROWN SAND WITH 80% GRAVEL
- III. 10YR 5/8 YELLOWISH BROWN COARSE SAND WITH 80% GRAVEL
- IV. 10YR 3/2 VERY DARK GRAYISH BROWN COARSE SAND WITH 30% GRAVEL
- V. 2.5Y 4/1 DARK GRAY CLAY WITH >5% COBBLES
- VI. 2.5Y 5/3 LIGHT OLIVE BROWN SANDY CLAY MOTTLED WITH 40% 7.5YR 5/6 STRONG BROWN SANDY CLAY
- VII. 5Y 6/2 LIGHT OLIVE GRAY CLAY MOTTLED WITH 40% 5YR 4/6 YELLOWISH RED CLAY


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Figure 26. Trench 5 West Wall Profile.

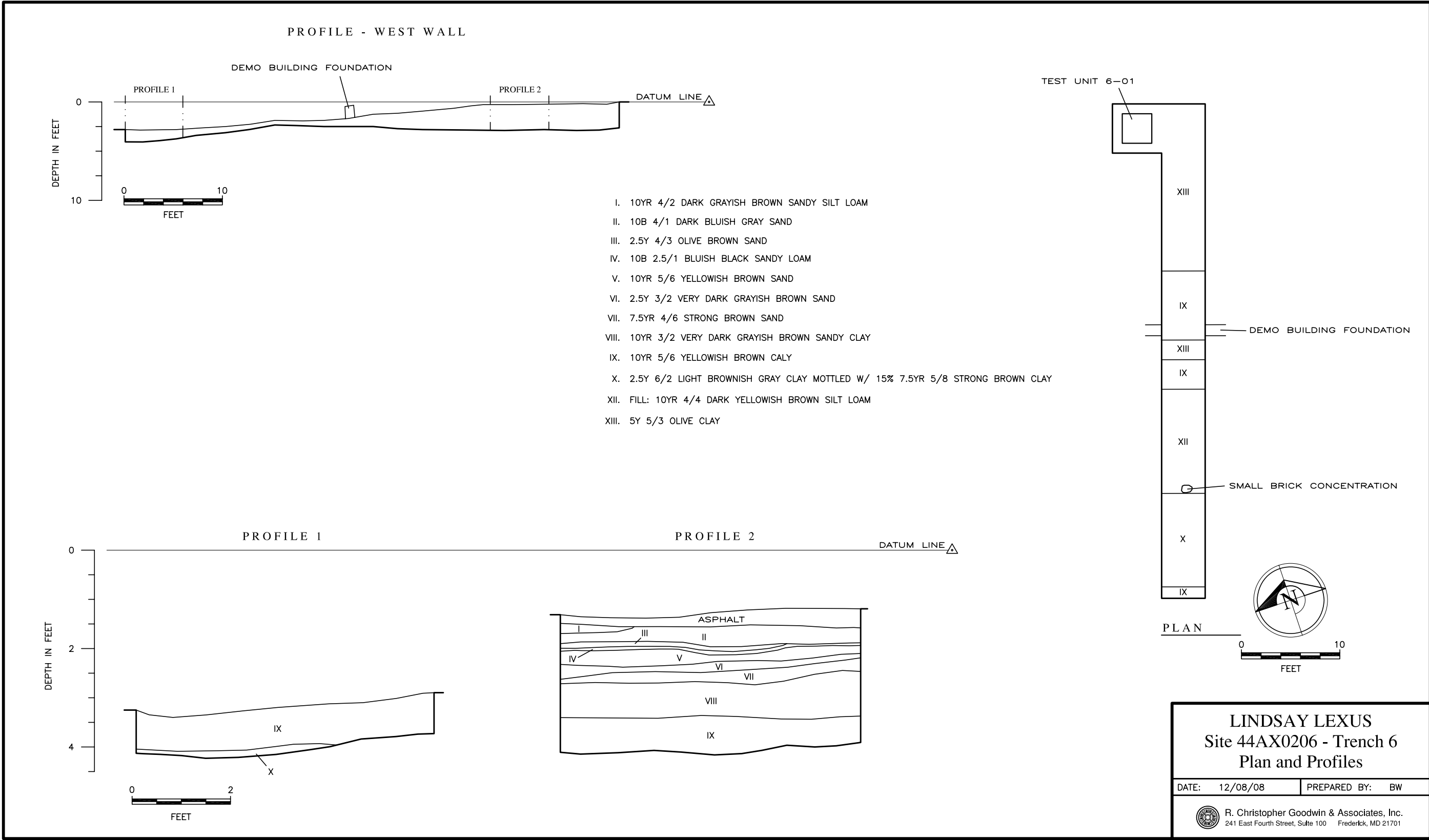


Figure 27. Trench 6 Plan and Profile.



Figure 28. Photo of Trench 6, Unit 6-1 East Wall Profile (Exp 122)

pieces of broken terra cotta drain tile were observed within this stratum. Smaller fragments of drain tile also were present in underlying stratum (Stratum III) which was composed of dark grayish brown clay loam. Stratum IV was characterized by yellowish brown clay; this stratum was culturally sterile. No cultural material, aside from the fragments of drain tile, was identified within the test unit.

Cultural Materials. The base of a Coca Cola bottle (1916-present) was recovered from Stratum VIII (Figure 29). Aside from the Coca Cola bottle base, no cultural material or cultural features were identified within Trench 6.

Trench 8

Trench 8 was located in the southwestern portion of the project area, north of the site of the demolished building (Figure 20). Excavation of the southern end of Trench 8 was hampered by the presence of an impenetrably thick layer of asphalt; 13 feet of trench was successfully excavated at the northern end.

Soils. Soil strata in this portion of the trench primarily comprised a series of asphalt and aggregate gravel layers, underlain by culturally sterile soil (Figure 30). Stratum I consisted of light yellowish brown (2.5Y 6/3) sand and gravel. Stratum II consisted of dark bluish gray (5B 4/1) gravel and Stratum III consisted of dark gray (5Y 4/1) sand and gravel. Stratum IV was comprised of yellowish brown (10YR 5/6) sandy clay with gravel and asphalt fragments. Stratum V consisted of dark gray (2.5Y 4/2) loamy clay and Stratum VI was comprised of strong brown (7.5YR 5/6) clay and pale yellow (2.5Y 8/2) sand.

Features and Cultural Materials. No intact cultural materials or intact features or deposits were identified during the excavation of Trench 8.

Site 44AX0206

Located in the northeastern corner of the project area, Site 44AX0206 is an 18 by 36 ft area (0.01 ac) that encompasses a structural ruin comprised of two remnant foundation walls, and an associated brick floor (Figures 20 and 31). The features that compose the site



Figure 29. Photograph of Coca Cola bottle base from Trench 6, Stratum VIII

were identified in Trench 4. The trench was expanded to the north and south to expose foundation and floor; on the east, excavation was extended to the boundary of the property. Due to access constraints, the full western extent of Site 44AX0206 has not yet been established, and will be investigated during the next stage of the project.

Trench 4

Trench 4 was aligned roughly north/south and perpendicular to the northern boundary of the property, closest to Wheeler Avenue (Figure 20). Originally measuring 50 x 3 feet, Trench 4 was greatly expanded upon the discovery of Feature 4-01; a brick foundation located in the northern half of the trench.

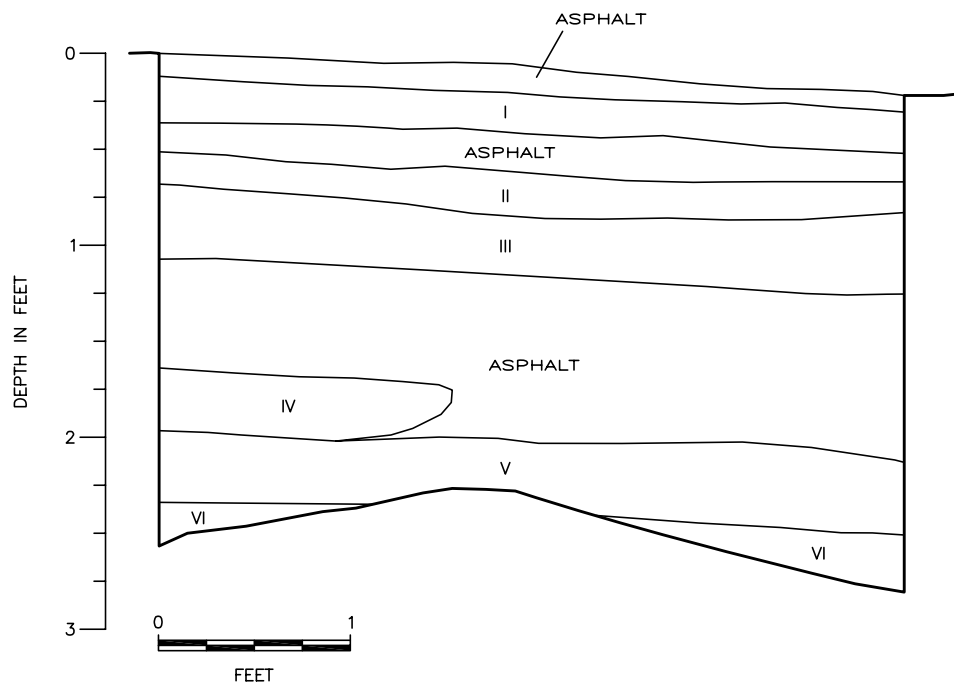
Soils. Beneath the asphalt the thick layer of concrete, soil profiles within the original footprint of Trench 4 varied considerably

(Figure 32). The soil profile at the southern end of the trench, farthest from the foundation, consisted of gravel and sand layers underlain by clay. The upper three strata were sand and gravel, distinguished from one another by color and texture (Figure 32). Stratum IV consisted of a thin layer of light yellowish brown (2.5Y 6/4) clay loam and greenish gray (5GY 6/1) clay. Stratum V was comprised of grayish brown (2.5Y 5/2) sand. These two strata, along with the three soil levels above them represent modern filling, most likely associated with parking lot construction.

Underlying the fill levels were two strata of natural soils (Figure 32). These consisted of yellowish red and gray clay (Stratum IV), and light gray and yellowish red clay (Stratum V). No cultural materials or features were present in the southern half of the trench.

In the northern half of Trench 4, there were two distinct soil profiles north and south of the foundation wall (Figure 32). North of the foundation, Stratum I consisted of dark yellowish brown sand, likely associated with the construction of the current parking lot. Beneath the sand, Stratum II consisted of light olive brown clay; this stratum may also be associated with parking lot construction; however, it is difficult to characterize, as no artifacts were recovered in association with this deposit. Stratum III consisted of brown silt loam (Figure 32); brick fragments and rocks were observed within this stratum, suggesting it may be related to the destruction/demolition of Feature 4-01. Strata IV and V, located adjacent to the foundation wall, also appear related to Feature 4-01. Stratum IV consisted of yellowish brown sandy loam with medium to large brick fragments (Figure 32). Stratum V was comprised of light olive brown clay with medium to large cobbles. Finally, Stratum VI, consisted of yellowish red clay loam and light yellowish brown (10YR 6/4) silty loam, with small to medium cobbles. This stratum appears to represent a historic fill deposit associated with the construction of Feature 4-01. It appears in other areas of the foundation, including the four disturbance areas discussed below.

The profile south of the foundation wall exhibited both similarities and differences



- I. 2.5Y 6/3 LIGHT YELLOWISH BROWN SAND AND GRAVEL
- II. 5B 4/1 DARK BLuish GRAY GRAVEL
- III. 5Y 4/1 DARK GRAY SAND AND GRAVEL
- IV. 10YR 5/6 YELLOWISH BROWN SANDY CLAY WITH 15% GRAVEL AGGREGATE AND ASPHALT FRAGMENTS
- V. 2.5Y 4/2 DARK GRAYISH BROWN LOAMY CLAY
- VI. 7.5YR 5/6 STRONG BROWN CLAY MOTTLED WITH 2.5Y 8/2 PALE YELLOW SAND


LINDSAY LEXUS Site 44AX0206 - Trench 8 Soil Profile - East Wall	
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Figure 30. Trench 8 East Wall Profile.

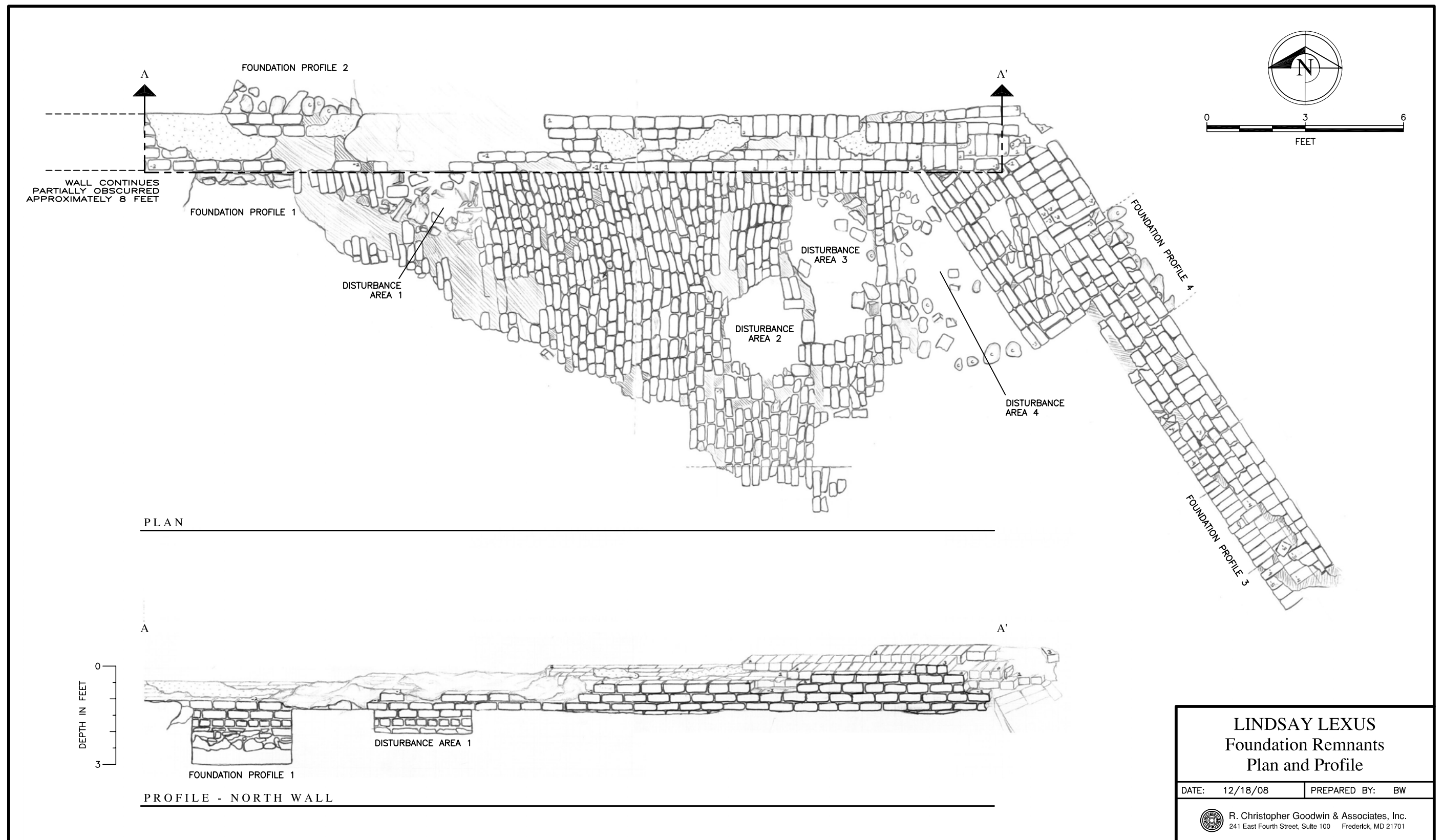
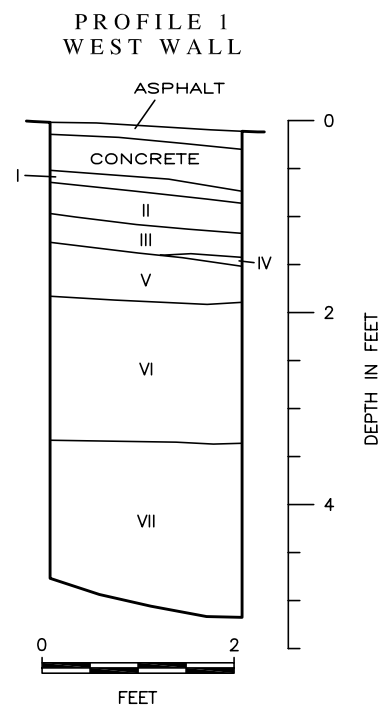
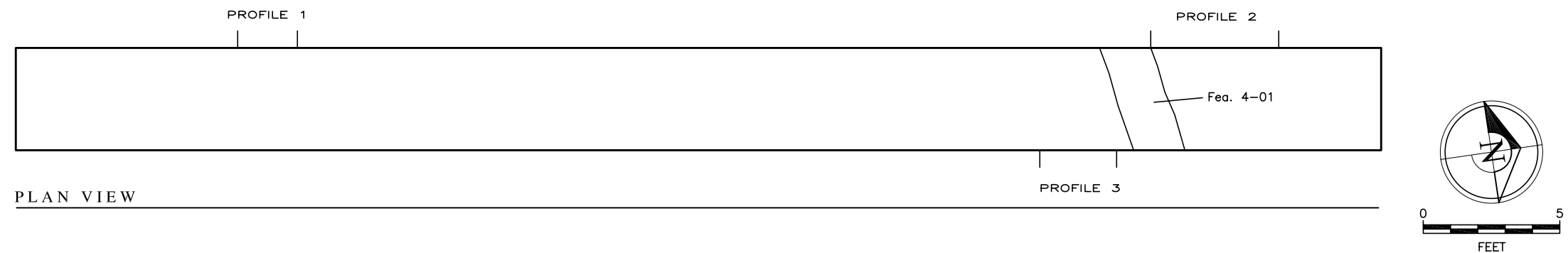
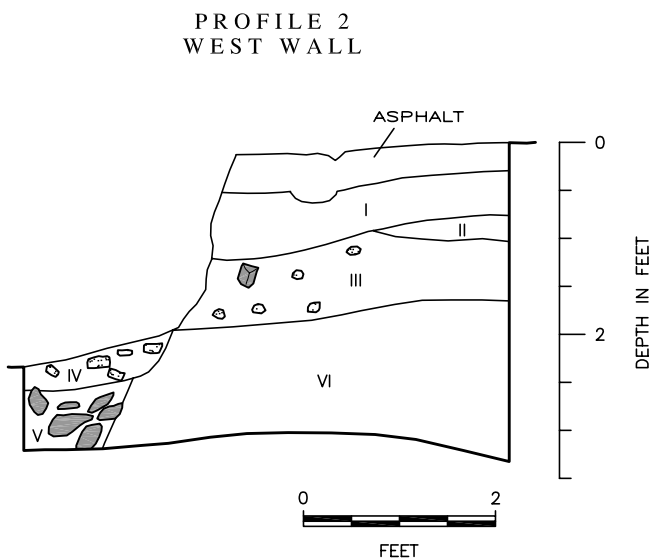


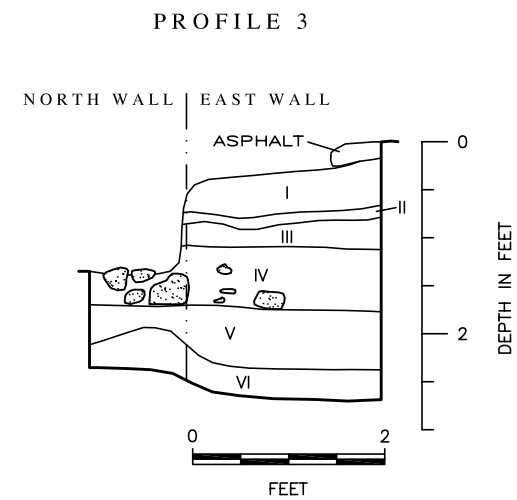
Figure 31. Scale drawing of foundation walls and brick floor.



- I. 7.5YR 4/6 STRONG BROWN COARSE SAND
- II. 2.5Y 5/1 GRAY SAND WITH 50% GRAVEL
- III. 10GY 3/1 DARK GREENISH GRAY SAND WITH 20% GRAVEL
- IV. 2.5Y 6/4 LIGHT YELLOWISH BROWN CLAY LOAM MOTTLED WITH 20% 5GY 6/1 GREENISH GRAY CLAY
- V. 2.5Y 5/2 GRAYISH BROWN SAND
- VI. 5YR 5/6 YELLOWISH RED CLAY MOTTLED WITH 30% 2.5Y 6/1 GRAY CLAY
- VII. 2.5Y 7/1 LIGHT GRAY CLAY MOTTLED WITH 30% 5YR 5/6 YELLOWISH RED CLAY



- I. 10YR 4/6 DARK YELLOWISH BROWN SAND
- II. 2.5Y 5/6 LIGHT OLIVE BROWN LOAMY CLAY
- III. 7.5YR 4/3 BROWN SILTY LOAM
- IV. 10YR 5/4 YELLOWISH BROWN SANDY LOAM WITH 55% BRICK FRAGMENTS
- V. 2.5Y 5/4 LIGHT OLIVE BROWN CLAY WITH 45% STONE COBBLES
- VI. 5YR 5/6 YELLOWISH RED CLAY LOAM MOTTLED WITH 40% 10YR 6/4 LIGHT YELLOWISH BROWN SILTY LOAM WITH 30% COBBLES



- I. 10YR 4/6 DARK YELLOWISH BROWN SAND
- II. 2.5Y 5/4 LIGHT OLIVE BROWN CLAY LOAM
- III. 2.5Y 3/1 VERY DARK GRAY SILT LOAM
- IV. 2.5Y 4/2 DARK GRAYISH BROWN SILT LOAM WITH 30% BRICK FRAGMENTS AND GROUND BRICK
- V. 10YR 4/4 DARK YELLOWISH BROWN SAND LOAM MOTTLED WITH 20% 10YR 5/6 YELLOWISH BROWN SAND LOAM WITH 30% COBBLES
- VI. 7.5YR 5/6 STRONG BROWN CLAY MOTTLED WITH 20% 10YR 6/2 LIGHT BROWNISH GRAY CLAY



LINDSAY LEXUS
Site 44AX0206- Trench 4
Plan and Profiles

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Figure 32. Original Trench 4 footprint plan and profiles.



Figure 33. Photograph showing the North Wall of the Foundation, view East. (Exp 169)

from that recorded on the north (Figure 32). Strata I and II are similar to those north of the foundation and likely represent activities related to the construction of the existing parking lot. Stratum III consisted of very dark gray silt loam. The presence of the occasional brick fragment in the profile, suggests it may be associated with the destruction/demolition of Feature 4-01 along with Stratum IV, which consisted of dark grayish brown silt loam with large brick fragments and brick dust. Stratum V consisted of dark yellowish brown and yellowish brown sand loam and cobbles. This stratum, like Stratum VI north of the foundation wall, appears to represent a historic fill layer, possibly associated with the construction of Feature 4-01. Finally, Stratum VI was strong brown and light brownish gray clay subsoil that contained no cultural materials or features.

Feature 4-01: Foundation and Floor. Initially identified as a single foundation wall in the northern end of Trench 4, expansion of

the trench revealed that Feature 4-01 was composed of two foundation walls and brick pavement (Figure 31). The exposed portion of the northern wall of the foundation measures 34 feet from the corner where it intersects the east wall, west to the point where excavation during the current investigation was halted (Figure 33). The northern wall is five courses wide, a total width of 1.7 feet; the wall appears to be six course American bond and the brick and mortar appear uniform in quality. This is consistent with a mid 19th century construction (Al Cox, personal communication). The presence of brick below grade is also indicative of 19th century construction. Brick found in Alexandria, prior to the 1830s, tended to be too soft and porous for use below grade (Al Cox, personal communication). The east wall measures 18 feet from where it meets the north wall, to the point where it passes under the eastern boundary of the property (Figure 34). The eastern wall is six courses wide, a total width of 2 feet. The width of the walls,



Figure 34. Photograph showing the East wall of the Foundation, view East (Exp 382)

five and six courses respectively, is suggestive of a substantial wall. The northern and eastern walls do not meet at a right angle; they intersect at 122° (Figure 35).

Soil adjacent to the foundations was removed in four locations in an effort to examine wall construction techniques (Figure 36). Excavations along the northern foundation wall (Foundation Profiles 1 & 2) revealed a stone and cobble footing underlying the foundation walls. No mortar was observed in relation to the stone and cobble footing; however, the absence of mortar does not necessarily indicate the footing was originally dry laid. It is possible the mortar associated with the footing had been leached out over the years. Soil beneath the footing was characterized as light olive gray (5Y 6/2) and yellowish red (5YR 4/6) clay; this soil is within the range of variation of the C horizon of the Grist Mill series mapped to the north of the current project area. No cultural material was identified in this stratum.

A builders' trench was present in Foundation Profile 1, on the southern face of the northern foundation wall. The narrow builders' trench extended 0.8 ft from the south face of the foundation. The total depth of the

builders' trench was 1.9 ft below the current foundation surface. Rocks and cobbles from the stone footer, extended out 0.4 ft from the foundation wall into the builders' trench. No cultural material was present in the tested portion of the builders' trench. No builders' trench was identified in Foundation Profile 2 on the northern face of the north foundation wall. However, the rocks and cobbles that comprise the stone foundation footer extended between 0.3 and 0.6 ft beyond the wall. Cobbles may have been included in the footer to facilitate the drainage of water away from the foundation (Pamela Cressey, personal communication).

Foundation Profiles 3 and 4 were excavated to the east and west of the eastern foundation wall (Figure 36). Excavation in these areas revealed that the stone and cobble footing also was present under this portion of the foundation. However, there was no evidence of a builders' trench either to the north or south of the eastern foundation wall. Foundation Profile 4 was very similar in composition to Foundation Profiles 1 and 2. Although no evidence of a builder's trench was observed in association with Foundation Profile 4, the stone and cobble footer



Figure 35. Photograph showing the brick floor (Exp 170)

underlying the eastern wall extended beyond the wall similarly to that observed along the northern wall in Foundation Profile 2. Foundation Profile 3 varied from the other three profiles in that it the cobble and stone footer was underlain by a thick stratum of quartz cobble laden soil (Figure 36). This stratum was composed of pale brown (10YR 6/3) and strong brown (7.5YR 5/6) sandy clay loam with a high percentage of small, medium, and large quartz cobbles. Although quartz cobbles were observed in subsoil strata elsewhere in the site, the size and high concentration of quartz cobbles observed in Foundation Profile 3 was unique to the southeastern portion of the site. No cultural material was observed in association with this soil stratum. The size and quantity of the cobbles present suggest the deposit is not a natural soil formation, but is instead the result of secondary deposition, most likely associated landscaping prior to the construction of the structure identified as Feature 4-01. Underlying the cobble laden stratum was light gray (2.5Y 7/2) and red (2.5YR 5/8) clay; this stratum is consistent with the C horizon of the

Grist Mill series mapped to the north of the current project area and appears to be sterile subsoil. It is also very similar to Stratum VI observed in Profile 1 of Trench 4; this soil stratum also was interpreted as culturally sterile subsoil (Figure 32).

The remnant of brick floor measures 22 feet from the east wall to its western terminus near the original Trench 4 foot print (Figure 35). At its widest, the floor is 10.5 foot, and on average it measures 5 feet, save where it narrows near its western terminus. The paver bricks are set on edge, suggesting industrial or street/stable paving. In addition, brick floors are not common in Alexandria residences, and when present, the bricks typically are laid flat rather than set on edge, providing further evidence the structure was not domestic in nature (Al Cox, personal communication).

Disturbance Areas. Four areas of disturbance were identified within the remnant brick paving (Figure 31). These disturbance areas were characterized by either the absence of brick or by disruptions in the pattern of the brick indicative of significant disturbance. Excavation of these disturbance areas was

undertaken to determine the nature of the disturbance, whether it was related to activity when the structure was occupied, or was caused by post-occupation disturbance or demolition.

Disturbance Area 1 (DA1) was located adjacent to the northern wall of the foundation on the western edge of the brick paving. The brick paving in this roughly circular disturbance area was broken and out of place (Figure 31). Testing in this area revealed four distinct strata below the paving (Table 5). Stratum I was characterized by large pieces of disturbed brick within a matrix of dark grayish brown sandy loam. Four cut nail fragments (1815-1890) were recovered from within Stratum I. Stratum II consisted of dark grayish brown sandy loam with pockets of greenish gray clay. Brick fragments were also present in Stratum II, as was one additional cut nail fragment. Stratum III was characterized by the presence of small, medium, and large cobbles within a matrix of light yellowish brown clay loam mottled with strong brown clay loam; one horseshoe was recovered from this stratum. The presence of the horseshoe within the second excavated level of the stratum is suggestive of historic activity or disturbance. It is unclear if the horseshoe was deposited in situ or resulted from historic filling/landscaping activities associated with the construction activities. Stratum IV was light gray clay with strong brown masses of oxidized iron; this is characteristic of poorly drained soils. The stratum was within the range of variation of the C horizon of the Hatboro series mapped to the southwest of the current project area and appears to represent culturally sterile subsoil (USDA-NRCS 2008).

A builders' trench was identified in Disturbance Area 1 at the top of Stratum III, at a depth of 0.85 ftbd. The builders' trench extended 0.65 ft from the southern face of the northern wall of the foundation (Figure 37). The trench was characterized by dark grayish brown (10YR 4/2) sandy loam with medium-sized cobbles. Larger cobbles also were observed within the trench; these extended beneath the brick foundation. The composition of the builders' trench was similar to that observed in Foundation Profile 1, located

approximately 4 ft west of DA1. No cultural materials were present in the tested portion of the builders' trench.

Feature 4-01B was identified at the top Stratum III in DA1, at a depth of 1.0 ftbd. Feature 4-01B has been interpreted as a shallow, non-structural post hole; the size and depth of the soil stain does not suggest a load bearing post. A similar post hole was noted approximately 11 ft to the east, within Disturbance Area 3. Feature 4-01B was characterized as a .5 ft diameter circular soil stain with a small concentration of brick fragments, located less than 1.0 ft south of the northern foundation wall, just beyond the builders' trench. The feature was bisected along a north/south line; the east half was removed followed by the west half (Figure 38). Soil in the feature was characterized as a dark grayish brown (10YR 4/2) sandy loam. The feature penetrated into Stratum IV terminating at a total depth of 1.75 ftbd. One piece of window glass was recovered during the excavation of Feature 4-01b; brick fragments were also observed within the feature matrix.

The quantity and size of disturbed brick found in Strata I and II is suggestive of post-abandonment disturbance. It is possible the disturbance occurred as a result of reuse or demolition of the structure. Although no temporally diagnostic material was recovered from the post hole identified as Feature 4-01B, the presence of brick fragments within the matrix of the feature suggests it post dates the brick floor and foundation walls identified as Feature 4-01. The presence of cut nails within Strata I and II of DA1, is consistent with a 19th century occupation. Unfortunately, the lack of diagnostic material within the post hole itself prevents precise dating of Feature 4-01B.

Disturbance Area 2 (DA2) was located 3.25 feet south of the north wall of the foundation. This disturbance area consisted of a roughly circular area within the brick paving; it measured 2.50 x 3.00 feet and was devoid of brick (Figure 31). Four distinct soil strata were identified during the excavation of DA2 (Table 6) (Figure 39). Strata I and II were interpreted as underlayment for the brick pavement. Stratum I was a thin lens of brownish yellow sand and Stratum II was a thicker layer of light

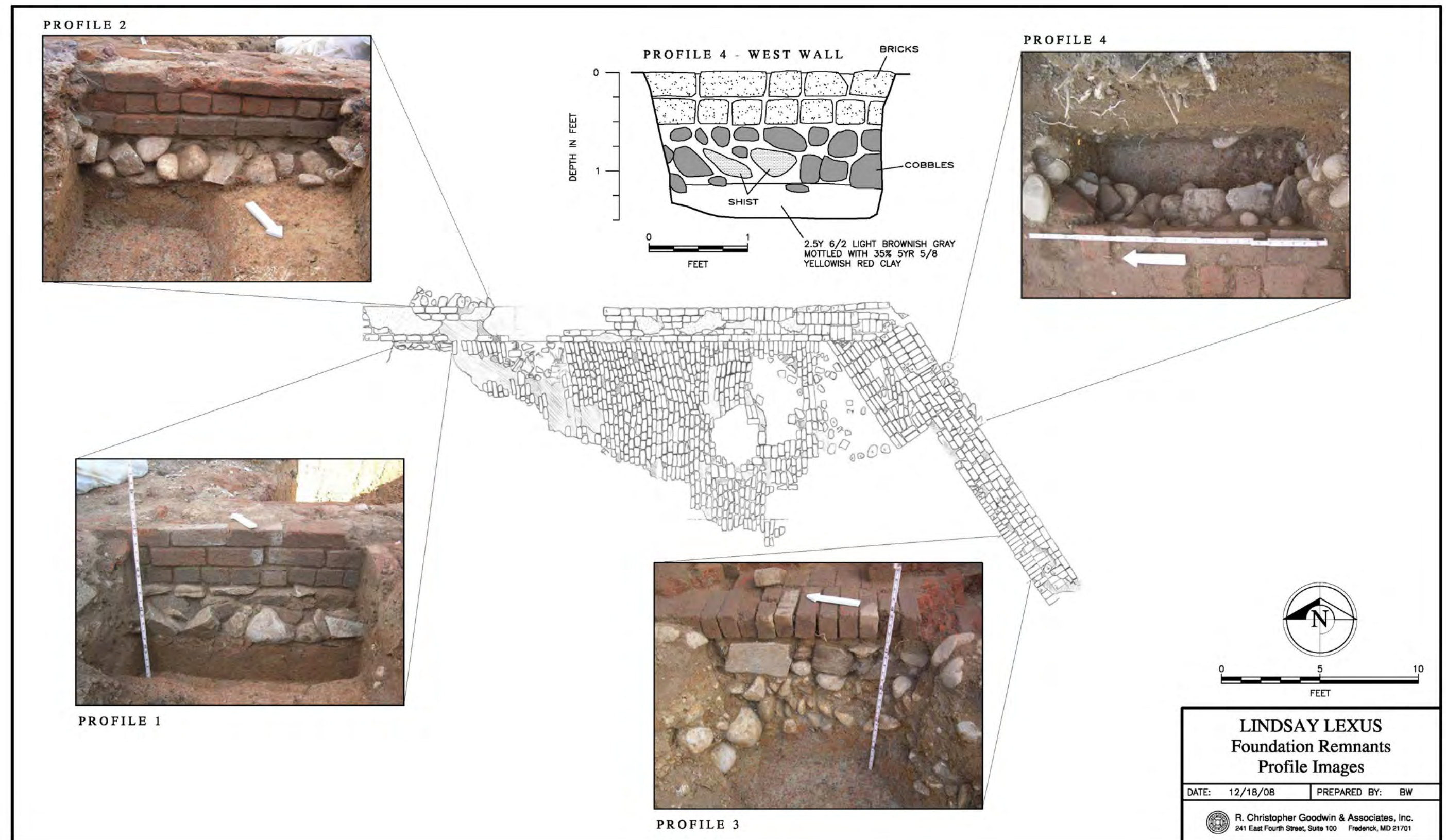


Figure 36. Photographs showing the construction technique of the foundation walls in four different locations.



Figure 37. Photograph showing the builders' trench identified within Disturbance Area 1 (Exp 247)



Figure 38. Photograph of Feature 4-01B, within Disturbance Area 1 (Exp 256)



Figure 39. Photograph of the west wall profile of Disturbance Area 2 (Exp 236)

Table 5. Disturbance Area 1: Soils and Materials

Stratum	Depth	Soils Description	Materials Description
I	0.325-0.5 ftbd	dark grayish brown (10YR 4/2) sandy loam	4 cut nail fragments (1815-1890)
II	0.5-0.85 ftbd	dark greyish brown (10YR 4/2) sandy loam with pockets of greenish gray (10GY 5/1) clay	1 cut nail fragment (1815-1890)
III	0.85-1.2 ftbd	light yellowish brown (10YR 6/4) clay loam with strong brown (7.5YR 5/6) clay loam; small and medium quartz cobbles	1 horse shoe
IV	1.2-1.4 ftbd	light gray (10YR 7/2) clay loam with strong brown (7.5YR 5/6) masses of oxidized iron on faces of peds	n/a

Table 6. Disturbance Area 2: Soils and Materials

Stratum	Depth	Soils Description	Materials Description
I	0.55-0.65 ftbd	yellowish brown (10YR 5/4) sand (80%); brownish yellow (10YR 5/8) sand	n/a
II	0.65-0.86 ftbd	light yellowish brown (10YR 6/4) loamy sand	n/a
III	0.86-1.72 ftbd	strong brown (7.5YR 5/8) sandy loam (65%); pale brown (10YR 6/3) sandy loam (35%); quartz cobbles represent approximately 30% of matrix	0.86-1.28 ftbd: 3 cut nail fragments (1815-1890); 1.28-1.41 ftbd: 1 whiteware (1820-present), 1 pearlware (1779-1830)
IV	1.72-1.41 ftbd	light gray (2.5Y 7/2) clay with red (2.5YR 5/8) masses of oxidized iron on faces of peds; quantity of cobbles decreases with depth	n/a

yellowish brown loamy sand. No artifacts were present in either stratum. Beneath these sand layers was Stratum III, a mottled strong brown and pale brown sandy clay loam. Small, medium, and large cobbles were present within Stratum III. Five historic period artifacts were recovered from within Stratum III: three cut nail fragments (1815-1890), one piece of whiteware (1820-present), and one piece of pearlware (1779-1830) (Figure 40). Stratum III appears to represent an episode of historic filling, and may have been deposited during site preparations prior to the construction of the structure identified as Feature 4-01. Stratum IV was characterized as light gray clay with red masses of oxidized iron, characteristic of poorly drained soils. Like Stratum IV within DA 1, Stratum IV of DA 2 was within the range of variation of the C horizon of the Hatboro series mapped to the southwest of the current project area and appears to represent culturally sterile subsoil (USDA-NRCS 2008). No cultural materials were recovered from Stratum IV.

No cultural features were observed during the excavation of DA2. There was some mixing of Stratum I and II within the disturbance area which may suggest that the absence of brick may have been due to post abandonment activities. The presence of 19th century cultural material within Stratum III is consistent with that recovered in DA1 providing further evidence of a 19th century occupation at the site.

Disturbance Area 3 (DA3) was located just south of the northern wall of the foundation, near the center of the brick floor. This oblong area measured 2.5 x 4.5 ft and was devoid of brick (Figure 31). Four distinct strata were identified during testing in this area (Table 7) (Figure 41). Stratum I was yellowish brown and brownish yellow sand, similar in composition to the sand deposits comprising Strata I and II in DA2. A total of eight cut nail fragments (1815-1890) and one piece of pearlware (1779-1830) were recovered from Stratum I (Figure 42). Stratum II was characterized by the presence of small, medium, and large cobbles within a matrix of light yellowish brown loamy sand. This deposit also may reflect historic filling deposit;

however, no cultural materials were present in the tested area. Stratum III was dark yellowish brown clay with quartz cobbles comprising approximately 10 per cent of the soil matrix; no cultural material was recovered from Stratum III (Figure 41). Stratum IV was comprised of light brownish gray clay with strong brown masses of oxidized iron, characteristic of poorly drained soils. Like Stratum IV within DA 1 and DA 2, Stratum IV of DA 3 was within the range of variation of the C horizon of the Hatboro series mapped to the southwest of the current project area and appears to represent culturally sterile subsoil (USDA-NRCS 2008). No cultural materials were recovered from Stratum IV.

Feature 4-01A was identified as a post hole, and was very similar in size and placement to Feature 4-01B. The feature was located within Disturbance Area 3 at the top of Stratum II at a depth of 1.16 ftbd (Figure 43). The feature, located less than 1 foot south of the north foundation wall, initially was identified as an oval soil stain that measured 1.06 x 0.71 ft. Upon excavation, the soil stain quickly narrowed to roughly 0.5 ft diameter and continued at that width nearly to its base at 2.23 ftbd. Soil within the feature consisted of yellowish brown (10YR 5/4) sandy clay. No cultural materials were presenting the feature. Like Feature 4-01B, Feature 4-01A appears to represent a non-structural post hole; the size and depth of the soil stain does not suggest a load bearing post.

Disturbance Area 4 (DA 4) was located 2.5 ft west of the eastern wall, adjacent to the northern wall of the foundation. The roughly triangular area extended 5 feet from the north wall, and was just over 3 feet wide at its southern end (Figure 32). The surface of DA4 was uneven; broken bricks and medium-to-large cobbles were present.

Four strata were identified during the excavation of Disturbance Area 4 (Table 8, Figure 44). Stratum I, although clearly visible in profile, was less distinct over much of the surface of the disturbance area. In profile, this stratum was characterized by light yellowish brown (10YR 6/3) and pale yellow (2.5Y 7/3) sand. Within the majority of the disturbance area, Stratum I soil was mixed with Stratum II



Figure 40. Photograph of artifacts recovered from Stratum III, Disturbance Area 2



Figure 41. Photograph of the north wall profile of Disturbance Area 3 (Exp 275)



Figure 42. Photograph of artifacts recovered from Stratum I, Disturbance Area 3



Figure 43. Photograph of plan view of Feature 4-01A, view north (Exp. 250)



Figure 44. Photograph of the north wall profile of Disturbance Area 4 (Exp 301)

Table 7. Disturbance Area 3: Soils and Materials

Stratum	Depth	Soils Description	Materials Description
I	0.7-1.05 ftbd	yellowish brown (10YR 5/4) sand (80%); brownish yellow (10YR 5/8) sand	8 cut nail fragments (1815-1890); 1 pearlware (1779-1830)
II	1.05-1.45 ftbd	light yellowish brown (10YR 6/4) loamy sand; quartz cobbles represent approximately 15% of matrix	n/a
III	1.45-2.15 ftbd	dark yellowish brown (10YR 5/6) clay; quartz cobbles represent approximately 10% of matrix	n/a
IV	2.15-2.71 ftbd	light brownish gray (2.5Y 6/2) loamy clay with strong brown (7.5YR 5/8) masses of oxidized iron on the faces of peds	n/a

Table 8. Disturbance Area 4: Soils and Materials

Stratum	Depth	Soils Description	Materials Description
I/II	0.02-0.7 ftbd	I: light yellowish brown (2.5Y 6/3) sand & pale yellow (2.5Y 7/3) sand; II: yellowish brown (10YR 5/8) sandy clay with 20% small gravel	1 window glass; 1 indeterminate metal fragment; 30 cut nail fragments (1815-1890)
II	0.7-1.12 ftbd	yellowish brown (10YR 5/8) sandy clay with 20% small gravel	8 cut nail fragments (1815-1890)
III	1.12-1.63 ftbd	strong brown (7.5YR 5/8) sandy clay (75%); light yellowish brown (2.5Y 6/3) sandy clay (25%)	n/a
IV	1.63-2.05 ftbd	light olive gray (5Y 6/2) clay with yellowish red (5YR 4/6) masses of oxidized iron on the faces of peds	n/a

to a depth of 0.7 ftbd. A total of 32 artifacts were recovered from Stratum I/II, including 30 cut nail fragments, one whole cut nail, and one piece of window glass. Stratum I was similar to the sand deposits encountered in the other three disturbance areas and had been interpreted as underlayment for the brick pavement. The level of disturbance and mixing with Stratum II soils observed in DA 4 may be indicative of a higher level of post demolition disturbance in this portion of the site.

Stratum II was characterized an episode of historic filling. The matrix of yellowish brown sandy clay with small-to-medium cobbles (Figure 44) was similar to Stratum II in DA3. This stratum contained eight cut nail fragments (1815-1890). Stratum III was strong brown and light yellowish brown sandy clay with some small-to-medium cobbles; no cultural material was recovered from Stratum III. Although no cultural material was recovered from Stratum III, the stratum has been interpreted as a probable historic fill deposit due. Stratum IV

was characterized as light olive gray clay with yellowish red masses of oxidized iron, characteristic of poorly drained soils. Like Stratum IV within DA 1, DA 2, and DA 3, Stratum IV of DA 4 was within the range of variation of the C horizon of the Hatboro series mapped to the southwest of the current project area and appears to represent culturally sterile subsoil (USDA-NRCS 2008). No cultural materials were recovered from Stratum IV.

A builders' trench was identified during the excavation of Disturbance Area 4. The builders' trench extended 0.9 ft from the south face of the north wall of the foundation (Figure 45). Identified at 0.55 ftbd, the trench was characterized by light brownish gray (2.5Y 6/2) and brownish yellow (10YR 6/8) sandy clay. A large rock was present at the base of the builders' trench, and extended beneath the foundation wall. Brick fragments were present in the soil matrix within the builder's trench, but no additional cultural materials were present.



Figure 45. Photograph of builders' trench identified within Disturbance Area 4 (Exp 269)

CHAPTER V

SUMMARY AND INTERPRETATION

Summary

This technical report presents the results of archeological testing and documentation associated with the development of the Lindsay Lexus New Car Service Facility in the City of Alexandria, Virginia. The project area comprises a parcel located on Wheeler Avenue, within the southwestern portion of the City of Alexandria. The roughly trapezoidal parcel is bounded on the north by Wheeler Avenue, on the south by the CSX Railroad right of way, and on the west by another commercially developed property. The property is bounded on the east by the offices of Flippo Construction Company, which are housed in a historic building known as the Old Dominion Mill. The majority of the property is asphalt surfaced and is used by Lindsay Lexus as an automobile storage facility. The foundation of a previously demolished ca. 1948 single story service facility was located near the southern boundary of the property. Planned improvements to the property include the construction of a car servicing facility on the mid-section of the property.

Archeological investigations were conducted on behalf of Simpson Development Company, Inc. by R. Christopher Goodwin & Associates, Inc. of Frederick, Maryland. The project extended from November 2008 through December 2008. The investigations were performed in compliance with the archeological ordinance of the City of Alexandria and in conformity with the *City of Alexandria Archaeological Standards* and the Secretary of Interior's *Standards and Guidelines for Archaeology and Historic Preservation*.

The objectives of this project were to: monitor demolition of existing buildings within the project area; conduct archeological testing to determine the presence and integrity of premodern historic resources; conduct archival investigations to prepare a cultural context for occupation of the property; complete laboratory processing of cultural materials collected during testing; prepare a technical report that details the findings of archeological investigations.

Archival Investigations

The Phoenix (Dominion) Mill was closely associated with the present project area for nearly a century and a half. Thus, archival research, focused on the eighteenth and nineteenth century milling industry in Northern Virginia, included an investigation of basic gristmill technology and the development of the industry in Northern Virginia, as well as on obtaining site-specific information about the Phoenix Mill property, its owners, and what is known about its configuration and operation.

An examination of the background for mills and milling technology in Northern Virginia focused on the two main types of mills, merchant and local mills. This study examined mill mechanics for the late eighteenth century, as well as advances and changes in milling technology in the nineteenth and twentieth centuries. The local milling industry, including the Phoenix Mill, relied mainly on water power, tapped from Holmes/Cameron Run. Phoenix mill was established at a time when the agricultural base in the area was shifting from tobacco to grain. An examination of data concerning the establishment of mills in the area provided some useful insights into general trends within

the region. First, mills were established within nearly every major watershed that could provide sufficient power. Secondly, milling experienced tremendous growth in the period around the turn of the nineteenth century. Thirdly, milling seems to have been, for some families, an occupation that was engaged in by more than one generation; and finally, it was not unusual for millers to operate more than one establishment on several different creeks.

A closer examination of the Holmes Run watershed showed five mills, four in the current boundaries of the City of Alexandria; Phoenix mill is the only one still standing. Reportedly constructed circa 1792, the property was sold at auction to satisfy a defaulted loan in 1812. An advertisement for the 1812 sale described the property as including: a frame dwelling, stables, a spring house, an orchard, gardens and meadow, as well as the mill and millrace. Thomas Wilson bought the mill in 1813; records indicate that he rented the mill to Joseph Janney ca. 1837. In 1854, the property was advertised as a mill with two frame dwellings, a brick barn and a stable “capable of stabling 20 horses.” The Watkins family acquired the mill in 1854; however, like Wilson they apparently leased the operation to others. During this latter nineteenth century, the surrounding area underwent significant changes including the creation and/or improvement of transportation links that necessitated changes to the water sources used to power the mills, including Phoenix Mill. These changes affected the location and trajectory of the tail race for the Phoenix Mill. The mill itself also was altered during this period, with the addition of an additional overshot wheel sometime before 1880. In 1888 John Brown acquired the mill, now identified as the Old Dominion Mill. After he defaulted, the mill was bought by Frank M. Hill, who may have rented the operation to someone else. The configuration of the tail race for the mill may have been modified twice in the later eighteenth century; however the tail race seems to have followed the same general path along the edge of the current study parcel throughout its use. By the time the mill stopped production in the 1930s the property had been subdivided along that

line. The land that contained the mill and the millrace was subdivided in the early twentieth century and the mill ceased production in the 1930s.

Archeological Field Investigations

Mechanized trench excavation across the larger parcel revealed evidence of extensive land modification in the southern, western, and central portions of the project area. Evidence of at least two distinct twentieth century filling episodes was identified. This included an early to mid-twentieth century episode, possibly associated with the construction of the ca. 1948 service facility, and a later twentieth century episode possibly associated with parking lot expansion and maintenance. Potentially intact soils located near the previously demolished building in the southern portion of the project area were tested, but failed to yield pre-modern material.

Intact cultural features, in the form of a remnant brick foundation and associated paving were identified in the northeastern corner of the project area; these were designated Site 44AX0206. Following consultation with staff at Alexandria Archaeology, mechanical excavation was undertaken to remove the concrete and asphalt overburden in this portion of the property. Overburden and fill materials were removed both mechanically and manually to more fully expose the brick foundation and brick paving. Two brick foundation walls were uncovered as well as surviving portions of associated brick paving. Four disturbance areas, identified within the brick floor were excavated, as was a builders’ trench along the southern side of the northern foundation wall. These excavations revealed the presence of a cobble and stone footer underlying the brick foundation; cobble laden historic period fill also was identified underlying portions of the brick floor. Natural soils identified at the site consisted primarily of clays with masses of oxidized iron on the faces of peds; the presence of these masses of oxidized iron in the soil is characteristic of poorly drained soils, suggesting the cobbles present in the historic fill and in the footer underlying the brick foundation may have served a drainage function. Two post holes

were identified during the excavation of the disturbance areas; however, the presence of brick fragments within the soil matrix of the posts holes suggest these non-structural posts most likely post-date the structure at Site 44AX0206. Nineteenth century cultural material was recovered from Site 44AX0206 including cut nails, window glass, whiteware, and pearlware. All features and disturbance area excavations were photographed, documented, and mapped.

Interpretation

The remnant of a brick structure identified as 44AX0206 has been exposed and documented. Data for the feature was compared with that for other mills in the area, and specifically to Cameron Mills to determine whether information from excavations at that site could help in determining the function of the brick features at 44AX0206. The twin mills at Cameron were constructed ca. 1794 by William Bird and John Ricketts, and as such are contemporary to the Phoenix Mill. Constructed side by side, the mills at Cameron shared a single mill race (Figure 46). In 2005, archeological excavations at the site of Cameron Mills uncovered the foundations of both mills (Figure 47). The foundations of the mills at Cameron were constructed from a range of material, including stone, brick, and modern masonry associated with the eastern mill's later usage as a pumping station. An examination of those foundations revealed that the majority of the foundation walls met at 90° angles. An exception to this is found in the southwest corner of the eastern mill. In that corner, irregular corners can be identified in the brick addition to the original mill. This addition was associated with the mill's use as a pumping station and the irregular corners may have been necessitated by the confluence of the mill race, rather than of functionality.

A comparison of the configuration of Cameron Mills and the Phoenix Mill suggests that the foundation remnant identified at Site 44AX0206 does not represent a double mill, but instead served some other function, likely related to the operation of the mill (Figures 47 and 20). The distance between the Phoenix Mill and the foundation remnant comprising

44AX0206, suggests a separate function for the latter resource. This is further supported by historic photographs of both mills (Figure 46 and 3). When asked to examine the brick structure, John McGrain, a milling expert in Maryland, indicated that he could not assign a milling function to the feature, but suggested that might be a support or ancillary structure (John McGrain, 2008 personal communication). Modern parcel boundaries were overlaid on a 1960 aerial photograph; the position of Site 44AX0206 in relation to the road in the photograph suggests the structure may have been located near the historic location of Wheeler Avenue (Figure 9).

Historic Murray's Mill, located in Catawba County, North Carolina, is an example of a late nineteenth and early twentieth century mill complex retaining a remarkable compliment of support and ancillary structures. At the time the National Register Nomination form was completed in 1979, the 150 acre mill complex boasted over two dozen extant structures including: the mill, wheathouse, store, cotton house, blacksmith shop, four residential dwellings, two barns, garages, smokehouses, and other support buildings. According to Historic Murray's Mill Site Manager, Jennifer Marquardt-Leach, the wheathouse was used "to store extra grain or damp grain" (Jennifer Marquardt-Leach, 2010 personal communication). The two-story frame wheathouse pre-dates the extant mill (ca. 1913) and was constructed in 1880, shortly after the first mill was constructed on the property during the 1870s. The wheathouse was located approximately 125 ft northeast of the original mill. It appears the second mill was constructed slightly downslope from the original mill building and wheathouse. The later mill was located approximately 65 ft from the wheathouse; the first floor of the wheathouse was level with the second floor of the later mill. This configuration allowed for the establishment of a pulley system connecting the two buildings to facilitate mechanical transfer of grain from the wheathouse to the mill; such a system would not have been possible given the location of the original mill (Jennifer Marquardt-Leach, 2010 personal communication).



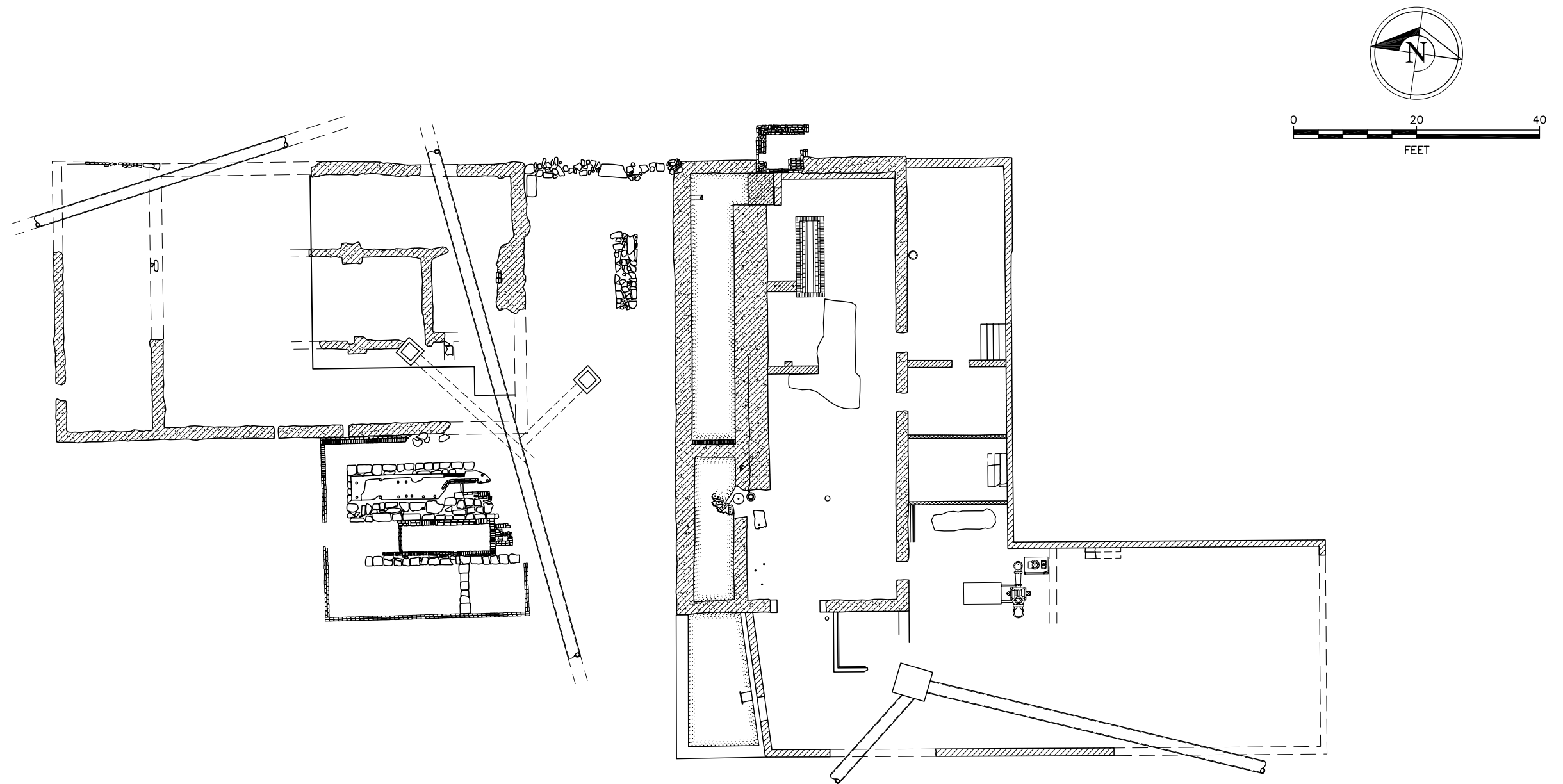
Figure 46. Post 1875 photograph of Hunt and Roberts' Cameron Mills (south façade), showing the addition that housed the steam engine and boiler installed in 1875-6 (Alexandria Library, Special Collections).

The estimated nineteenth century construction date for the foundation at Site 44AX0206, is consistent with archival evidence of significant expansion operations at the Phoenix Mill during the mid and latter portion of the nineteenth century. The only brick structure explicitly mentioned in either the 1812 or 1854 *Alexandria Gazette* advertisements for the property was “a large Brick Barn and Stable” referenced in the 1854 advertisement. It is possible the brick foundation represents the remains of such a structure; however, the “large Brick Barn and Stable” is described in the advertisement as associated with the Farm rather than the mill. No support structures directly related to the milling operations were named in either advertisement. If the brick foundation and floor at Site 44AX0206 are remnants of a milling support structure they may be the remains of grain storage structure similar to the wheathouse identified at Murray's Mill; the wheathouse at Murray's Mill was located approximately 125 ft from of the original mill, but was 65 ft from the later mill building. The foundation and floor of Site 44AX0206 are located approximately 100 ft from the mill

building. As much of the southern extent of the remnant structure is no longer extant, the actual distance between the buildings may be smaller. Although the Murray's Mill wheathouse has a rectangular footprint, the irregular angle of the foundation at 44AX0206, like that observed at Cameron Mills, may have been necessitated by the building's proximity to the mill race rather than reflective of its functionality.

Recommendation

Additional investigations of the area immediately west of the structure are planned to coincide with future phases of construction. Additional investigations will include the mechanical removal of the existing asphalt and concrete parking lot and related overburden to expose any remnant portions of the foundation associated with Site 44AX0206 not identified during the current investigation. The current investigation also did not identify/locate the mill race, and an additional 30 to 50 ft trench will be excavated in the central portion of the property to investigate the possibility the mill race may have been located further south on the parcel. Future investigations for the site



LINDSAY LEXUS
Foundations at
Cameron Mills

DATE: 02/12/09 PREPARED BY: BW

R. Christopher Goodwin & Associates, Inc.
241 East Fourth Street, Suite 100 Frederick, MD 21701

Figure 47. Plan view of foundations at the twin mills at Cameron.

also will include the development of an approach for public interpretation of the data from current investigations.

Additional archival research will be conducted into outbuildings associated with grist mills during the nineteenth century. This research will examine types of outbuildings and their uses, with a particular focus on building configuration and construction methods. This research will include, but not be limited to, an examination of barns, stables, and wheathouses. Research will include an examination of these buildings utilization in

relation to nineteenth century milling practices. Research into building construction techniques will explore the use of cobble footings underlying brick foundations. This research will include an examination into drainage techniques and systems utilized by builders in the nineteenth century including, but not limited to, an examination of French drains. This research will compare the foundation remains at Site 44AX0206 to other sites including the bakery located on Lee Street in the City of Alexandria.

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ACKNOWLEDGEMENTS

R Christopher Goodwin & Associates would like to acknowledge Simpson Development, Inc. especially Donald Simpson, Jr., Robert Starling who exhibited a great deal of interest and support throughout the process from monitoring to report production. At the City of Alexandria, Pamela Cressy, Ph.D. Francine Bromberg, M.A. and Steven Shepard, Ph.D. provided valuable support and guidance throughout the project. In addition, Al Cox provided valuable insight to the interpretation of the extant features. We also would like to acknowledge the

contribution of John McGrain in the interpretation of the historic features.

At R. Christopher Goodwin & Associates, Inc., Suzanne Sanders, M.A. served as Principal Investigator. The field investigations were supervised by Jennifer Evans, M.A., she was assisted in the field by Nathan Workman, B.A., Jeanine Measel, B.A., Sarah Owens, B.A., Brandon Gonia, B.A, and Benjamin Skolnik, B.A. Martha Williams, M.A., M.Ed. conducted archival investigations. The illustrations for this report were prepared by Barry Warthen; and Sharon Little produced the report.

APPENDIX I
ARTIFACT INVENTORY

Artifact Inventory

2/16/2009

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
Lindsay Lexus Ph. I 44AXO206								
FS 1		Unit Trench 1		Strat V		3.8 to 3.8 ftbd		
HISTORICS	Metal	Steel		Wire, Fragment		1	0	
Total Count= 1						Total Weight= .		
FS 2		Unit Trench 2 B		Strat VIII		4.7 to 4.7 ftbd		
HISTORICS	Glass		Colorless	Indeterminate Bottle, Lip		2	0	Crown cap; Mend, 1892-Present
Total Count= 2						Total Weight= .		
FS 4		Unit Trench 4		Feature 4-01		Foundation clean-up		
HISTORICS	Ceramic	Earthenware	Whiteware	Unspecified Hollow Vessel, Body		2	0	1820-Present
	Ceramic	Earthenware	Whiteware	Unspecified Hollow Vessel, Body, Transfer Printed		1	0	Blue lines and floral, 1820-Present
	Ceramic	Earthenware	Whiteware	Unspecified Hollow Vessel, Body, Transfer Printed		1	0	Green probable building, 1828-Present
	Ceramic	Porcelain	Hard-Paste	Unspecified Hollow Vessel, Body		1	0	
	Ceramic	Stoneware	Gray, Wheel Thrown	Unspecified Hollow Vessel, Body		2	0	Colorless salt glaze exterior; Red slip interior; Mend
	Glass		Aqua	Indeterminate Bottle, Body		1	0	
	Glass		Aqua	Indeterminate Bottle, Lip		1	0	Patent lip, 1880-Present
	Glass		Aqua	Window, Fragment		1	0	
	Glass		Colorless	Indeterminate Bottle, Lip		1	0	Capset
	Glass		Solarized, Manganese	Indeterminate Bottle, Body		1	0	1875-1920
	Manufactured	Slag		Glass		1	0	
	Metal	Brass		Shanked Button, Fragment		1	0	

Artifact Inventory

2/16/2009

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
Lindsay Lexus Ph. I 44AXO206								
HISTORICS	Metal	Iron	Cut	Nail, Fragment		1	0	1815-1890
Total Count= 15						Total Weight= .		
FS 5		Unit Trench 4		Feature 4-01		0 to 2 cmbs		Disturbance Area 3
HISTORICS	Ceramic	Earthenware	Pearlware	Unspecified Hollow Vessel, Body		1	0	1779-1830
Total Count= 1						Total Weight= .		
FS 10		Unit Trench 4		Feature 4-01B West 1/2	Strat I	Level 1	1 to 1.45 ftbd	Disturbance Area 1
HISTORICS	Glass		Aqua	Window, Fragment		1	0	
Total Count= 1						Total Weight= .		
FS 6		Unit Trench 4		Feature 4-01 West 1/2	Strat I	Level 1	0.325 to 0.5 ftbd	Disturbance Area 1
HISTORICS	Metal	Iron	Cut	Nail, Fragment		3	0	1815-1890
Total Count= 3						Total Weight= .		
FS 7		Unit Trench 4		Feature 4-01 East 1/2	Strat I	Level 1	0.325 to 0.5 ftbd	Disturbance Area 1
HISTORICS	Metal	Iron	Cut	Nail, Fragment		1	0	1815-1890
Total Count= 1						Total Weight= .		
FS 13		Unit Trench 4		Feature 4-01 North 1/2	Strat I	Level 1	0.72 to 0.95 ftbd	Disturbance Area 3
HISTORICS	Metal	Iron	Cut	Nail, Fragment		3	0	1815-1890
Total Count= 3						Total Weight= .		
FS 16		Unit Trench 4		Feature 4-01 South 1/2	Strat I	Level 1	0.75 to 1.01 ftbd	Disturbance Area 3
HISTORICS	Metal	Iron	Cut	Nail, Fragment		5	0	1815-1890

Artifact Inventory

2/16/2009

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
Lindsay Lexus Ph. I 44AXO206								
						Total Count= 5		Total Weight= .
	FS 14	Unit Trench 4		Feature 4-01 South 1/2	Strat I/II	Level 1	0.24 to 0.59 ftbs	Disturbance Area 4
HISTORICS	Glass		Aqua	Window, Fragment		1	0	
	Metal	Iron	Cut	Nail, Fragment		28	0	1815-1890
						Total Count= 29		Total Weight= .
	FS 17	Unit Trench 4		Feature 4-01 North 1/2	Strat I/II	Level 1	0.02 to 0.7 ftbd	Disturbance Area 4
HISTORICS	Metal	Iron	Cut	Nail, Fragment		2	0	1815-1890
	Metal	Iron		Indeterminate Form, Fragment		1	0	
						Total Count= 3		Total Weight= .
	FS 8	Unit Trench 4		Feature 4-01 West 1/2	Strat II	Level 2	0.5 to 0.675 ftbd	Disturbance Area 1
HISTORICS	Metal	Iron	Cut	Nail, Fragment		1	0	1815-1890
						Total Count= 1		Total Weight= .
	FS 18	Unit Trench 4		Feature 4-01 North 1/2	Strat II	Level 2	0.7 to 1.12 ftbd	Disturbance Area 4
HISTORICS	Metal	Iron	Cut	Nail, Fragment		8	0	1815-1890
						Total Count= 8		Total Weight= .
	FS 9	Unit Trench 4		Feature 4-01	Strat II/III		1 to 1.2 ftbd	Disturbance Area 1
HISTORICS	Metal	Iron		Horse Shoe, Fragment		1	0	
						Total Count= 1		Total Weight= .

Artifact Inventory

2/16/2009

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
Lindsay Lexus Ph. I 44AXO206								
FS 11		Unit Trench 4		Feature 4-01 West 1/2	Strat III	Level 2	0.86 to 1.28 ftbd	
								Disturbance Area 2
HISTORICS	Metal	Iron	Cut	Nail, Fragment		3	0	1815-1890
Total Count= 3						Total Weight= .		
FS 12		Unit Trench 4		Feature 4-01 West 1/2	Strat III	Level 3	1.28 to 1.43 ftbd	
								Disturbance Area 2
HISTORICS	Ceramic	Earthenware	Pearlware	Unspecified Hollow Vessel, Body		1	0	1779-1830
	Ceramic	Earthenware	Whiteware	Unspecified Hollow Vessel, Body		1	0	1820-Present
Total Count= 2						Total Weight= .		
FS 3		Unit Trench 6		Strat VIII		1.4 to 1.4 ftbs		
HISTORICS	Glass	Machine Made	Aqua	Indeterminate Bottle, Base, Embossed Lettering		1	0	Coca Cola bottle; Owens Illinois makers mark with "50" on side; "ALEXANDRIA/VA" on base, 1916-Present
Total Count= 1						Total Weight= .		
Site Number Totals					Total Count= 80		Total Weight= .	

Artifact Inventory

2/16/2009

Category	Group	Class	Type	Sub-Type	Heat	Count	Weight (g)	Comments
Lindsay Lexus Ph. I 44AXO206								
Project Totals					Total Count= 80		Total Weight= .	

APPENDIX II
VDHR SITE FORM

City/County: Alexandria

DEPARTMENT OF HISTORIC RESOURCES
ARCHAEOLOGICAL REPORT

DHR ID#: 44AX0206

DHR Site Number: 44AX0206 Other DHR Number:

Resource Name:

Temporary Designation: 44AX10000

Site Class: Terrestrial, open air

CULTURAL/TEMPORAL AFFILIATION

Cultural Designation	Temporal Designation
Euro-American	19th Century

THEMATIC CONTEXTS/SITE FUNCTIONS

Thematic Context: Industry/Processing/Extraction **Example:** Mill, raceway

Comments/Remarks:

LOCATION INFORMATION

USGS Quadrangle(s): ALEXANDRIA **Restrict UTM Data?** Yes

Center UTM Coordinates (for less than 10 acres): NAD 18/4297486/318153/2

NAD	ZONE	EAST	NORTH
------------	-------------	-------------	--------------

Boundary UTM Coordinates (for 10 acres or more):

NAD	ZONE	EAST	NORTH
------------	-------------	-------------	--------------

Physiographic Province:	Coastal Plain	Drainage:	Potomac/Shenandoah River
Aspect:	Facing south	Nearest Water Source:	Cameron Run
Elevation (in feet):	44.00	Distance to Water(in feet):	1,450
Slope:	0-2%	Site Soils:	Urban Land
		Adjacent Soils:	Sassafras-Marumsco complex

Landform:

SITE CONDITION/SURVEY DESCRIPTION

Site Dimensions: 18 feet by 36 feet **Acreage:** 0.01

Survey Strategy: Subsurface Testing

Site Condition: Unknown Portion of Site Destroyed

City/County: Alexandria

Threats to Resource: Development

Survey Description:

Archeological investigations initially involved the excavation of dispersed mechanical trenches measuring 3x50 ft on average in plan view and extended to approximately 4-5 ft below grade. Trench 4 placed in the northeastern corner of the project area identified a partially intact brick foundation/mill race which was manually excavated. Locational data associated with the brick structural feature and trenches was recorded with a Trimble GeoXT GPS sub-meter receiver and a Topcon GTS-303 total station. The collected information was referenced to UTM Zone 18N NAD83 with distance units in feet and meters.

CURRENT LAND USE

Land Use: Commerce/Tr **Example:** Parking lot

Dates of Use: 2009/01/12

Comments/Remarks:

Storage for Lexus auto dealership

SPECIMENS, FIELDNOTES, DEPOSITORIES

Specimens Obtained? Yes

Specimens Depository: temporary-R. Christopher Goodwin & Associates, Inc. 241 East 4th St. Suite 100 Frederick, MD 21701

Assemblage Description:

The recovered artifact assemblage comprises two discrete categories: primarily 19th century architecture debris and modern 20th century materials contained in fill matrices. Corroded wire nails, asphalt, concrete, and bottle glass fragment characterize the sub-assemblage observed and sampled in the fill deposits examined beneath the parking lot. Artifacts recovered in the vicinity of a partially intact brick foundation and floor include sparse examples of 19th century domestic items (ceramic sherds, bottle glass fragment, and one button) dominated by architectural detritus of the same period such as cut nails and window glass.

2 gray stoneware, 1 hard-paste porcelain, 5 refined white-bodied earthenware, 2 undecorated pearlware, 3 window glass, 7 bottle glass, 1 slag, 1 brass button, 1 horseshoe, 1 wire, 55 cut nail fragments

Specimens Reported? No

Assemblage Description--Reported:

Field Notes Reported? Yes

Depository: temporary-R. Christopher Goodwin & Associates, Inc. 241 East 4th St. Suite 100 Frederick, MD 21701

REPORTS, DEPOSITORY AND REFERENCES

Report (s) ? Yes

Depository: Department of Historic Resources and R. Christopher Goodwin & Assoc.

DHR Library Reference Number:

Reference for reports and publications:

Archeological Investigations at the Proposed Lindsay Lexus New Car Service Facility, City of Alexandria, Virginia

PHOTOGRAPHIC DOCUMENTATION AND DEPOSITORY

Photographic Documentation?

Depository

Type of Photos

Photo Date

temporary-R.Christopher Goodwin & Associates, Inc. 241 East 4th St. Suite 100, Frederick, MD 21701

35mm B&W, color slide, digital

9999/99/99

City/County: Alexandria

CULTURAL RESOURCE MANAGEMENT EVENTS

Cultural Resource Management Event:	Survey:Phase I/Reconnaissance	Date: 2008/11/99
--------------------------------------------	-------------------------------	-------------------------

Organization and Person:

Organization: R. Christopher Goo **First:** Jennifer **Last:** Evans

Sponsor Organization:

DHR Project Review File No:

CRM Event Notes or Comments:

Mechanical trench excavation, manual excavation of buried brick foundation/mill race, and total station survey undertaken by Goodwin and Associates in Nov-Dec 2008.

INDIVIDUAL/ORGANIZATION/AGENCY INFORMATION

Individual Category Codes:

Honorif: **First:** **Last:**

Suffix:

Title:

Company/

Agency:

Address:

City: **State:** **Zip:**

Phone/Ext:

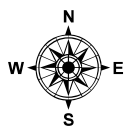
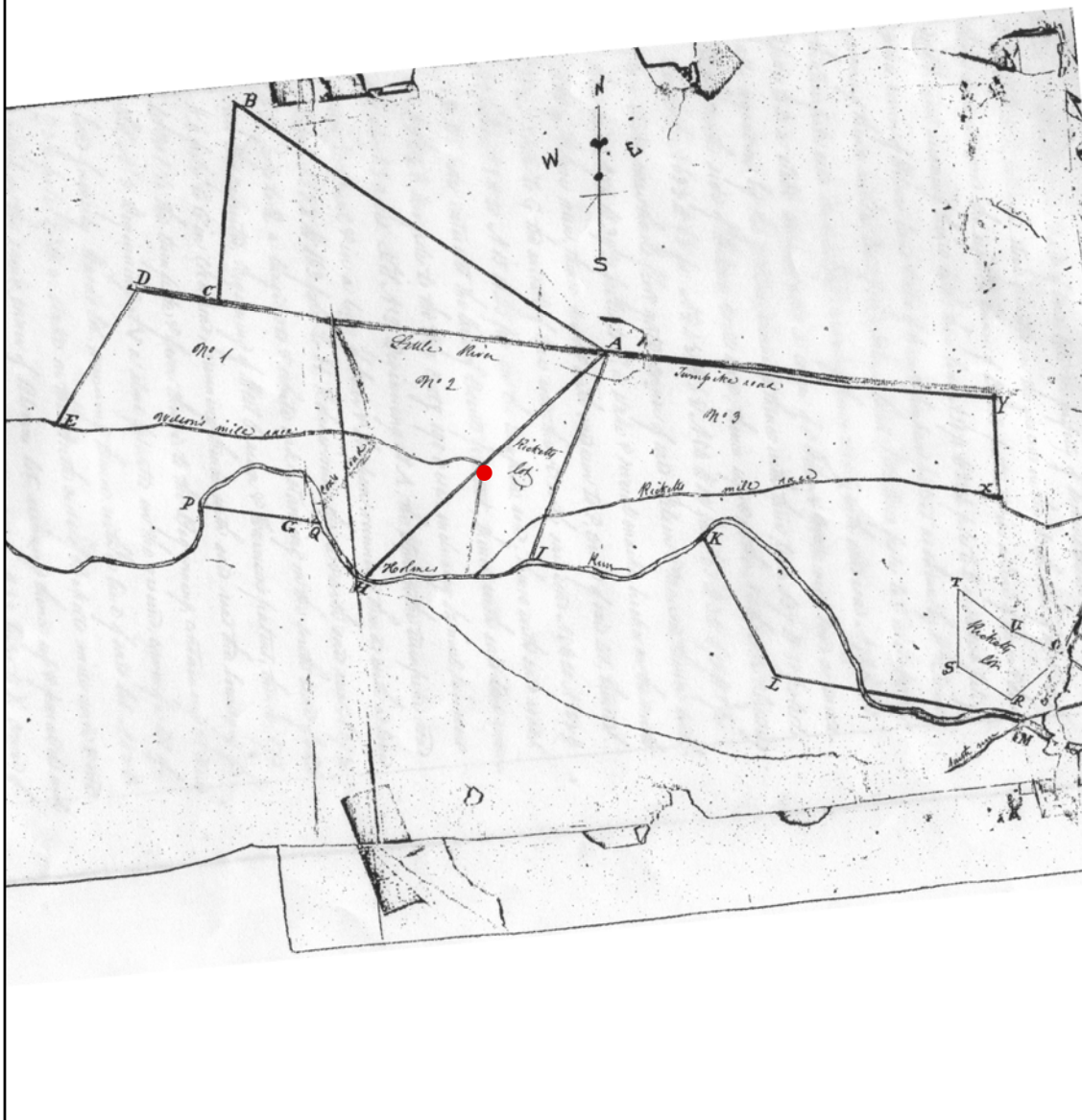
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Ownership Type: Private

Government Agency:

APPENDIX III

MAP STUDY OVERLAYS



● Project Boundary

No referenceable scale

LINDSAY LEXUS

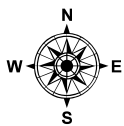
Date: 9/15/2008

Prepared By: CJS



R. Christopher Goodwin & Associates, Inc.
241 East Fourth Street, Suite 100 Frederick, MD 21701

Project_Data\Lindsay Lexus\Figure10.mxd



Project Boundary
 Mill Race

No referenceable scale

LINDSAY LEXUS

Date: 9/15/2008

Prepared By: CJS



R. Christopher Goodwin & Associates, Inc.
 241 East Fourth Street, Suite 100 Frederick, MD 21701

Project Data\Lindsay Lexus\Figure11.mxd



Project Boundary



Mill Race

No referenceable scale

LINDSAY LEXUS

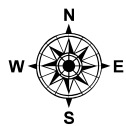
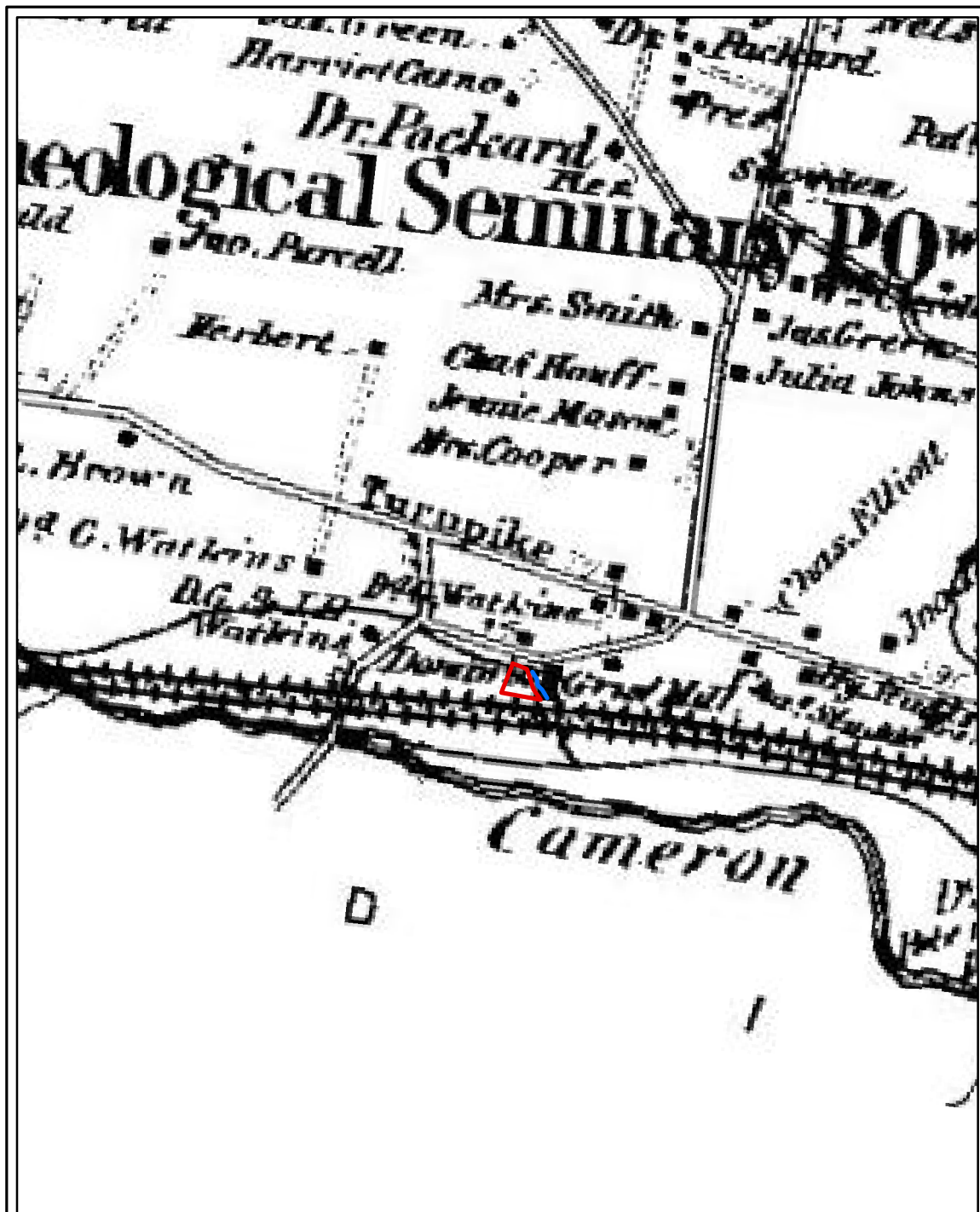
Date: 9/15/2008

Prepared By: CJS



R. Christopher Goodwin & Associates, Inc.
241 East Fourth Street, Suite 100 Frederick, MD 21701

Project_Data\Lindsay Lexus\1865.mxd



Project Boundary



Mill Race

No referenceable scale

LINDSAY LEXUS

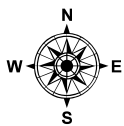
Date: 9/15/2008



Prepared By: CJS



R. Christopher Goodwin & Associates, Inc.
241 East Fourth Street, Suite 100 Frederick, MD 21701

Project: Data\Lindsay Lexus\Hodkins.mxd



 Project Boundary
 Mill Race

No referenceable scale

LINDSAY LEXUS

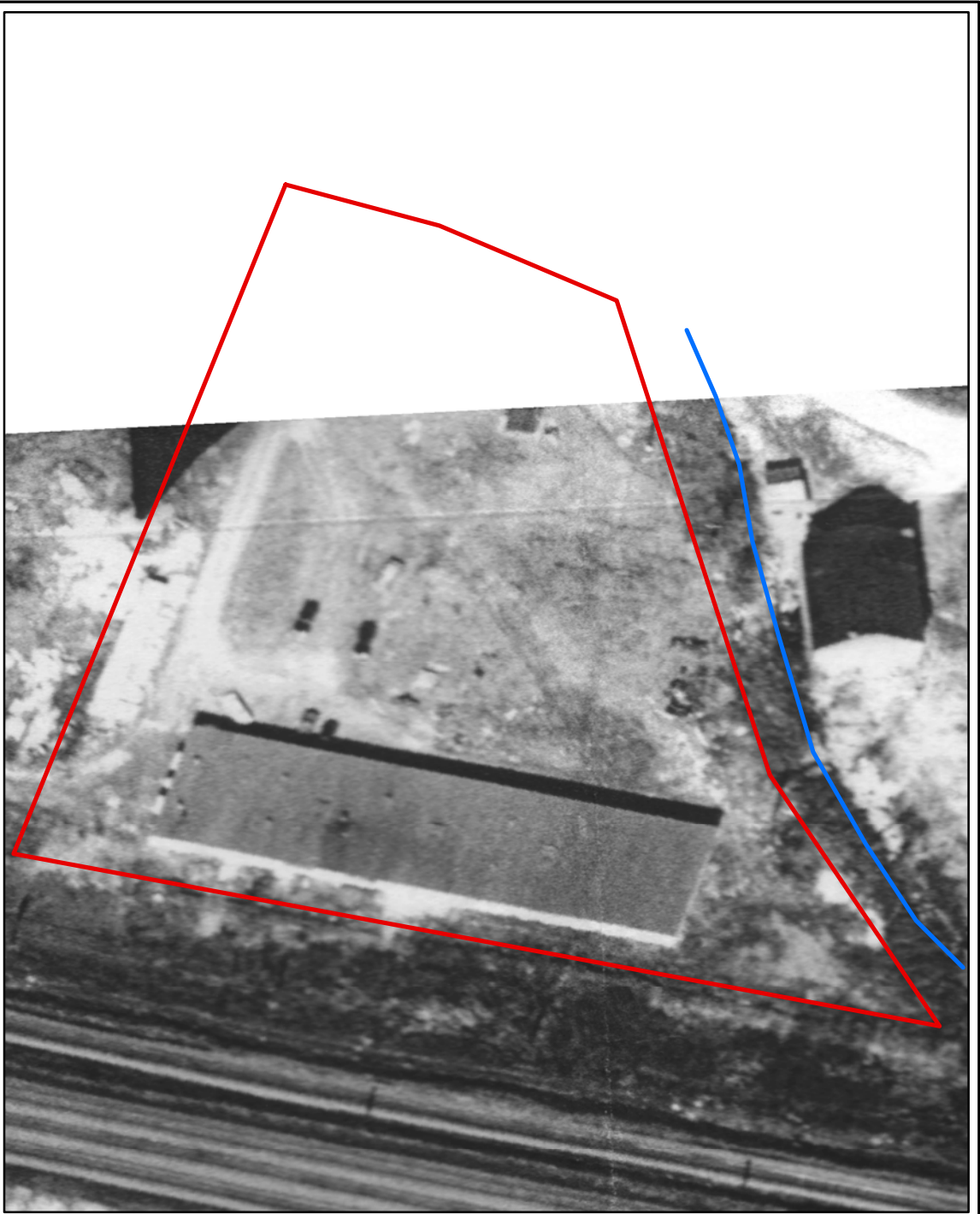
Date: 9/15/2008



Prepared By: CJS



R. Christopher Goodwin & Associates, Inc.
 241 East Fourth Street, Suite 100 Frederick, MD 21701

Project_Data\Lindsay Lexus\Figure13.mxd



 Project Boundary
 Mill Race

No referenceable scale

LINDSAY LEXUS

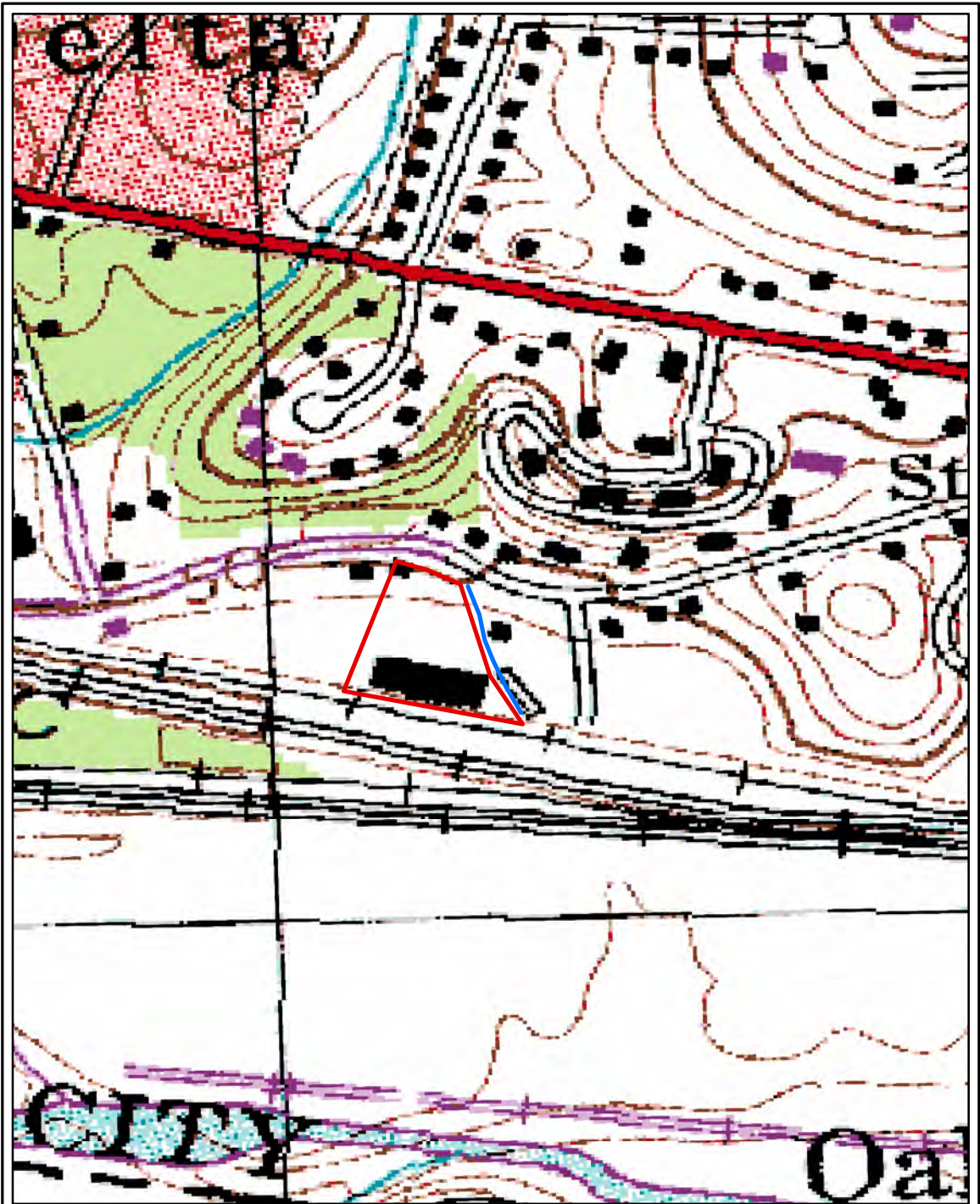
Date: 9/15/2008

Prepared By: CJS

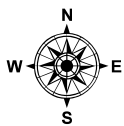


R. Christopher Goodwin & Associates, Inc.
241 East Fourth Street, Suite 100 Frederick, MD 21701

\\Project_Data\Lindsay Lexus\1951.mxd



Source: USGS 7.5' Quadrangle



Project Boundary

Mill Race

0 50 100 200 300 400 500 Feet

Disclaimer: This is for general location only.

LINDSAY LEXUS

Date: 9/15/2008

Prepared By: CJS



R. Christopher Goodwin & Associates, Inc.
241 East Fourth Street, Suite 100 Frederick, MD 21701

\\Project_Data\Lindsay Lexus\Quad.mxd

APPENDIX IV

KEY PROJECT PERSONNEL

Suzanne Sanders, M.A., Senior Project Manager, received her Bachelor of Arts degree from SUNY Binghamton in 1984, and her M.A., in Historical Archaeology from the College of William and Mary in 1988. Ms. Sanders' M.A. thesis focused on vernacular architecture (standing structures), and included an inventory and analysis of over 400 buildings. For four years, while at William and Mary, Ms. Sanders instructed archeological field schools in historical archeology held by the College in the West Indies. In addition to extensive field experience in the Mid-Atlantic, Ms. Sanders has worked in the southeast, including North Carolina, Florida, and Louisiana; and, in West Virginia and Ohio. Her fieldwork also includes extensive experience on both historic and Precolumbian sites in the Bahamas and in the Caribbean. Ms. Sanders has worked on sites ranging in date from the mid-seventeenth through the twentieth century. These have included both urban and rural sites related to domestic, agricultural, industrial, institutional, and military activities. These investigations have included the range from Phase I survey and inventory, through Phase II evaluation, and Phase III mitigation. Her experience in cultural resource management includes participation in the preparation of planning documents such as Memoranda of Agreement (MOAs), Programmatic Agreements (PAs), Environmental Assessments, Environmental Impact Assessments, and Historic and Archeological Resources Protection Plans (HARP Plans). Additional participation in planning under Federal Preservation Law has included the preparation of National Register of Historic Places nominations and amendments to nominations for both sites and districts.

Ms. Sanders has supervised or served as project manager for Phase I survey and inventory projects that include extensive, long-term Section 110 inventory on federal properties and military installations. These surveys have included the preparation of planning documents for these facilities. Her involvement in Phase II evaluation of prehistoric, Precolumbian, and historic sites has included extensive domestic, agricultural and plantation, industrial and institutional, and military sites throughout the Mid-Atlantic and in the Bahamas and the Caribbean. Relevant projects encompassed research on eighteenth and nineteenth century domestic and plantation sites in Maryland and Virginia; seventeenth, eighteenth, and nineteenth century plantation and sugar processing sites in the Caribbean; and Precolumbian habitation sites in the Caribbean. Ms. Sanders has managed or supervised many Phase III mitigation projects, including urban domestic and industrial sites in Annapolis and Baltimore, Maryland, and Civil War campsites in Pennsylvania and Virginia, as well as a nineteenth century graveyard in Pennsylvania. At Goodwin & Associates, Inc., Ms. Sanders also has been involved with many comprehensive, multi-phase investigations of urban neighborhoods. In Baltimore, these include working with the Maryland Stadium Authority in connection with the development of Oriole Park at Camden Yards, the Baltimore Convention Center, and the Ravens Stadium. Her work with the City of Annapolis was connected with several phases of downtown development, including the Gott's Court Parking Area and the Main Street Project. She also was involved in the 14th Street Urban renewal efforts in Washington, D.C.

Ms. Jennifer L. Evans received her B.A. from Millersville University in Lancaster, Pennsylvania. In December of 1998, she graduated Cum Laude with a Bachelor of Arts Degree in Anthropology/Archaeology. Her undergraduate experience included the completion of a Departmental Honors Thesis involving the interpretation of special patterning at a late nineteenth/early twentieth century rural farmstead. In May of 2008, Ms. Evans received her M.A. in American Studies from Pennsylvania State University, Capital College in Harrisburg, Pennsylvania. Her thesis, titled “Accusation and Redemption: Gettysburg in the Aftermath of the Battle” examined primary documentary sources, including newspaper archives, in an examination of the accusations of disloyalty leveled at the people of Gettysburg in the immediate aftermath of the Battle of Gettysburg.

Since joining R. Christopher Goodwin & Associates, Inc. in 2001, Ms. Evans has worked on a variety of archeological projects including Phase I excavations in Ohio, Maryland, Pennsylvania, Connecticut, New York, West Virginia, Virginia, North Carolina, the U.S. Virgin Islands, and the Bahamas. She also has worked on Phase II and Phase III excavations in Ohio, Pennsylvania, Maryland, Virginia, and the U.S. Virgin Islands. She has worked extensively on both historic and prehistoric sites and materials.

Ms. Evans has contributed to many of the technical reports published in the company. Since completing her M.A. in 2008, Ms. Evans has participated in archival research and assisted in architectural surveys.

MARTHA R. WILLIAMS, M.A., M.ED.

PROJECT MANAGER/ARCHEOLOGIST/HISTORIAN

Martha R. Williams, M.A., M.Ed., Project Manager, holds a B.A. (1960) from Lebanon Valley College; a Master of Education, with emphasis in the Social Sciences, from the University of Pennsylvania (1965); and an M.A. in History, with emphasis in Applied History, from George Mason University (1987). She was a Coe Fellow in American Studies at SUNY Stony Brook in 1982 and 1989. While completing her internship with George Mason University, she co-authored the Heritage Resource Management Plan for Fairfax County, Virginia.

Ms. Williams' past experience in cultural resource management and in historical archeology began over 30 years ago with a field school with Colonial Williamsburg in 1972. As co-director of the Fairfax County Seminars in historical archeology for high school students (1973-1987), she assisted in or directed investigations at 15 archeological sites in Fairfax County. Her experience also included volunteer work on both prehistoric and historic sites with the Fairfax County Heritage Resources Branch, for the City of Alexandria, for the Virginia Division of Historic Resources, and for the National Park Service, including excavations at the Lost Colony site on Roanoke Island. She also worked for the National Park Service as an archeological laboratory technician following her retirement from teaching.

Since joining Goodwin & Associates, Inc., in 1989, Ms. Williams has served as historian, project archeologist, project manager, and public interpretation specialist for numerous studies conducted by the firm. As historian, she has conducted research for company projects in such diverse eastern seaboard and central states as Maryland, Virginia, New York, Illinois, Pennsylvania, Maine, Massachusetts, Vermont, North Carolina, Georgia, Mississippi, Arkansas, and Louisiana, as well as in the District of Columbia and Puerto Rico. She is familiar with archival resources for both terrestrial and underwater projects. She has managed all types of archeological projects, including preparation of archeological predictive models and disturbance studies; Phase I and II archeological surveys and evaluations; Phase III archeological data recovery projects; and cultural resource planning documents for Federal agencies and local governments. Her managerial experience encompasses military, domestic, commercial, and industrial sites in both urban and rural settings. As public interpretation specialist, she designed and executed a wide range of public information activities, including public participation programs for the Camden Yards Stadium and the Juvenile Justice projects in Baltimore; site brochures for the Drane House in Garrett County, Maryland and Icehouse Square in Gettysburg, Pennsylvania; display panels for the Main Street and Naval Academy sites in Annapolis, Maryland; permanent exhibit panels at the Army's Aberdeen (Maryland) Proving Ground; and a popular history of Fort Belvoir (Virginia). She also prepared two public information and training booklets and a training video for the Legacy Program of the Department of Defense.

Ms. Williams is actively involved with professional preservation organizations. She has served as Vice-President of the Archeological Society of Virginia (ASV), and continues to sit on its Board of Directors. Her publication credits include contributed articles in the *Yearbook* of the Historical Society of Fairfax County, *Museum News, Interpretation* (NPS), the *Quarterly Bulletin* of the ASV, *American Antiquity*, and the *Journal of Mid-Atlantic Archaeology*. In 1991, the Fairfax County History Commission presented her its Distinguished Service Award for her contributions to local history and preservation. The ASV also recognized Ms. Williams as "Professional Archeologist of the Year" in 1996. On the national level, the Society for Historical Archaeology recognized her service as Chair of that organization's Committee on Public Education in January, 2001, when she received the Society's Award of Merit for her contributions to archeological education.