HUNTER RESEARCH

PHASE II ARCHAEOLOGICAL FIELD ASSESSMENT
PHASE III ARCHAEOLOGICAL DATA RECOVERY
AND MONITORING

BORTON/BALLINGER FARMSTEAD SITE
[28-BU-949]

ROWAN COLLEGE AT BURLINGTON
CAMPUS EXPANSION PROJECT
MOUNT LAUREL TOWNSHIP

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MANAGEMENT SUMMARY

This technical report describes and interprets the results of a program of Phase II archaeological field assessment followed by Phase III archaeological data recovery and archaeological monitoring at the Borton/Ballinger (aka Votta) Farm Site in Mount Laurel Township, Burlington County, New Jersey. This work was conducted to evaluate and then mitigate the effects of the Rowan College at Burlington Campus Expansion Project on the historical archaeological resource known as the Votta Farm Site, a property considered eligible for inclusion in the New Jersey and National Register of Historic Places by the New Jersey Historic Preservation Office. All archaeological work and related historical research discussed in this report were performed by Hunter Research, Inc. working as a subcontractor to Taylor, Wiseman & Taylor, project engineer for the County of Burlington and Rowan College at Burlington.

The archaeological data recovery of the Borton/Ballinger Farmstead [28-Bu-949] focused on three of the four areas defined by the research design: the farmhouse cellar/foundation, the middens, and the farmyard. Very little of the underlying prehistoric deposits were identified. Only a single prehistoric projectile point was also identified in a historic fill layer. In summary these investigations have revealed: multi-phase cellar/foundation remains, incorporating a well shaft; a late 19th- and early 20th-century trash pit; demolition layers capping historic ground surfaces; evidence of at least one farm building. Investigations have also identified an earlier house foundation that provides a key to interpreting some of the complicated stratigraphy documented in the trenches outside of the farmhouse's footprint. This investigation adequately documented the features uncovered and obtained a substantial sample of historic artifacts (over 6,700) dating from the mid-18th into the 20th century. In addition to the archaeological findings a detailed history of the farmstead was developed through research into primary and secondary sources and tied to the archaeology.

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We offer our thanks to Richard McGuire, P.E., of Taylor Wiseman & Taylor, the project engineer who provided project plans. Gregory Lattanzi, Curator, kindly assisted us in our research at the New Jersey State Museum. We also received valuable assistance from the staffs of the Burlington County Clerk's Office, Bulrington County Historical Society, New Jersey Historic Preservation Office, New Jersey State Archives, and the New Jersey State Library.

With regard to Hunter Research staff involvement, the project directed by James Lee. Background research was carried out by Eryn Boyce under the direction of Patrick Harshbarger. The fieldwork and analysis was carried out by Dorothy Both, Jordan Smith, Andrew Martin and Evan Mydlowski under the direction of Joshua Butchko. Artifact analysis was conducted by Joshua Butchko. Report graphics and layout were completed by Evan Mydlowski and James Lee. This report was written by Joshua Butchko, Eryn Boyce and James Lee.

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Chapter 1

INTRODUCTION

A. PROJECT BACKGROUND AND SCOPE-OF-WORK

This technical report describes and interprets the results of a program of Phase II archaeological field assessment followed by Phase III archaeological data recovery and archaeological monitoring at the Borton/Ballinger (aka Votta) Farm Site in Mount Laurel Township, Burlington County, New Jersey (Figures 1.1 and 1.2; Photograph 1.1). This work was conducted to evaluate and then mitigate the effects of the Rowan College at Burlington Campus Expansion Project on the historical archaeological resource known as the Votta Farm Site, a property considered eligible for inclusion in the New Jersey and National Register of Historic Places by the New Jersey Historic Preservation Office (NJHPO). The Votta Farm Site is referred to throughout this report as the Borton/Ballinger Farm Site to more accurately reflect the historical ownership and operation of the farm property associated with this archaeological resource. All archaeological work and related historical research discussed in this report were performed by Hunter Research, Inc. working as a subcontractor to Taylor, Wiseman & Taylor, project engineer for the County of Burlington and Rowan College at Burlington.

These archaeological studies were required as part of the Rowan College at Burlington Campus Expansion Project's compliance with the New Jersey Department of Environmental Protection's Land Use Regulation Program and in accordance with N.J.A.C. 7:7A (Marcopul to Dunne, July 19, 2016 [HPO Project No. 16-1567-2]). Work was conducted in accordance with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (36 CFR 61), the principles and standards of the Advisory Council on Historic Preservation's handbook, *Treatment of Archaeological Properties* and the *Guidelines for Archaeological Investigations* issued by the New Jersey Historic Preservation Office. Senior staff performing this work met the qualifications standards specified for archaeologists in 36 CFR 66. The technical approach and research design for the archaeological data recovery and monitoring were reviewed and approved by the NJHPO.

The scope-of-work for these archaeological studies involved four principal tasks: 1). background research, including site-specific primary archival research; 2). archaeological fieldwork, which entailed initial testing, followed by large-scale data recovery excavation and concluded with limited archaeological monitoring; 3). laboratory analysis, focused largely on the analysis and cataloging of artifacts; and 4). preparation of this technical report. In addition, during the period of the data recovery excavations, Hunter Research supplied archaeological and historical content for a website developed by Rowan College at Burlington, the purpose of which was to make the results of the archaeological work accessible to the student and local communities (http://www.rcbc.edu/campus-transformation/site-excavation).

B. PREVIOUS RESEARCH AND INVESTIGATIONS

Prior to the current work, two earlier archaeological investigations of the Borton/Ballinger (Votta) Farm Site were completed by archaeologist R. Alan Mounier in 1993 and 1995. The first investigation was part of a combined Phase I/II cultural resources study conducted in connection with the original

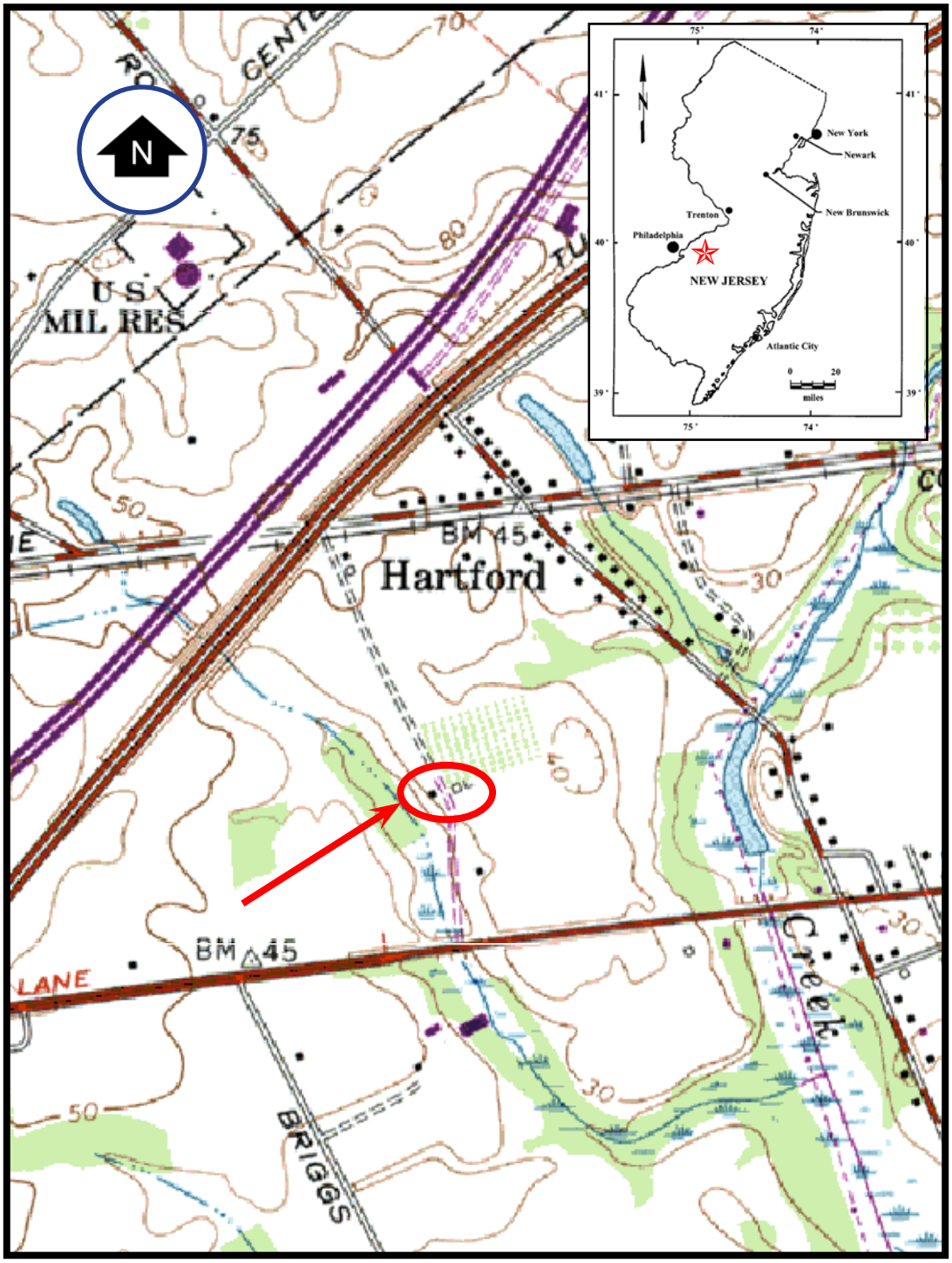


Figure 1.1. Location of Borton/Ballinger Farmstead Site (circled). Source: 7.5' USGS Moorestown, N.J. (1966 [photorevised 1981]) Quadrangle. Scale: 1 inch = 1,000 feet.

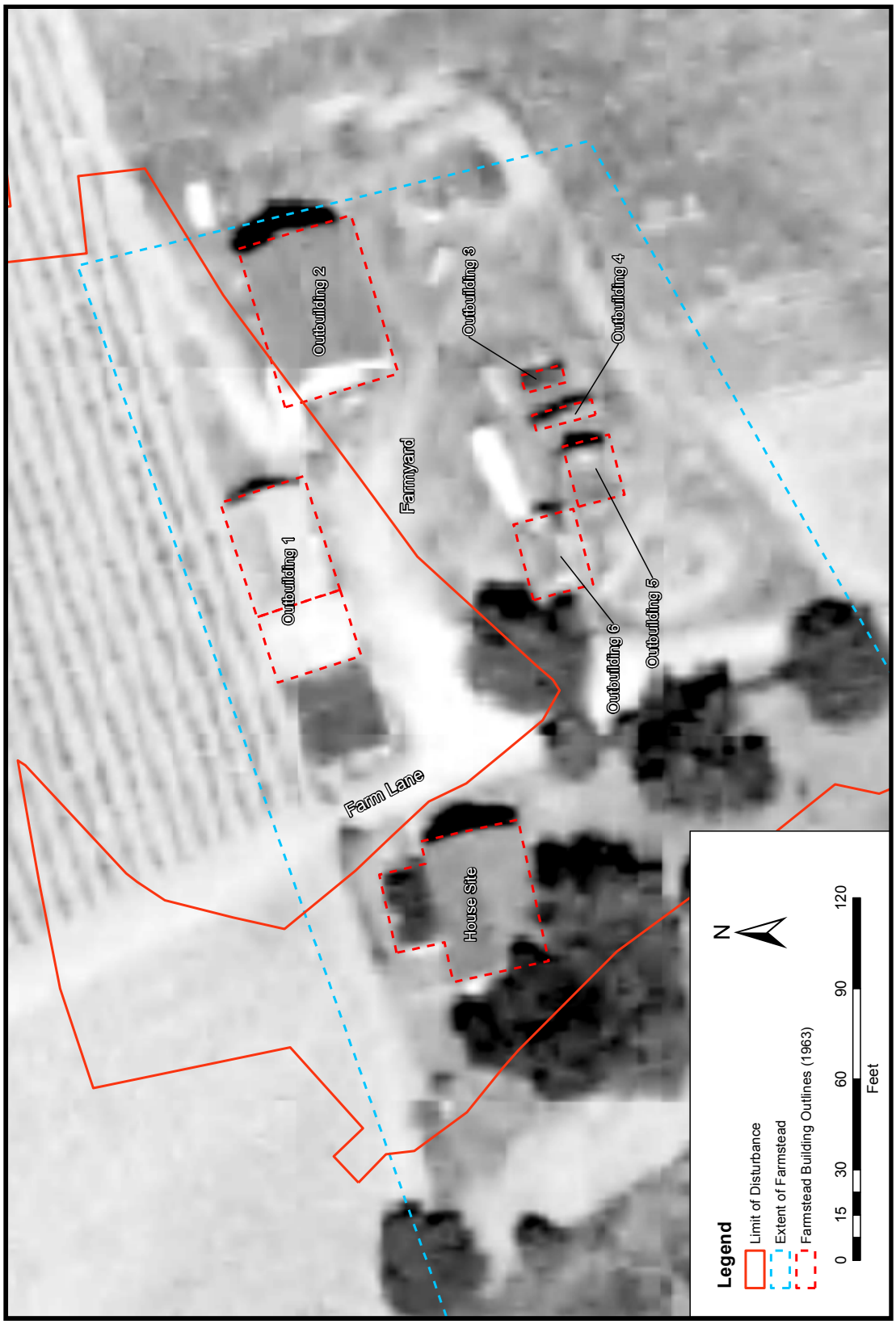


Figure 1.2. Historic Aerial Photograph of the Borton/Ballinger Farmstead Site Showing the Location of Structures in 1963. Source: NETR 2016.

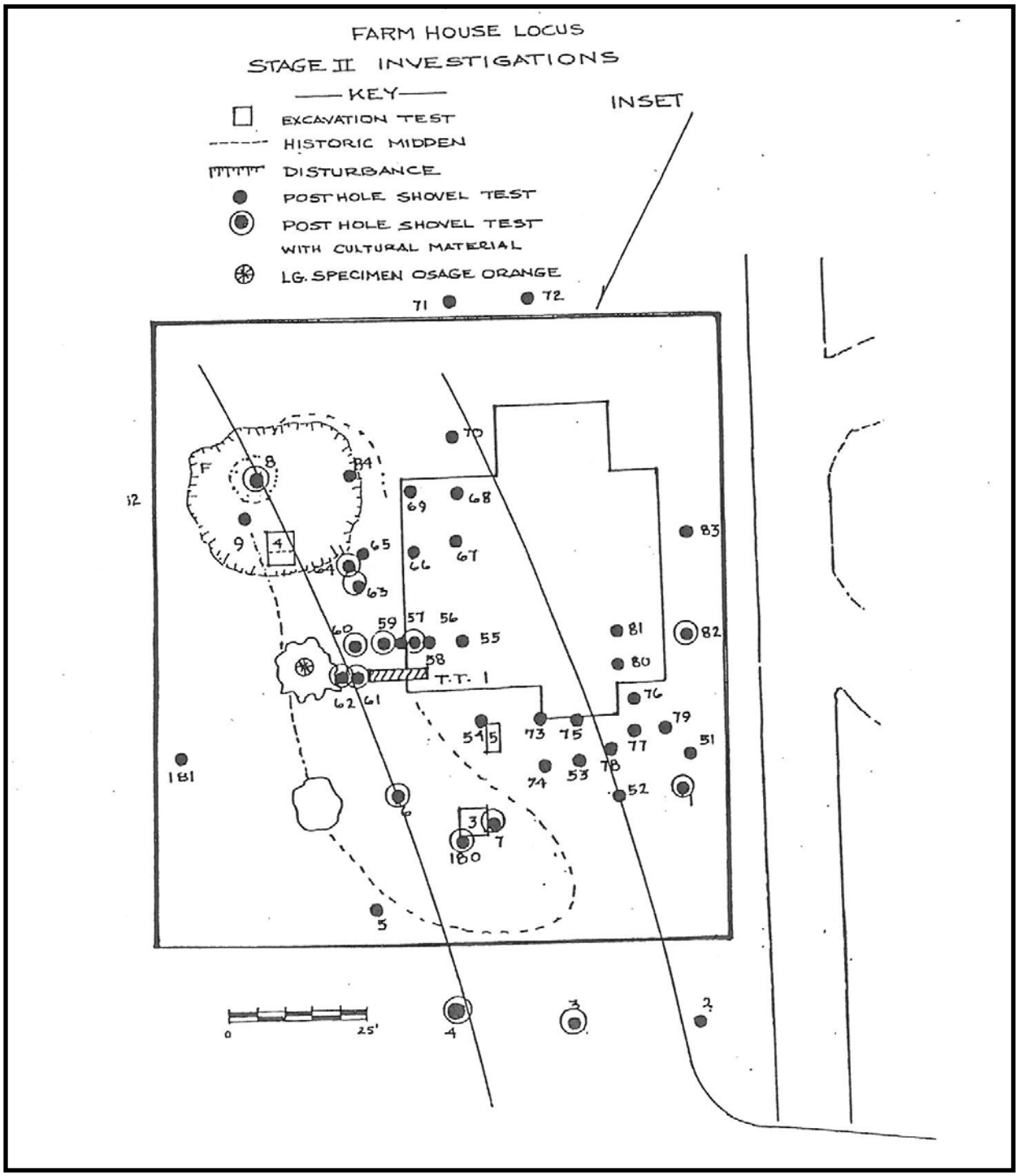
Phorograph 1.1. View facing south showing a general view of the Borton/Ballinger Farmhouse site during excavation (Photographer: Joshua Butchko, September 2016)[HRI Neg.#16034/D3:010].

phase of construction of what was then known as the Burlington County College Mount Laurel campus (now Rowan College at Burlington). This investigation comprised background research, surface inspection and the systematic power-auger testing of approximately 80 acres of the 114-acre campus property (Mounier 1993). Mounier identified a small prehistoric site and a historic house site (the Votta Farm Site) dating back to *circa* 1750. According to local sources the farmhouse was last occupied by the Votta family, but was also known locally as the "Ashead Farm," and was reputedly built in the early 18th century. An archaeologist who had visited the house prior to its demolition in the early 1990s, described it as a frame house set on a stone foundation. The cellar was finished extensively with brick and included corbelled arches, a possible cellar hearth and a lower sub-cellar with a well that extended beyond the footprint of the foundation (Mounier 1993:16).

The investigation of the farmhouse site included the excavation of 46 power-auger (or "post hole") tests and a 10-by-2.5-foot test trench (Test Trench 1). The power-auger sampling delineated at least one large midden area (or several overlapping middens) and the rough footprint of the house's foundation. The test trench identified a limonite foundation wall, and exterior historic fill deposits capped and filled by modern deposits. This trench did not extend to any significant depth within the interior of the foundation to assess the integrity of its unusual cellar. Excavations also identified 173 historic period artifacts that dated from the mid-18th-century through the 20th century. Several other historic features were noted during the inspection of the ground surface including cisterns or septic tanks, a brick-lined shaft feature that was interpreted as a possible well, and a depression around what was thought to be a looted privy hole. A particularly large specimen osage orange tree was also noted on the site that likely dated from early on in the farm's period of occupation. Mounier also noted the degree to which fill placed on the site after the house's demolition made it difficult to excavate. At the conclusion of this investigation he concluded that site "had the potential to inform on questions important in local and regional history" (Mounier 1993:24).

In 1995 Mounier returned to test other portions of the campus site and at this time excavated three additional units within the Votta Farm Site (Excavation Units 3, 4 and 5) (Figure 1.3) (Mounier 1995). These additional units targeted the possible privy hole (Excavation Unit 4 [3 by 5 feet]), the large midden (Excavation Unit 3 [5-foot square]) and a possible, smaller midden located closer to the footprint of the house (Excavation Unit 5 [5 by 2.5 feet]). Mounier found that significant, stratified midden, or historic refuse dumps, were present and intact within the project site. His investigation suggested that the upper levels of the larger midden investigated by Excavation Unit 3 primarily dated from the 19th century, while the lower levels of this midden yielded material more diagnostic of the 18th century. Excavation Unit 4 was also stratified with late 19th or 20th-century material coming out of the top levels, while below a definite stratigraphic change primarily early 19th and 18th-century material was identified. Unit 5 identified a dense, early historic midden similar to the lower levels of Excavation Unit 3.

Ceramics recovered from these units included lead- and manganese-glazed earthenwares, red and yellow earthenwares with slip, combed, marbled and dotted underglaze decoration, and lesser amounts of pearlware, creamware and salt-glazed stonewares. Other artifact types recovered included stem and pipe bowl fragments, food bone, shell, fruit pits, nails, miscellaneous metal artifacts (nails and fasteners), and brick and stone masonry trimmings (Mounier 1995:35). Several prehistoric artifacts were also identified in the historic fill material, including an argillite Lackawaxen-type biface, suggesting that human occupation of this location might extend as far back as the end of the Late Archaic period, *circa*



tFigure 1.3. Plan of Archaeological Investigations at the Borton/Ballinger Farmstead site conducted by R. Alan Mounier in 1995. Source: Mounier 1995.

1,000 B.C. Mounier did not identify any indication of the presence of Early Archaic-period deposits during his investigations. In the conclusion of his report Mounier reiterated his recommendation that the site was a significant historic site that retained its potential to yield additional archaeological information.

C. RESEARCH DESIGN

The Phase I and II investigations of the Borton/ Ballinger (aka Votta) farm site (Mounier 1993, 1995) presented a brief historic context for the farm based primarily on an analysis of historic maps and published secondary sources. The Phase III research design aimed to build on this foundation and develop a site-specific understanding of the property's land-use history and the socio-economic status of the occupants of the property through carefully targeted primary archival study. Archival study focused chiefly on land records (deeds, mortgages, tax ratable assessments), surrogates records (wills and inventories), census records (both population and agricultural schedules) and genealogical information. Much of the research was conducted online through google searches and at key websites (e.g., ancestry.com, newspapers.com, genealogybank.com), but in-person research was also carried out at several area historical repositories, notably the New Jersey State Archives and the Burlington County Historical Society.

In addition, considerable research effort was directed at unraveling the architectural history of the farmhouse. Standard sources dealing with the vernacular architectural traditions of Burlington County and the Lower Delaware Valley (e.g., the Historic American Buildings Survey online archive; the historic site survey files for Burlington County at the New Jersey Historic Preservation Office; Ashton 1976; Lanier and Herman 1997) were consulted for relevant parallels to the buildings at the Borton/Ballinger farm and, more specifically, regional architectural analogs were sought for the unusual cellar arrangement of the farmhouse. A primary goal of both the architectural and historical background research was to support the Phase III archaeological data recovery and provide the additional documentary evidence necessary to maximize an understanding of the site.

Archaeological data recovery was designed to sample an appropriate percentage of the Borton/Ballinger farm site. As originally envisaged, seven trenches and associated open area excavations were proposed allowing for examination of an area of 2,125 square feet, representing approximately 6% of the 0.8 acres (or 34,588 square feet) of the site. An extra 50 x 5-foot trench was added at the request of the NJHPO upon this agency's review of the work plan. It was also expected that a major part of the site (essentially its eastern half) would prove to have been disturbed by nearby campus-related construction in 2002. This meant that the excavations ultimately sampled perhaps as much as 12% to 15% of the intact portions of the site.

The archaeological fieldwork aimed to focus on four main resource categories: the farmhouse foundation; midden deposits and shaft features; the farmyard layout; and the underlying prehistoric deposits. For each of these four resource categories a set of specific research questions was posed, as follows:

1. The Farmhouse Foundation

Substantial portions of the farmhouse foundation and basement were exposed in order to examine the remains of corbelled brick arches, the basement hearth, a sub-basement vault and other architectural details in an attempt to address the following questions:

What does the unusual foundation of the Borton/ Ballinger farmhouse reveal about the historic development of the building and farmstead?
What features of the cellar foundation and basement were part of the original construction of the house and what were added on at a later date?

If elements of the cellar foundation and basement were added later, how do such changes reflect the history of the farm and region?

How do the remains of the farmhouse compare with other houses in the region such as the rural Tallman farmhouse of *circa* 1757 (Mounier 1988) and the urban Indian King Tavern of *circa* 1732/1741 (Hunter Research, Inc. 2014), which both have similar cellar arrangements?

Do the farmhouse's basement plan and architectural details suggest a particular ethnic connection or cultural preference, or offer any sort of social statement?

Does the arrangement of the farmhouse reflect specific farming activities or products or a change in these activities over time?

2. Midden Deposits and Shaft Features

The midden deposits and shaft features on the site were sampled stratigraphically through a combination of manual and mechanical excavation in order to address the following research questions:

What do the artifacts from the site reveal about the cultural, ethnic and socio-economic status of the farm's occupants?

What do changes in artifact type and quantity within the stratified midden deposits tell us about the farm's occupants?

To what extent do changes in refuse disposal over time reflect different periods of the farm's history and changes in cultural standards?
Do the form and content of the shaft features (e.g., wells, cisterns, privies or pits) reveal any cultural, ethnic or socio-economic information about the builders and/or occupants of the farm?

3. The Farmyard Layout

Although it was suspected that much of the farmyard east of the farm lane had been destroyed during the construction of the nearby campus, details about the locations of various outbuildings in relation to the farmhouse were sought both archaeologically and through background research. Depending on their state of preservation, the following research questions were addressed:

Are archaeological remains of any farm-related outbuildings (sheds, barns, coops and other specialized agricultural buildings) still extant on the property?

Are any landscaping features (sidewalks, paths, terraces, flower beds and vegetable gardens) archaeologically present on the property?

Does the placement of the farmhouse and farm-related outbuildings in relation to one another and to shaft features, middens and plantings reveal any cultural or economic preferences of the farm's occupants?

Was the apparent domestic versus agricultural division of the farmyard (located on either side of the farm lane in the 20th century) intentional or functional?

How did the layout of the farmyard change over time?

4. Prehistoric Deposits

An effort was made to identify Early Archaic archaeological deposits relating to the
New Jersey Pinelands Commission Site 558 (Moorestown Quad). Although Mounier did not identify evidence from this period (he did recover a Late Archaic/Early Woodland-period biface) it was thought the site still retained some potential for intact prehistoric deposits within the limit of anticipated project-related disturbance. If such deposits were identified, the following research questions were judged pertinent:

What period does this site date to? An option is included for obtaining three radiocarbon dates if suitable dateable material is identified.

What activities were performed at this site?

How long was this site occupied?

How does this site compare to other sites in the region from the same period?

What lithic technologies and raw materials were being utilized at this site?

Can any faunal or floral evidence be obtained through the excavation of this site?

Chapter 2

HISTORICAL CONTEXT

A. HISTORICAL OVERVIEW

Burlington County was first established in 1681, though its boundaries were only formally established with the unification of the first and second Tenths of West Jersey on May 17, 1694. By 1694, Burlington County consisted of nine townships, one of which was Eversham where the current project site is located. These townships were created in 1688 as part of the first municipal subdivision of Burlington County. Eversham Township continued in existence for more than a century, becoming Evesham Township when it was re-incorporated in 1798. Three years later, its boundaries with neighboring Chester Township were adjusted and then in the following year, 1802, its area was considerably reduced to around two-thirds of its original size following the formation of Washington Township in 1802. Evesham Township covered some 67,000 acres in 1834 and included all of the present-day townships of Mount Laurel and Medford and part of Lumberton Township. In 1847, with the creation of Medford Township, Evesham's area was cut to roughly half its original size, and then, in 1872, the township lost another 13,000 acres or thereabouts when Mount Laurel Township was established, reducing Evesham Township to its current size of roughly 20,000 acres (Woodward and Hageman 1883:316, 371; Snyder 1969:93).

Although Dutch, Swedish and English explorers all established a limited presence in Burlington County in the early 17th century, European settlers began to arrive in larger numbers in the Evesham/Mount Laurel area of Burlington County in the late 17th and early 18th century following the Quaker apportionment of West Jersey. These settlers were primarily of English heritage. Settlement spread eastward from the Delaware River up the navigable waters of the Rancocas, Assiscunk and Pennsauken creeks. Settlers exploited the fertile soils of the Inner Coastal Plain, soon producing large quantities of fruit, vegetables and agricultural products that were sent to Philadelphia by boat via a transportation network that centered on the Delaware River and its navigable tributaries (Cunningham 1953:206; Griscom 1973:3).

The Quaker presence in Burlington County dates from 1677, when the first Quaker settlers began to arrive, fleeing persecution in England and quickly establishing themselves in the Evesham/Mount Laurel area. A Welshman, William Evans, is generally credited with being the first Quaker settler of Mount Laurel. After first settling on the banks of Rancocas Creek with his father and their family in 1682, Evans purchased 300 acres in Mount Laurel in 1688. He married Elizabeth Hanke, a Quaker minister, and, in 1693, the couple relocated to their Mount Laurel property, which they referred to as "Mount Pray." Evans went on to purchase an additional 1,000 acres southeast of Marlton from Margaret Cook in 1700 (Woodward and Hageman 1883:371; Picken and Greenberg 1972:8; Flack 2012:7).

The Evans family hosted the first Quaker meeting in the Evesham/Mount Laurel area at their house in 1694. The first Quaker meetinghouse in Mount Laurel was constructed shortly after in 1698, but a permanent place of worship was not established until 1717 when Evans donated a lot for a meetinghouse and cemetery at the intersection of the Moorestown-Mount Laurel Road and the Mount Laurel-Hainesport Road to the Society of Friends. The current Evesham Friends

Meeting House in Mount Laurel was constructed in 1760 and expanded in 1798 (Woodward and Hageman 1883:375; Picken and Greenberg 1972:8).

The Evans tract, upon which the village of Mount Laurel (Evesham) stood, was approximately 2.5 miles south of the project site. The nearby village of Hartford, less than half a mile north of the project site at the intersection of the Moorestown-Mount Holly Road (Marne Highway/Burlington County Route 537) and the Hartford Road, did not emerge as a focus of settlement until the 1830s. This location was part of an extensive tract of land that had been owned by the Talman family during the late 17th and early 18th centuries. It is unclear how far south the Talman tract extended from the crossroads village, but it is possible that the project site lay originally within its bounds (Woodward and Hageman 1883:372; Mounier 1993:14).

The first settlers in the Evesham/Mount Laurel area likely traveled primarily by water, using the Delaware River and Rancocas Creek to transport agricultural goods to market and as their main means of contact with the outside world. However, the Moorestown-Mount Holly Road (Marne Highway/Burlington County Route 537), soon developed as a major overland route. A precursor to this road apparently existed as early as 1684 and Samuel Lewis may have been capturing the old 17th-century path of the Moorestown-Mount Holly Road in his *Map of New Jersey,* published in 1795 (Figure 2.1). On the basis of this map, the Moorestown-Mount Holly Road headed east from Moorestown, crossing the interfluve between the Pennsauken and Rancocas creeks and passing just north of the project site and then heading on to McAlley's Tavern and Mount Holly. The road, which was commonly known as the Philadelphia Road because it connected Mount Holly to Philadelphia through Moorestown, was "civilized and straightened" in 1794. This likely occurred in anticipation of the relocation of the Burlington County seat from Burlington City to Mount Holly, which was approved by the New Jersey legislature in 1793 and approved by voters in 1796 (Woodward and Hageman 1883:175; Saffron 1987).

The Moorestown-Mount Holly Road remained the only major road in the Hartford area through at least 1812 (Figure 2.2). By 1828, however, a network of local roads had begun to take root, connecting rural farms to the larger population centers of Burlington County (Figure 2.3). This expansion of the transportation system was accompanied by the appearance and growth of villages located at crossroads and mill seats. The first detailed maps of Evesham Township, notably the map of Burlington County published by J.W. Otley and R. Whiteford in 1849 (Figure 2.4), illustrates this relatively dispersed settlement pattern, which came to characterize Evesham Township, and later Mount Laurel Township, well into the 20th century.

In the vicinity of the project site, it is during the second quarter of the 19th century that Hartford Road and the village of Hartford first become clearly visible in the cultural landscape. Although a precursor of Hartford Road certainly existed by 1828, secondary sources date the origins of the village to 1836 and the establishment of a crossroads store by Joseph Davis who, by this time, owned much of the former Talman tract. Although Thomas Gordon did not list Hartford in his *A Gazetteer of the State of New Jersey,* published in 1834, his *Map of the State of New Jersey,* published in 1828, did show a building located on the north side of the Moorestown-Mount Holly Road just east of the precursor to Hartford Road and adjacent to Talman's Creek (Figure 2.3). Unfortunately, the 1828 Gordon map does not identify the building or its owner. Regardless, Hartford received its first blacksmith when John Armington moved to the village around 1838 (Woodward and Hageman 1883:373).

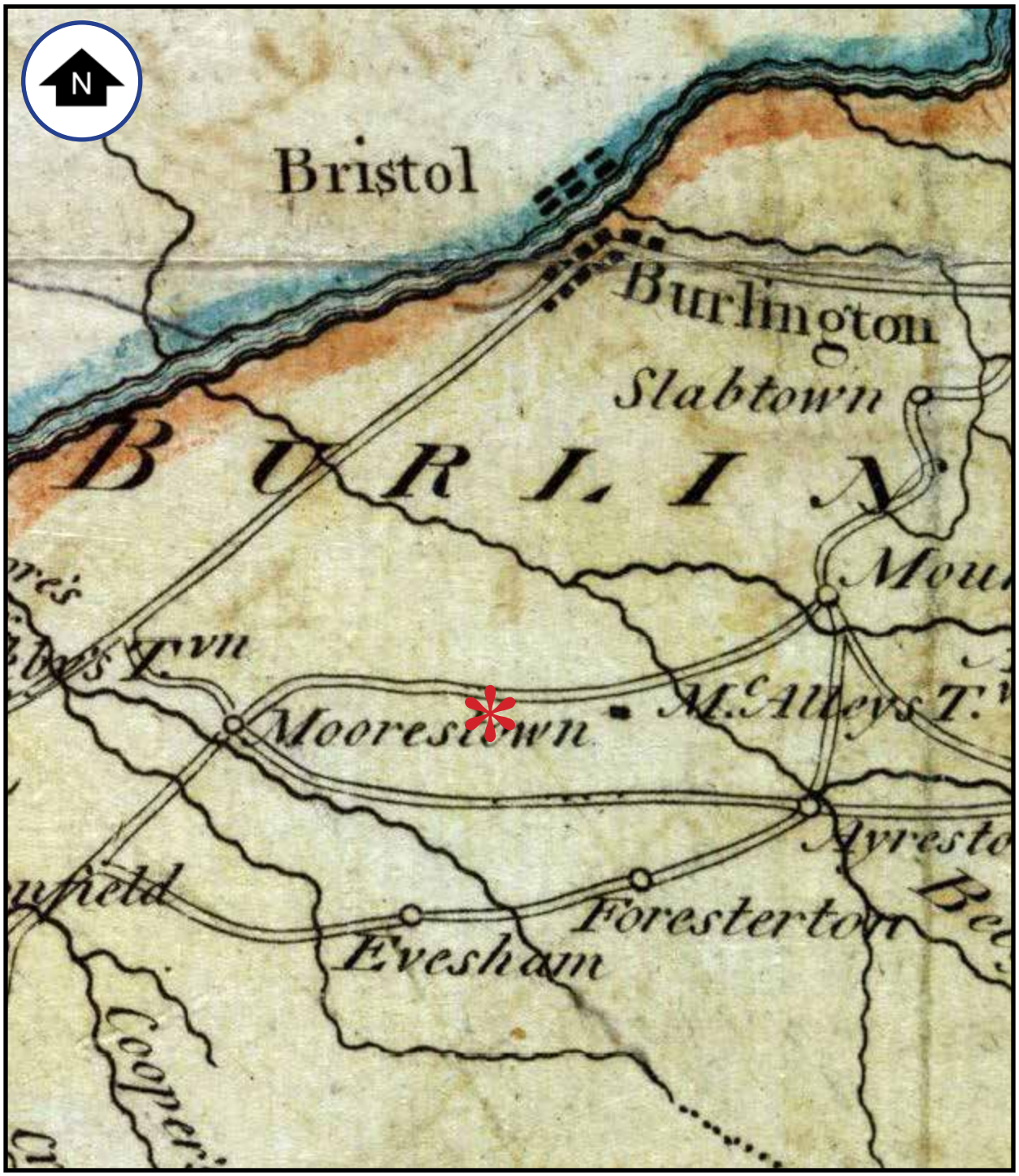


Figure 2.1. Lewis, Samuel. *The State of New Jersey* (detail). 1795. Location of project site indicated with a star (approximately). Scale: 1 inch = 2.2 miles (approximately).

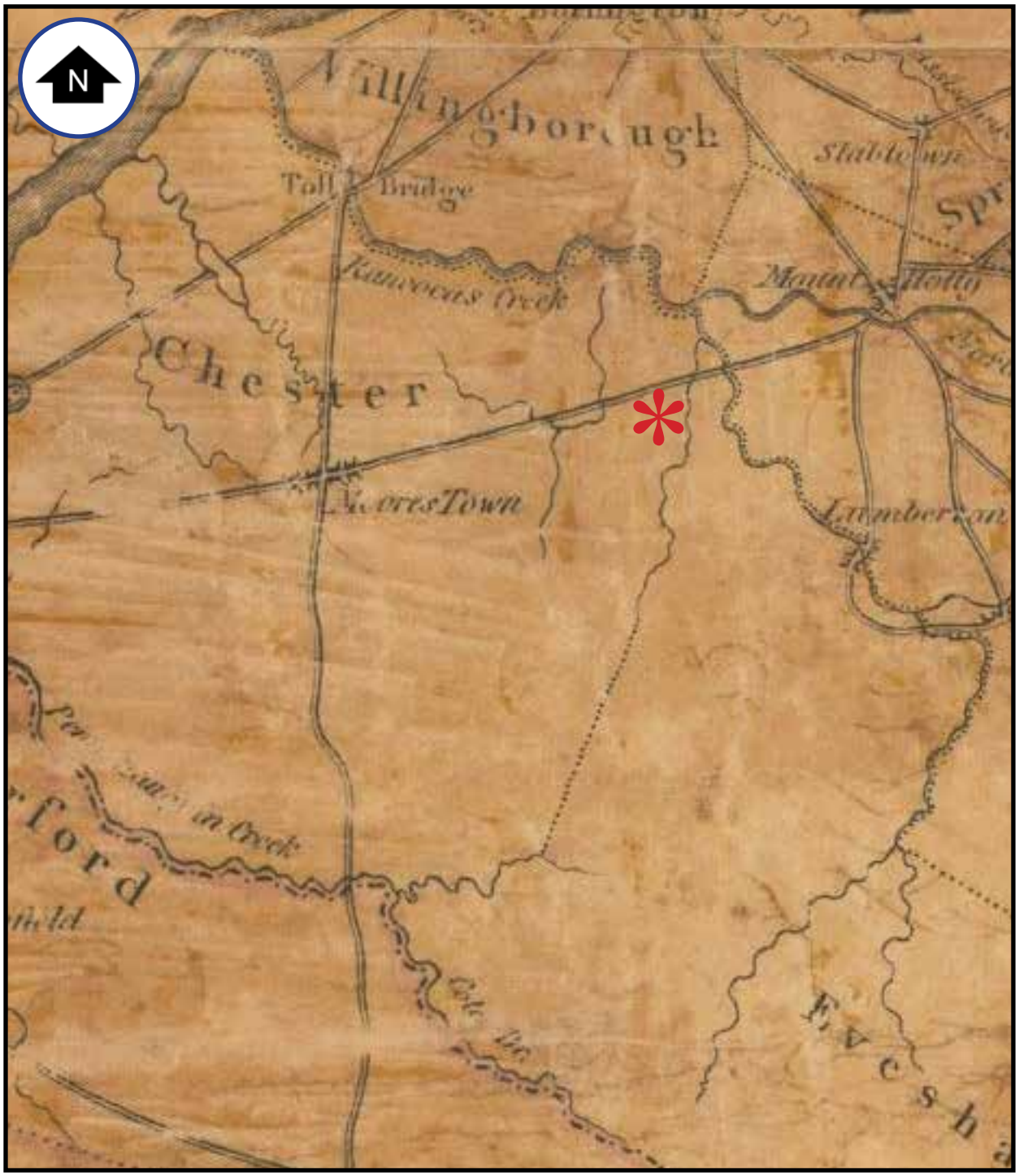


Figure 2.2. Watson, William. *A Map of the State of New Jersey, Compiled from the Most Authentic Information* (detail). 1812. Location of project indicated with a star (approximately). Scale: 1 inch = 2.2 miles (approximately).

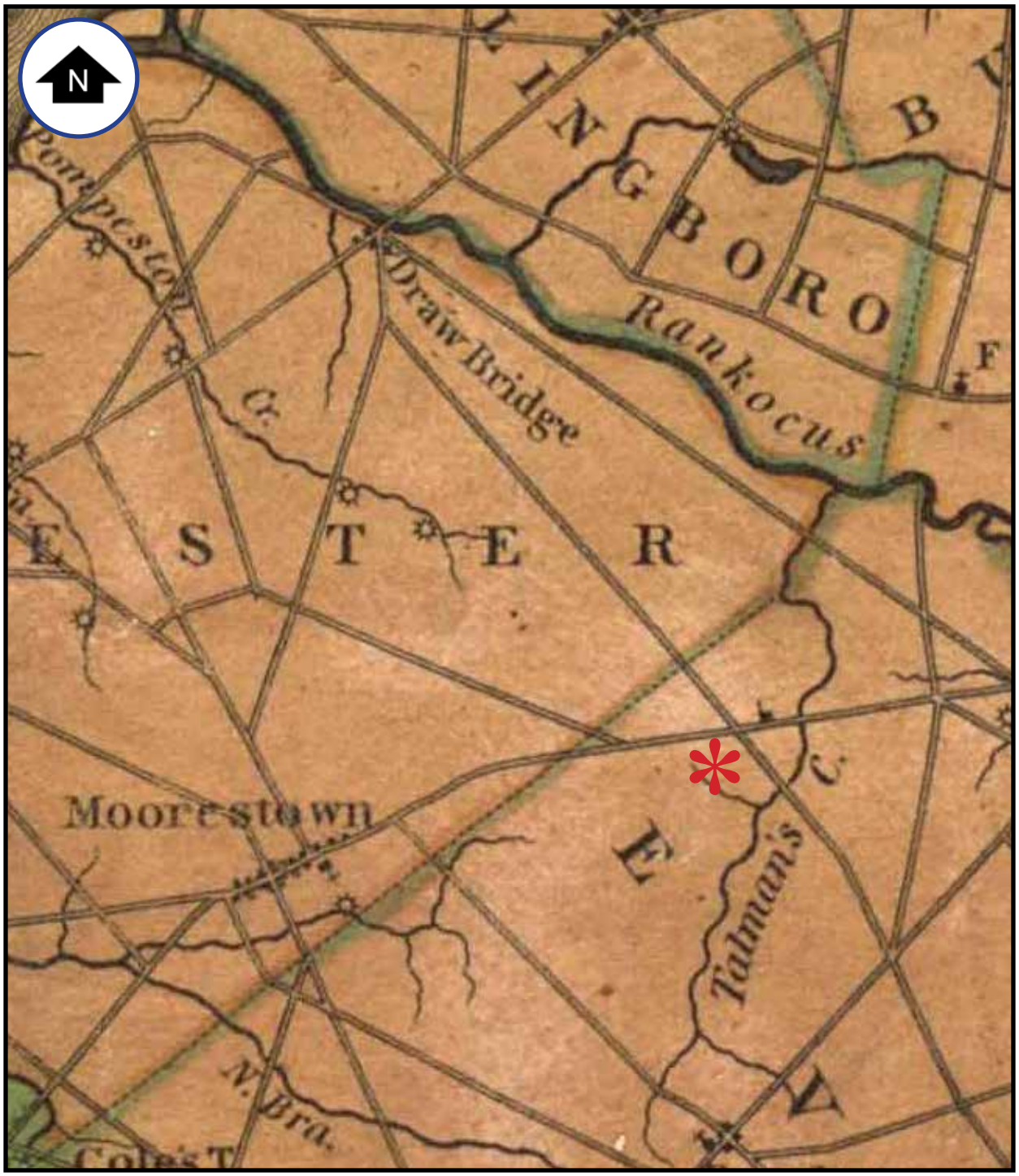


Figure 2.3. Gordon, Thomas. *Map of the State of New Jersey: with Part of the Adjoining States* (detail). 1828. Location of project site circled (approximately). Scale: 1 inch = 3,500 feet (approximately).

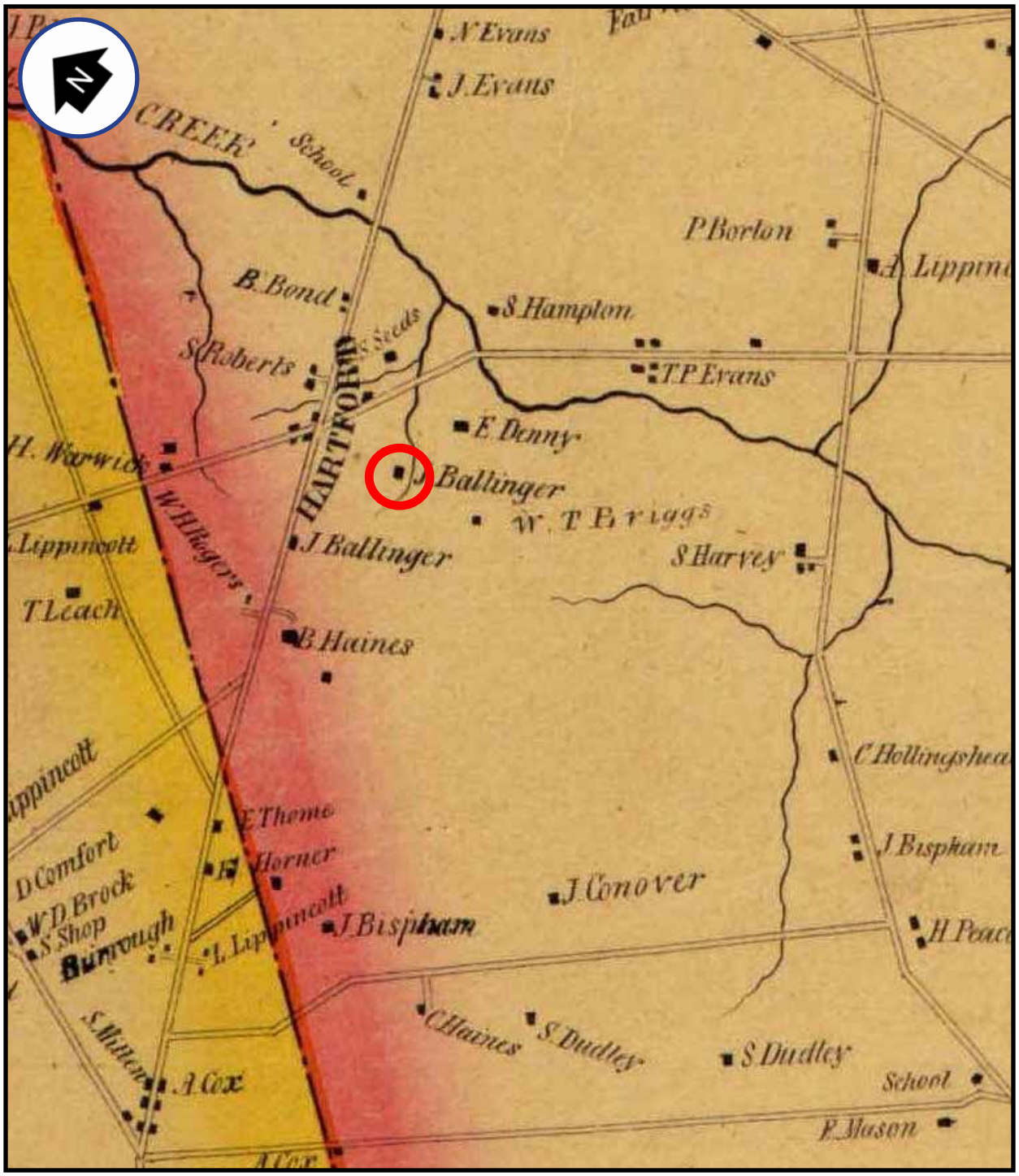


Figure 2.4. Otley, J.W. and R. Whiteford. *Map of Burlington County Mostly from Original Surveys* (detail). 1849. Location of project site circled. Scale: 1 inch = 2,700 feet (approximately).

Despite its location on the Moorestown-Mount Holly Road, the crossroads village of Hartford grew slowly during the mid-19th century (Mounier 1993:12). The Otley and Whiteford map of Burlington County in 1849 shows the village consisting of a cluster of approximately five buildings located immediately adjacent to Hartford Road just north and south of the Moorestown-Mount Holly Road (Figure 2.4). Unfortunately, this map does not label any of these buildings. Hartford continued to expand gradually over the ensuing decades. As shown by the *New Map of Burlington County* created by Parry, Sykes and Early in 1859, the village had more than tripled in size in the 1850s and by the end of the decade contained approximately 18 buildings arrayed along the Moorestown-Mount Holly Road and Hartford Road (Figure 2.5). A new road (Briggs Road) was also opened during this period, running south from the Moorestown-Mount Holly Road just west of the project site. The *Map of the Vicinity of Philadelphia* published by Beers and Lake in 1860 shows a similar arrangement of roads and identifies many of the same property owners (Figure 2.6). The village at this time included several houses, a school, a wheelwright shop, a blacksmith shop and a store.

The arrival of the Camden and Burlington County Railroad in 1866 spurred additional growth in Hartford in the 1870s and 1880s. In 1876, the railroad tracks were routed through the center of the village parallel to and south of the Moorestown-Mount Holly Road. The train station stood on the southwest corner of the intersection of the Moorestown-Mount Holly Road and Hartford Road (Figure 2.7). The railroad, which ran from Coopers Ferry in Camden to Pemberton and had stations in Hartford and Masonville, gave farmers and local residents in Mount Laurel Township access to the markets and consumer goods of Philadelphia. The importance of the Camden and Burlington County Railroad was clearly in evidence in the 1880s. By 1883, the village of Hartford comprised a schoolhouse, a creamery, a blacksmith shop, a wheelwright shop, a coal yard, a railroad station (with a telegraph office), a post office, a Sunday school and two stores. It boasted a population of around 80 people (Woodward and Hageman 1883:373; Saffron 1987; Mounier 1993:12).

Despite the bolstering effect of the Camden and Burlington County Railroad, Hartford remained a small village within a predominantly agricultural landscape into the mid-20th century. Indeed, the area bounded by the Moorestown-Mount Holly Road, Hartford Road and Briggs Road, which included the project site, remained under active cultivation throughout this period (Figures 2.8-2.11). The Moorestown-Mount Holly Road retained its prominence as a regional artery, though it became known by a new name after World War I, when it became an American Legion memorial highway and was renamed the Marne Highway in honor of the second Battle of the Marne. As the 20th century wore on, the growing popularity of the automobile placed increasing pressure on the capacity of the Marne Highway. As a result, the state of New Jersey constructed a new road, N.J. Route 38, running parallel and south of the Marne Highway just under 1,000 feet south of the project site (Saffron 1987).

As a more direct route to Camden, N.J. Route 38 quickly supplanted the Marne Highway in popularity with motorists. As a result, it "gave itself over to the sprawl of fast-food restaurants, supermarkets and car dealerships" (Saffron 1987). In addition to the construction of N.J. Route 38, the growing popularity of the automobile wrought dramatic changes in the landscape all around Hartford. Just over a quarter mile northwest of the project site, the New Jersey Turnpike, constructed in the early 1950s and opened to the public by 1957, helped to render the Camden and Burlington County Railroad obsolete and this line closed down in the mid-1960s. Although the Marne Highway retained its "turn-of-the-century ambiance" into the latter decades of the 20th century, modern

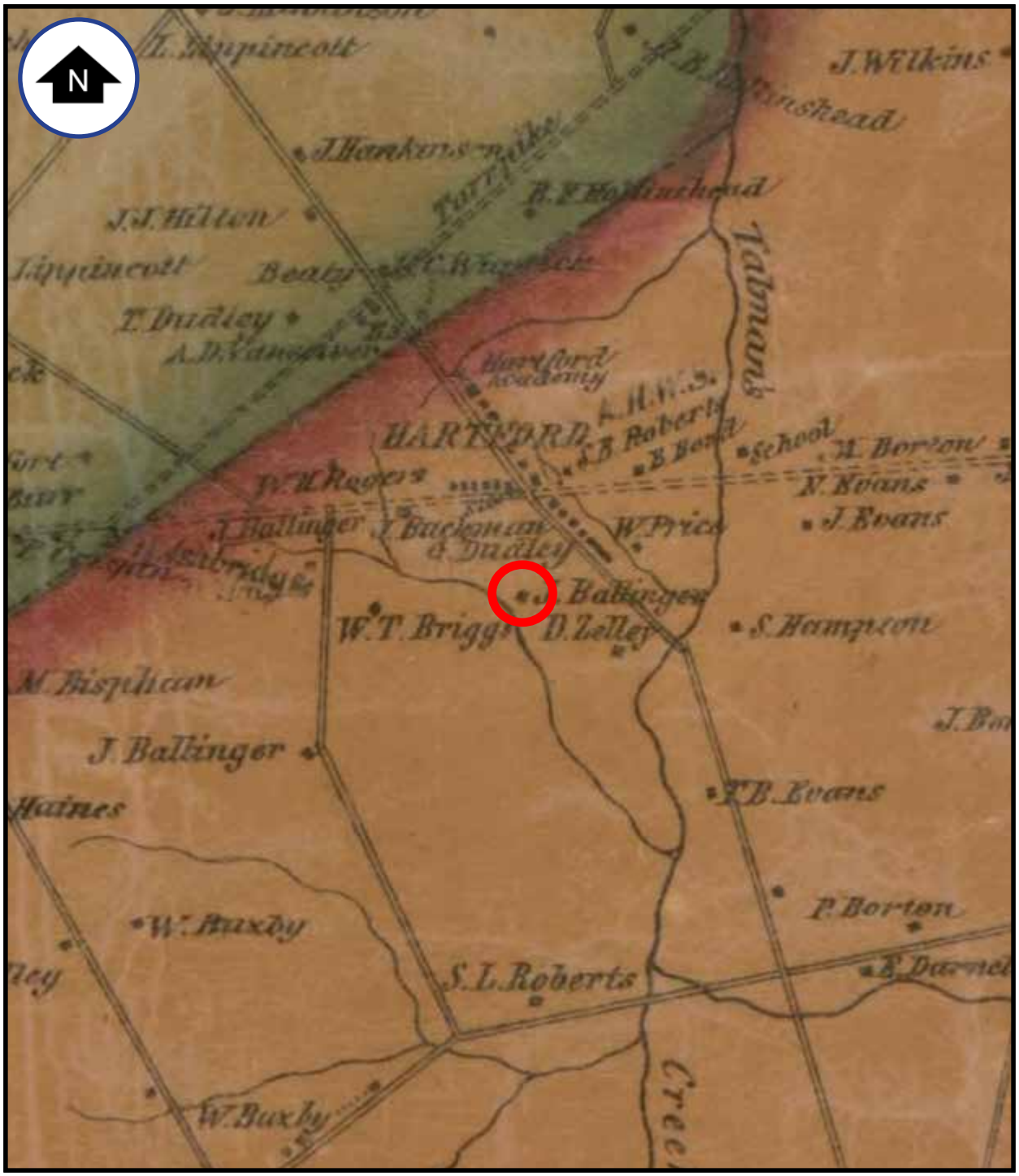


Figure 2.5. Parry, William, George Sykes and F.W. Earl. *New Map of Burlington County: From Actual Surveys and Official Records*. 1859. Location of project site circled. Scale: 1 inch = 1,850 feet (approximately).

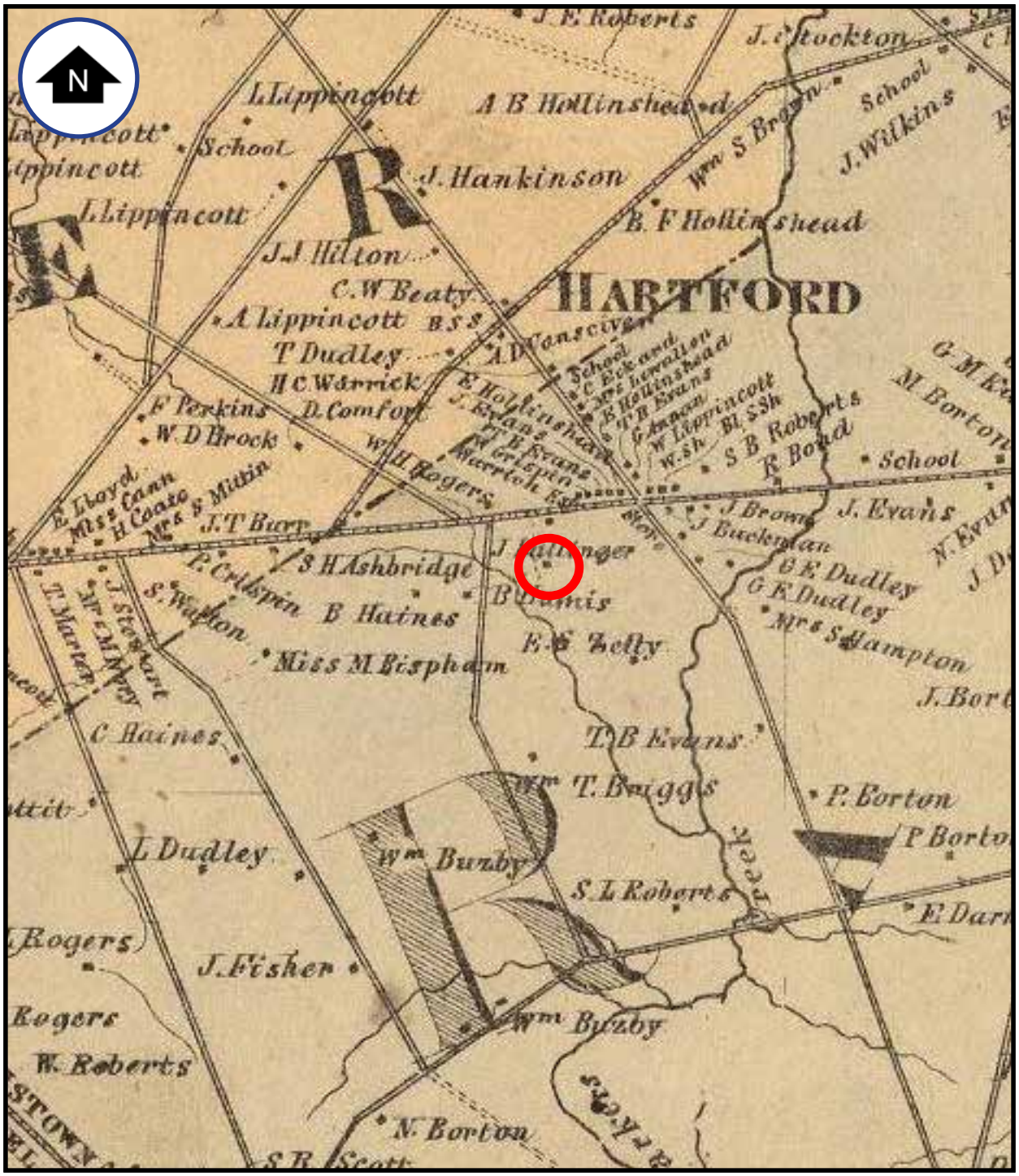


Figure 2.6. Lake, D.J. and S.N. Beers. *Map of the Vicinity of Philadelphia* (detail). 1860. Location of project site circled (approximately). Scale: 1 inch = 2,000 feet (approximately).

Figure 2.7. Scott, J.D. Mt. Laurel Township (detail). *Combination Atlas Map of Burlington County, New Jersey.* 1876. Location of project site circled (approximately). Scale: 1 inch = 1,050 feet (approximately).

Figure 2.8. Aerial Photograph. 1930. Scale: 1 inch = 215 feet (approximately). Location of project site outlined. Source: NETR 2016.

Figure 2.9. Aerial Photograph. 1956. Scale: 1 inch = 320 feet (approximately). Location of project site circled. Source: NETR 2016.

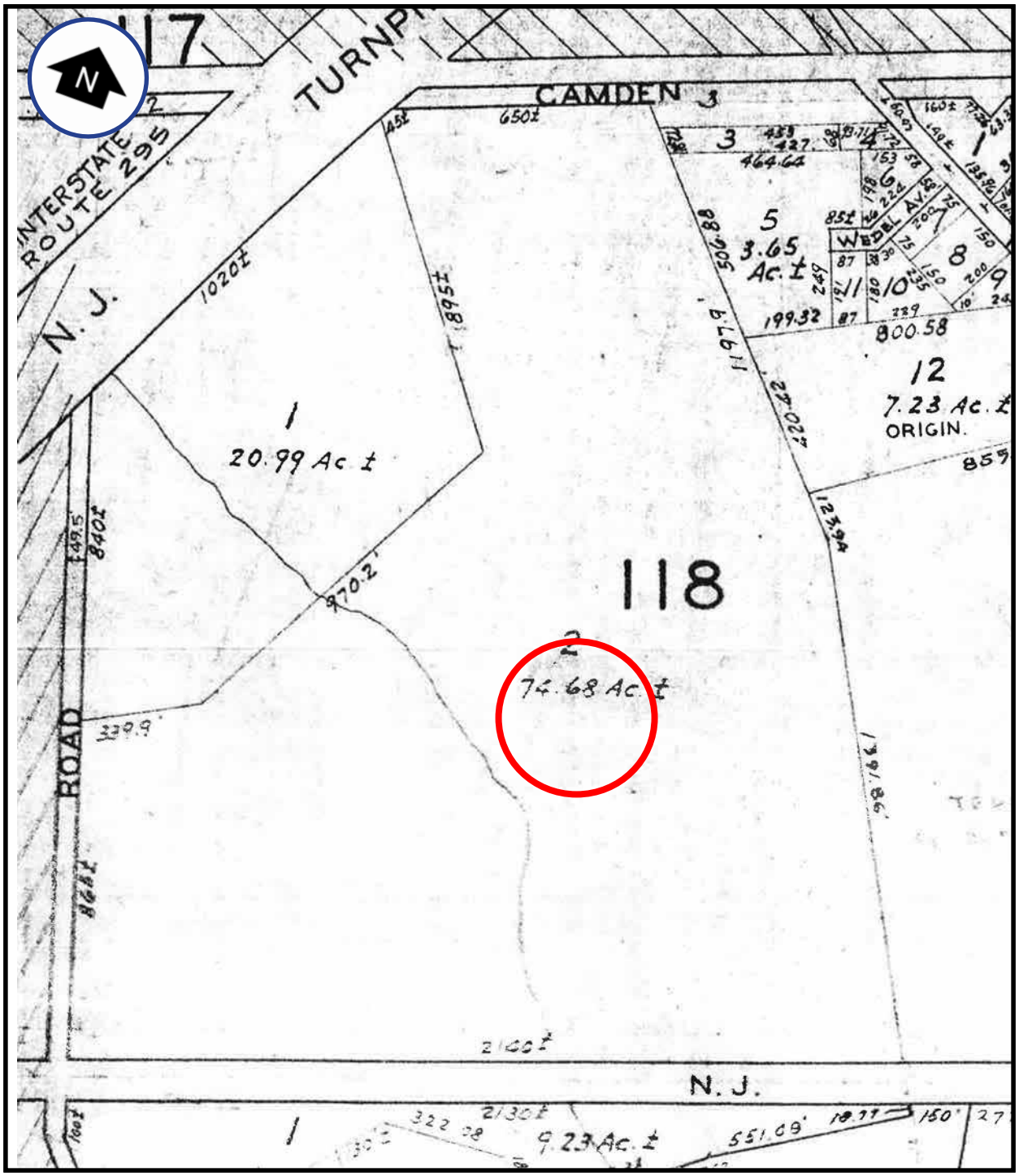


Figure 2.10. Jones, Albert C. *Tax Assessment Map of the Township of Mt. Laurel, Burlington County, NJ* (detail). 1957. Scale 1 inch = 400 feet (approximately). Location of project site outlined. Source: Office of the Burlington County Clerk.

Figure 2.11. Aerial Photograph. 1963. Scale: 1 inch = 75 feet (approximately). Location of project site outlined. Source: NETR 2016.

development began to take hold in the 1980s as real estate developers constructed housing developments and commercial buildings (Saffron 1987). The rapid pace of suburbanization in the area prompted the completion of Route I-295 in the 1980s immediately adjacent and northwest of the New Jersey Turnpike and the burgeoning growth of the local population eventually led to the transformation of the project site from deep-rooted farmland into a part of the Burlington County College campus in the 1990s and early 2000s.

B. SITE HISTORY

1. Introduction

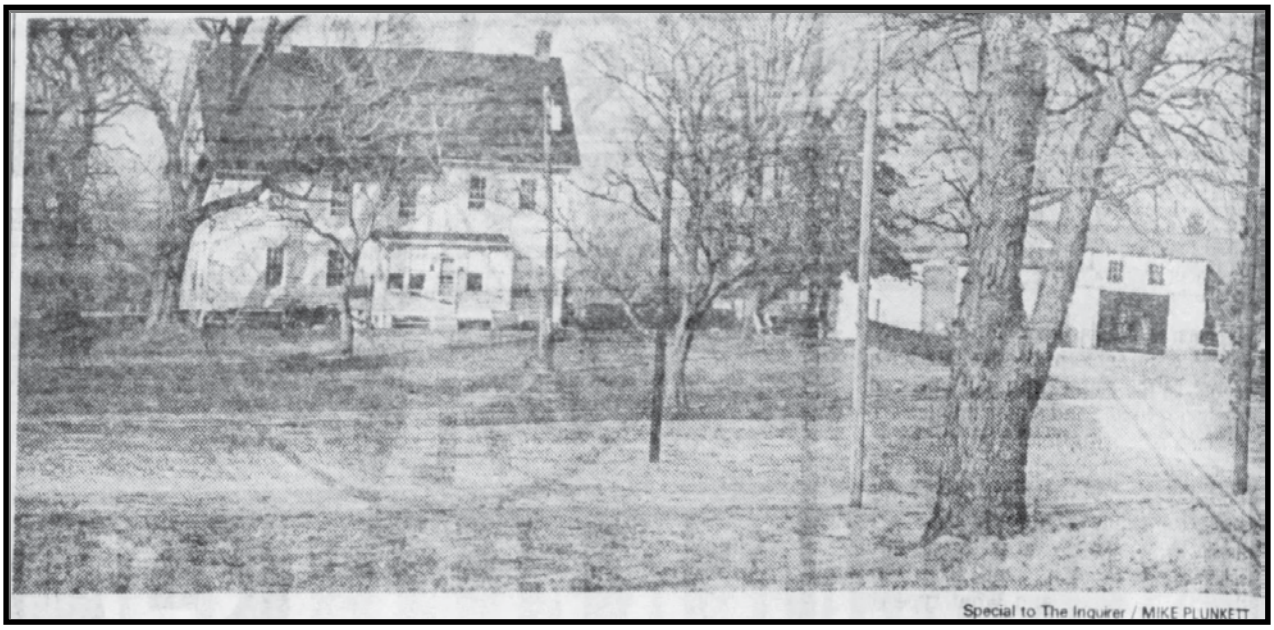
Land records, probate records, census data and genealogical sources were all exhaustively researched to reconstruct the ownership and land use history of the tax parcel containing the farm purchased by the Burlington County Board of Chosen Freeholders from Louis Edward and Mary Votta in 1988 (Photographs 2.1 and 2.2) (Table 2.1). This research revealed that the Votta farm had been part of a larger property originally owned by members of the Borton and Ballinger families in the 18th and 19th centuries and it was determined that the Votta property would be more accurately termed the Borton/Ballinger Farm.

2. The Borton Family, 1760-1787

The history of the Borton/Ballinger property apparently begins with William Borton, Sr. The son of John Borton, Jr. and Hannah Borton, William Borton, Sr. was descended from one of the first English settlers in Mount Laurel Township. His grandfather, John Borton, Sr., a Quaker from Aynho, Oxfordshire, England, arrived in New Jersey with his wife, Ann Kinton Borton, and their children on the ship *Griffin* in 1679 (Haines 1975). John Borton, Sr. quickly acquired property in Burlington County, purchasing a 110-acre tract on the north side of Rancocas Creek in 1680 and one-sixth of a West Jersey proprietary share in 1682. The family settled in 1682, however, on an estate known as "Hillsdown" located on the south side of Rancocas Creek along the route of the current Moorestown-Mount Holly Road. Extending south to the village of Masonville, "Hillsdown" originally comprised 200 acres (Mason 1908:10; Decou 1929:118; Mann 1979:9-10). John Borton, Jr. inherited "Hillsdown," which had grown to 300 acres, by the time of his father's death in 1687. William Borton, Sr., as John Borton Jr.'s second son, did not stand to inherit the property (Mason 1908:12; Mann 1979:18; Borton Family File).

William Borton, Sr. married Deborah Hager (Hedge) in Haddonfield, New Jersey, in April 1731. The couple had three children, William, Esther and Hannah, before Deborah Hager Borton died *circa* 1740. William Borton, Sr. then married Abigail Lord in Haddonfield, New Jersey, in March 1741. William and Abigail Lord Borton had four children: Joshua, Josiah, Caleb and Sarah. At the time of his death in 1763 William was a modestly wealthy farmer and tanner with a personal estate worth more than £472. The inventory of his belongings documents a house furnished with two beds, chests, a clothes press, tables, a clock and a chest of drawers. His livestock included a riding horse, a mare and a colt, two steers, a pair of oxen, four cows and an unspecified number of young cattle. Additionally, he possessed an extensive stock of saddle leather, shoe leather and animal skins (Burlington County Inventory 11/317).

Unfortunately, it is not clear from the available primary sources whether or not William Borton, Sr. ever occupied the Borton/Ballinger property. He appears in the records of the Haddonfield Monthly Meeting in the 1730s and 1740s, which suggests that he lived in or near Haddonfield during this period. However, he was a resident of Evesham Township by the time he



Photograph 2.1. Borton/Ballinger House, *circa* 1988. Source: *The Philadelphia Inquirer*, Sunday December 11, 1988.

Special to The Inquirer / DAVID M. WARREN

Louis Votta walks the farm his family has run for 59 years. The county bought it as a school site.

Photograph 2.2. Borton/Ballinger House, *circa* 1989. Source: *The Philadelphia Inquirer*, Sunday December 15, 1989.

wrote his will on October 28, 1760. In this document, he identified the land that he left to William Borton, Jr., which became the Borton/Ballinger farm, as "the lower part of my plantation situate in Evesham." It appears, nevertheless, that William Borton Sr. was not living on the plantation in 1760, for he left "the house in which I now live and the lot on which it stands" to his wife Abigail Lord Borton during her widowhood. Regardless, William Borton, Sr. died on June 3, 1763, and William Borton, Jr. inherited the Borton/Ballinger farm along with a 26-acre meadow tract (Burlington County Will 7415C).

William Borton, Jr. married Martha Owen in Burlington County on April 7, 1760. Their daughters Hannah Borton and Prudence Borton were born on February 19, 1761, and December 25, 1762, respectively. Primary source documents suggest that, unlike his father, William Borton, Jr. may have occupied and actively farmed the Borton/Ballinger farm. According to New Jersey tax records, William Borton, Jr. owned a 200-acre farm in Evesham Township in 1770. This closely matches the combined acreage of the Borton/Ballinger farm and the meadow that he inherited from his father (Burlington County Tax Ratables, Evesham Township 1770).

It is not known who constructed the first dwelling on the Borton/Ballinger farm. The architectural evidence suggests that the three-bay section of the house seen in a photograph taken in 1988 may from the 18th century because of the arrangement of the windows and the roofline (Photograph 2.1). Archaeological testing undertaken by R. Alan Mounier in 1993 and 1995 indicated that the house was constructed *circa* 1750 (Mounier 1993: I; Mounier 1995: i). Although this date would place the construction of the first dwelling on the Borton/Ballinger farm within the tenure of William Borton, Sr., it seems more likely that William Borton, Jr. constructed it around the time he married Martha Owen in 1760 or inherited the property from his father in 1763.

Like his father, William Borton Jr. was a moderately wealthy farmer. His personal estate was valued at over £647. Although lacking in detail, an inventory of his personal estate reveals a house comfortably furnished with beds, tables, chests, a desk, a chest of drawers, pewter and tin ware, brass kettles, iron pots, a clock and books. The inventory also provides information about William Borton, Jr.'s farm. In addition to raising horses, cattle, sheep and hogs, William also grew hay, rye, Indian corn, flax, oats and peas. The farm almost certainly contained an apple orchard, for the inventory lists a cider mill and press among his possessions. William Borton, Jr. died intestate in July 1779, and his property was divided equally between his daughters, Hannah and Prudence.

Hannah Borton married Levi Ballinger at the Evesham Friends Meeting House on April 14, 1784. Prudence Borton married Joseph Ridgway in Burlington County on March 18, 1786. Levi and Hannah Ballinger purchased Prudence's share of the Borton/Ballinger Farm from Prudence and her husband, who lived in Willingboro Township, for £850.00 on May 21, 1787. The Borton/Ballinger farm subsequently remained in the hands of the Ballinger family, apart from two brief interludes, for the next 89 years.

3. The Ballinger Family, 1787-1876

Born on February 24, 1762, to Thomas and Mary Ballinger, Levi Ballinger was a native of Evesham Township and a member of the Evesham Friends Meeting. After marrying Hannah Borton in 1784, Levi and his wife likely settled on the Borton/Ballinger farm. He referred to the property in his will of 1839 as the "tract of land whereon I now live" (Burlington County Will F/111). Levi Ballinger and Hannah Borton Ballinger had nine children: five daughters (Mary, Martha, Hannah, Rachel and Sarah) and four sons (Thomas, William, Levi and Jacob). Levi Ballinger owned extensive property in Evesham

Table 2.1. Borton/Ballinger House Site, Sequence of Ownership.

Transfer Date	Grantor	Grantee	Reference	Sale Price	Notes
3 June 1763	William Borton Sr.	William Borton Jr.	Burlington County Will 11/317	n/a	William Borton leaves the lower part of his plantation containing 188 acres and his meadow adjoining his brother Obadiah Borton to his son William Borton Jr.
27 July 1779	William Borton Jr.	Hannah Ballinger and Prudence Ridgway, daughters of William Borton Jr.	Burlington County Inventory #19697C	n/a	William Borton Jr. dies intestate with a wife and two daughters. His property is divided in half among his daughters Hannah Ballinger and Prudence Ridgway.
21 May 1787	Joseph and Prudence Ridgway	Levi and Hannah Ballinger	Burlington County Deed N/59	£850	Joseph and Prudence Ridgway sell their moiety (half) of William Borton Jr.'s property to their sister and brother-in-law. William Borton Jr.'s property included a plantation of a little over 182 acres on the south side of the Mount Holly Road and an adjoining 28-acre meadow.
15 March 1813	Levi and Hannah Ballinger	Job Collins	Burlington County Deed Z7/507	$4,000	Job Collins purchases the approximately 182-acre plantation and the 28-acre meadow.
16 March 1813	Job Collins	Levi and Hannah Ballinger	Burlington County Deed Z7/508	$4,000	Levi and Hannah Ballinger purchase the approximately 182-acre plantation and 28-acre meadow.
1842 (death date inferred)	Levi Ballinger	Jacob Ballinger	Burlington County Probate Record #14884	n/a	Levi Ballinger's will leaves a farm to each of his four sons. Jacob Ballinger receives the northerly portion of the farm occupied by Levi Ballinger. Jacob Ballinger's brother Levi Ballinger receives the southern portion of this farm, which is described as containing a brick house, and a 28-acre ditch meadow.
28 October 1848	Biddle and Sarah Haines	Jacob Ballinger	Burlington County Deed H5/215	Unknown	7.77 acre acre parcel adjoining the land Jacob Ballinger inherited from Levi Ballinger.
26 March 1868	Biddle and Elizabeth B. Haines	Jacob Ballinger	Burlington County Deed M7/284	Unknown	7.88 acre parcel adjoining the land Jacob Ballinger inherited from Levi Ballinger and the parcel he purchased from Biddle Haines in 1848.
25 March 1869	Jacob Ballinger	Levi Rogers	Burlington County Deed Z7/509	$21,409.50	122.34 acre parcel south of land owned by the Camden and Burlington County Railroad.
25 March 1874	Levi and Lydia Rogers	Jacob Ballinger	Burlington County Deed Y8/280	$15,858.50	122.34 acre parcel south of land owned by the Camden and Burlington County Railroad.
25 March 1876	Jacob and Hannah Ballinger	Amos Ashead	Burlington County Deed G9/362	$15,292.50	122.34 acre parcel south of land owned by the Camden and Burlington County Railroad.
18 March 1905	Benjamin S. Ashead (widower), Rebecca S. Ashead and John Morris and Elizabeth T. Ashead	Joseph H. Ashead	Burlington County Deed 395/325	$4,898.90	Amos Ashead dies intestate, and his farm is divided between his four children. Benjamin S. Ashead, Rebecca S. Ashead and John Morris and Elizabeth T. Ashead sell their 3/4 interests in the 122.34 acre farm south of land owned by the Camden and Burlington County Railroad to Joseph H. Ashead.
20 April 1921	Joseph H. Ashead	Frank Visco	Burlington County Deed 584/111	$15,000	122.34 acre farm south of land owned by the Camden and Burlington County Railroad excepting a 1-acre parcel adjoining the Camden and Mount Holly Road and a 20 feet-wide lane leading from the road to the farm.
25 January 1923	Frank and Filomena Visco	Clayton L. Andrews	Burlington County Deed 611/55	$1	122.34 acre farm south of land owned by the Camden and Burlington County Railroad excepting a 1-acre parcel adjoining the Camden and Mount Holly Road and a 20 feet-wide lane leading from the road to the farm.
2 November 1925	Clayton and Anna P. Andrews	Green Acres, Inc.	Burlington County Deed 658/392	$1	122.34 acre farm south of land owned by the Camden and Burlington County Railroad excepting a 1-acre parcel adjoining the Camden and Mount Holly Road and a 20 feet-wide lane leading from the road to the farm, a 1-acre parcel adjoining Briggs Road and lands owned and occupied by the Camden and Burlington Railroad Company.
12 March 1929	Green Acres, Inc.	Clayton L. Andrews	Burlington County Deed 730/169	$1	122.34 acre farm south of land owned by the Camden and Burlington County Railroad excepting a 1-acre parcel adjoining the Camden and Mount Holly Road and a 20 feet-wide lane leading from the road to the farm, a 1-acre parcel adjoining Briggs Road and lands owned and occupied by the Camden and Burlington Railroad Company.
12 April 1932	Clayton and Anna P. Andrews	Charles and Mary Votta	Burlington County Deed 792/422	$1	122.34 acre farm south of land owned by the Camden and Burlington County Railroad excepting a 1-acre parcel adjoining the Camden and Mount Holly Road and a 20 feet-wide lane leading from the road to the farm, a 1-acre parcel adjoining Briggs Road, lands owned and occupied by the Camden and Burlington Railroad Company and a 3.936 acre parcel containing the N.J. Route 38 right of way.
24 January 1964	Gerald (Jerry) and Althea Votta, Marie and Dante Brindisi and Anna and James Gibson	Louis Votta	Burlington County Deed 1562/847	$1	Charles Votta dies intestate, and his farm is divided between his seven children. Gerald Votta, Marie Brindisi and Anna Gibson sell their 3/7 interests to Louis Votta. Three tracts of land: 1) 77.166-acre parcel bounded by the New Jersey Turnpike, the Marne Highway and N.J. Route 38. 2) 8.37-acre parcel south of N.J. Route 38 and east of Briggs Road. 3) 31.135-acre parcel east of Briggs Road.
28 December 1988	Louis Votta	Burlington County Board of Chosen Freeholders	Burlington County Deed 3780/109	$4,510,000	74.394-acre parcel south of the New Jersey Turnpike and the Marne Highway, west of Block 300, Lots 3.01, 3, 5, 12 and 13 and north of N.J. Route 38 and east of Briggs Road.
28 December 1988	Mary Votta	Burlington County Board of Chosen Freeholders	Burlington County Deed 3780/113	$1	74.394-acre parcel

Township. In addition to the Borton/Ballinger farm, he inherited a farm on the south side of the Medford-Evesboro Road from his brother Joshua Ballinger after the latter's death *circa* 1784 (Hunter Research Inc. 2015:3-5).

In his will of 1839, Levi Ballinger divided his Evesham Township property between his four sons, Thomas, William, Levi and Jacob. Jacob Ballinger, the youngest son, born in 1806, received the Borton/Ballinger farm, which represented the northern portion of his father's property. Levi Ballinger devised the southern portion of his farm, which included a brick house, and a 28-acre ditch meadow to Levi Ballinger, Jr. (Burlington County Will F/111). The size of the Borton/Ballinger farm *circa* 1839, when Levi Ballinger died, is unclear. Based on later land acquisitions by Jacob Ballinger, however, it is believed that he inherited approximately 107 acres from his father. Jacob purchased a 7.77-acre lot adjoining the Borton/Ballinger farm from Biddle Haines on October 28, 1848, and a 7.88-acre lot, also adjoining the property and acquired from Haines, on March 26, 1868 (Burlington County Deeds H5/215 and M7/284). Jacob Ballinger formally incorporated both of these lots into the Borton/Ballinger farm when he ordered a survey made of the property in 1868 (Burlington County Deed Z7/509).

Jacob Ballinger received formal title to the Borton/Ballinger farm after Levi Ballinger died *circa* 1839. However, Jacob clearly occupied the farm before his father wrote his will on August 24, 1839, for this document described this particular piece of property as "the northerly part, which is now occupied by my said son Jacob" (Burlington County Will F/111). It is likely that Jacob Ballinger took up residence on the Borton/Ballinger farm around the time he married Hannah Coalston on March 9, 1836. In 1840, his household comprised himself, his wife, a man between the ages of 20 and 30 (likely a farm laborer or servant), a boy between the ages of ten and 15 (possibly a farm laborer or servant), a boy between the ages of five and ten (possibly a relative), a boy below the age of five (likely their son) and a girl below the age of five (possibly a relative) (U.S. Federal Census of New Jersey, Population Schedules 1840).

Historic maps testify to the enduring tenure of Jacob Ballinger and the changing appearance of the farm that housed him and his household. The Otley and Whiteford map of Burlington County in 1849 shows Jacob Ballinger owning two houses, one located immediately adjacent to the Moorestown-Mount Holly Road and the other located some distance south of the intersection of the Moorestown-Mount Holly Road and Hartford Road near a creek that probably corresponds to present-day Parkers Creek. It is suspected that a tenant rented the house on the Mooretown-Mount Holly Road, while Jacob Ballinger and his family occupied the house next to the creek. The latter is thought to be the original homestead on the Borton/Ballinger farm and the site of the current archaeological investigations. Both houses appear again under Jacob Ballinger's ownership on the Parry, Sykes and Earl map of 1859 and the Lake and Beers map of 1860, but the house on the Moorestown-Mount Holly Road had been pulled down by the time J.D. Scott published his *Combination Map Atlas of Burlington County* in 1876 (see above, Figures 2.4-2.7). It was likely demolished to make way for the Camden and Burlington County Railroad in 1866.

Following in the footsteps of his maternal grandfather, William Borton, Jr., Jacob Ballinger engaged in mixed agriculture at the Borton/Ballinger farm, raising livestock and growing grains and vegetables. He likely ran the farm with the help of his 13-year-old son, Charley Ballinger, and a 12-year-old Irish boy named James McCollon, who lived in the Ballinger household. According to the population schedules of the 1850 federal census for Evesham Township, Jacob Ballinger's household also included his wife, Hannah Coalston Ballinger, his son, Joseph Ballinger (aged 6),

his daughter, Elizabeth Ballinger (1), a woman named Rebecca Keen (35) and her son, Alfred Keen (4). In 1850, the 120-acre farm, which comprised 80 acres of improved land and 40 acres of unimproved land, produced 150 bushels of wheat, 300 bushels of Indian corn, 1,000 bushels of Irish potatoes, 20 bushels of sweet potatoes, $75 worth of orchard products and 35 tons of hay. With the 1,000 bushels of Irish potatoes that it grew, the Borton/Ballinger farm was one of the largest producers of Irish potatoes in the immediate vicinity. In contrast to the majority of farmers in the immediate vicinity, who harvested between 100 and 400 bushels of potatoes, only two other farmers equaled or exceeded Jacob Ballinger's Irish potato crop. On the Borton/Ballinger farm ten milk cows produced 200 pounds of butter and 1,000 pounds of cheese. The farm also housed four horses, one other type of cattle (likely a bull) and 14 pigs. Altogether, the livestock were valued at $1,000, and the farm possessed a cash value of $9,600 (U.S. Federal Census of New Jersey, Agricultural Schedules 1850; U.S. Federal Census of New Jersey, Population Schedules 1850).

By 1860, Jacob Ballinger had increased the number of acres under cultivation at the Borton/Ballinger farm from 80 to 100 acres. As in 1850, he likely relied on the help of his 15-year-old son, Joseph Ballinger, and a 14-year-old boy from Pennsylvania, George Allen, to operate the farm. In addition to Joseph Ballinger and George Allen, Jacob's household also included his wife, Hannah Coalston Ballinger, his two daughters, Elizabeth (aged 12) and Mary (4), and a 14-year-old girl named Rachel Lorm. During this period, it appears that the Ballingers shifted their attention away somewhat from mixed crop and dairy farming to more grain production and market gardening. Although the number of cattle on the farm increased from 11 in 1850 to 15 in 1860, the number of milk cows declined from ten in 1850 to seven in 1860. The amount of butter saw a modest increase, rising from 200 pounds in 1850 to 300 pounds in 1860, but cheese production had ceased completely by the latter year. Concurrent with the changes in dairy production, Jacob Ballinger expanded the types of grains cultivated on the farm. In addition to 200 bushels of wheat and 400 bushels of Indian corn, the farm also produced 150 bushels of oats in 1860. Hay production also increased from 35 tons in 1850 to 50 tons in 1860 (U.S. Federal Census of New Jersey, Agricultural Schedules 1850, 1860; U.S. Federal Census of New Jersey, Population Schedules 1860).

Interestingly, the amount of Irish potatoes that the Ballingers harvested dropped sharply from 1,000 bushels in 1850 to 350 bushels in 1860. The amount of sweet potatoes grown on the farm remained constant at 20 bushels, while the value of the orchard products grown on the farm dropped from $75 in 1850 to $30 in 1860. The 1860 federal agricultural census valued all of the market garden produce grown on the Borton/Ballinger farm at $500. In addition to the cattle mentioned above, the farm housed three horses, two donkeys/mules and seven pigs. The agricultural census valued the livestock at $1,434. Despite expanding the acreage of improved land at the Borton/Ballinger farm and introducing a new grain crop to the farm, the cash value of the farm grew by only $400, rising from $9,600 in 1850 to $10,000 in 1860 (U.S. Federal Census of New Jersey, Agricultural Schedules 1850, 1860).

The Borton/Ballinger farm briefly passed out of Ballinger family hands on March 25, 1869 when Levi Rogers purchased the 122.34-acre property from Jacob Ballinger, now living in Chester Township, for $21,409.50 (Burlington County Deed Z7/509). The oldest child of William D. and Lydia Rogers, Levi Rogers grew up on a farm in Evesham Township. He married Lydia B. Evans at the home of Isaiah Evans in Evesham Township on January 12, 1854. The couple settled on a farm in Evesham Township and welcomed a daughter, Martha, in 1856. After purchasing the Borton/Ballinger farm in 1869, Levi Rogers occu-

pied the property with his family. It appears that he either expanded the size of the property by purchasing additional land or that he already owned a neighboring property. The 1870 agricultural census reported that the Borton/Ballinger farm under Rogers ownership encompassed a total of 141 acres of land, which included 120 acres of improved land and 21 acres of unimproved land. Although this was not the largest agricultural property in the immediate vicinity – three neighboring farms contained 200 acres or more – it was one of the most valuable properties, with a cash value of $21,500. With only one daughter, Levi Rogers relied on two laborers (Mason Borden [aged 21] and Charles Idell [17]) to help him run the farm. In 1870, Mason Borden and Charles Idell lived with the Rogers household and received $1,000 in wages and board. The Rogers household also included Levi Rogers (39), Lydia Rogers (45), Martha Rogers (14) and two foster/adopted children (Eliza Moore [12] and Nelson Billings [11]) (U.S. Federal Census of New Jersey, Agricultural Schedules 1870; U.S. Federal Census of New Jersey, Population Schedules 1870).

Like his predecessors, Levi Rogers engaged in mixed agriculture. In 1870, he grew 100 bushels of winter wheat, 400 bushels of Indian corn, and 100 bushels of oats. Rogers greatly increased the size of the Irish potato crop, producing 1,500 bushels and exceeding Jacob Ballinger's peak of 1,000 bushels in 1850. The farm also produced 30 bushels of sweet potatoes, 50 tons of hay, and orchard products and market garden produce valued at $50 and $200 respectively. Among the livestock were two horses, two mules/donkeys, three cattle and three pigs, while ten milk cows produced 200 pounds of butter. Levi Rogers and his family made a comfortable living, with the 1870 federal agricultural census valuing the livestock on the farm at $1,800 and all of the crops and farm products at $3,000 (U.S. Federal Census of New Jersey, Agricultural Schedules 1870).

The farm returned into Ballinger family control when Levi Rogers sold the property back to Jacob Ballinger for $15,858.50 on March 25, 1874. Jacob Ballinger retained ownership of the property for only two years, selling 122.34 acres south of Camden and Burlington County Railroad (i.e., the bulk of the farm), to Amos Ashead for $15,292.50 on March 25, 1876. It is unlikely that Jacob Ballinger returned to the farm to live during this period as both deeds relating to his transfer of the property in the mid-1870s reported Chester Township as his place of residence. According to the population schedules of the 1880 federal census, Jacob Ballinger, who identified himself as a retired farmer, lived in Chester Township with his wife. It is possible, however, that he returned to Hartford sometime after 1880, since he died there at the age of 78 on June 9, 1885 (U.S. Federal Census of New Jersey, Population Schedules 1880).

4. The Ashead Family, 1876-1921

Born on April 6, 1820, to Amos and Sarah Butcher Ashead, Amos Ashead was a native of Waterford Township, Camden County, New Jersey. He married Hannah A. Hoyle, who was born on April 12, 1824 to John and Prudence Butcher Hoyle in Jefferson County, Ohio, on March 23, 1854. The couple lived for a time in Columbiana County, Ohio, before moving to Delaware Township in Camden County, New Jersey, prior to 1870. By the time Amos Ashead purchased the Borton/Ballinger farm from Jacob Ballinger on March 25, 1876, he lived in Mount Laurel Township. After purchasing the property, Amos Ashead moved there and ran the farm with his family. In 1880, the 60-year-old farmer headed a household that included his wife, Hannah (aged 56), their five children (Benjamin [24], Rebecca [22], Joseph [21], Amos [18] and Morris [14]) and an 11-year-old servant, Martha Davis, from Ohio (U.S. Federal Census of New Jersey, Population Schedules 1880).

The agricultural schedules from the 1880 federal census provide the last detailed information about the operation of the Borton/Ballinger farm in the 19th century. As it had throughout the 19th century, the property remained a family-operated farm during the tenure of Amos Ashead. Although Ashead, like the Ballingers and Levi Rogers, continued to engage in mixed agriculture, he apparently decreased the amount of land under cultivation. According to the agricultural schedules, the 104-acre farm contained 74 acres of improved land, 14 acres of meadow, pasture and orchard, and 16 acres of woodland. Amos Ashead kept more than half of the farm's improved land, 47 acres, as grassland. Of this land, 35 acres were mowed and produced 45 tons of hay that presumably fed the majority of the livestock on the property. In fact, the large amount of acreage devoted to hay production suggests that the Asheads focused their farming efforts on animal husbandry. In addition to five horses, the farm supported ten pigs, nine milk cows and five other types of cattle in 1880. This number excluded another nine calves born and 15 cattle sold during the previous year. Together, the milk cows on the farm produced 300 pounds of butter in 1879. This amount of butter was similar to that being produced by the Ashead's neighbors, who reported that their farms produced between 100 and 400 pounds of butter that year. Amos Ashead also owned 30 chickens, who produced 150 dozen eggs in 1879. His neighbors' chickens, in contrast, produced between 180 and 400 dozen eggs in the same year. The 1880 agricultural census valued the livestock on the Borton/Ballinger farm under Ashead ownership at $900 (U.S. Federal Census of New Jersey, Agricultural Schedules 1880).

Amos Ashead devoted the remaining 27 acres of improved land at the Borton/Ballinger Farm to growing cereal and vegetable crops. In 1879, he planted one acre with buckwheat, 12 acres with Indian corn and 11 acres with wheat, resulting in a harvest of 20 bushels of buckwheat, 400 bushels of Indian corn and 157 bushels of wheat. Although his neighbors planted a similar mix of cereal crops on their farms, Amos Ashead was one of only two farmers in the immediate vicinity who chose to plant buckwheat. He also planted three acres of Irish potatoes and a quarter of an acre of sweet potatoes. From these plots, Amos Ashead gathered 300 bushels of Irish potatoes and 40 bushels of sweet potatoes. Like the majority of his neighbors, Amos Ashead used fertilizers to improve the fertility of his farm and relied on laborers to help run the farm. He spent $80 on fertilizers and paid $250 in wages to laborers in 1879. In addition to the acres of buckwheat, Indian corn, wheat, Irish potatoes and sweet potatoes, the farm contained a two-acre orchard with 90 apple trees. In 1879, these trees produced 50 bushels of apples worth $20. In total, the farm produced $4,500 in crops and other goods and possessed a cash value of $15,000 in 1879 (U.S. Federal Census of New Jersey, Agricultural Schedules 1880).

Amos Ashead occupied the Borton/Ballinger farm through the end of the 19th century and into the 20th century. It appears that he continued to actively farm the property during this period with the help of his son Joseph H. Ashead and, in 1895, an African-American farm laborer named Grant Hinton. The population schedules for the 1900 federal census for Mount Laurel Township identified both the 80-year-old Amos Ashead and the 41-year-old Joseph H. Ashead as farmers. Born on September 17, 1858, Joseph H. Ashead never married and he lived with his parents and his older sister, Rebecca S. Ashead, on the Borton/Ballinger farm until his parents' deaths. Amos Ashead died intestate at the age of 83 on March 4, 1904. The Burlington County Surrogate's Court divided his property between his children Benjamin S. Ashead, Rebecca S. Ashead, John Morris Ashead and Joseph H. Ashead. Following the wishes of their father, Benjamin S. Ashead, Rebecca Ashead and John Morris Ashead sold their three-quarter interests in the Borton/Ballinger Farm to Joseph H. Ashead

for $4,898.90 on March 18, 1905 (New Jersey State Census 1895; U.S. Federal Census of New Jersey, Population Schedules 1900).

Although Rebecca Ashead sold her interest in the Borton/Ballinger farm to her brother Joseph, she continued to live there with him through at least 1905. It is unclear if Joseph H. Ashead continued to farm the Borton/Ballinger property. In 1905, his household included his sister, Rebecca S. Ashead (47), and three unrelated individuals, Ella B. Green (18), George W. Davis (45) and James Moore (50), who presumably worked for Joseph as a servant and farm laborers, respectively. By 1910, however, Joseph H. Ashead was no longer a farmer and had left the Borton/Ballinger farm. According to the 1910 federal population census schedule for Mount Laurel Township, he lived in a rented house on Bridgeboro Road with his sister and reported that his livelihood came from his own income. This may indicate that he rented or leased the old Borton/Ballinger farm to a tenant farmer. It seems that Joseph H. Ashead and Rebecca S. Ashead had returned to the Borton/Ballinger farm by 1920, when the federal population census schedule indicated that Joseph was occupying a property that he owned on the Mount Holly Pike with his sister Rebecca. Interestingly, Joseph H. Ashead reported that he was unemployed, while his sister, at the age of 62, worked as a housekeeper for a private family. Joseph and Rebecca Ashead left the Borton/Ballinger farm for the last time less than a year later following the 122.34-acre property's purchase by Frank Visco, an Italian road paver from Philadelphia, for $15,000.00 on April 20, 1921 (Burlington County Deed 584/111) (New Jersey State Census 1905; U.S. Federal Census of New Jersey, Population Schedules 1910, 1920).

5. Changing Ownership, 1921-1932

After Frank Visco purchased the Borton/Ballinger farm from Joseph H. Ashead in 1921, ownership of the property entered an 11-year period of flux, during which time it changed hands four times. Frank and Filomena Visco sold the property to Clayton L. Andrews, a farmer from Moorestown, New Jersey, for $1.00 on January 25, 1923 (Burlington County Deed 611/55). Green Acres, Inc., a company based in Camden, New Jersey, then purchased the farm from Clayton L. and Anna P. Andrews for $1.00 less than two years later on November 2, 1925 (Burlington County Deed 658/392). Green Acres, Inc., in turn, sold the property back to Clayton L. Andrews for $1.00 on March 12, 1929 (Burlington County Deed 730/169). Charles (Carmine) Votta and Mary Vote finally purchased the farm from Clayton L. and Anna P. Andrews for $1.00 on April 12, 1932. Excluded from the purchase was a 3.936-acre parcel that the state of New Jersey acquired in preparation for the construction of N.J. Route 38 in 1932 (Burlington County Deed 792/422).

6. The Votta Family, 1932-1989

Born Carmine Votta in Marisconovo (Marisco Nuovo), Italy, in 1877, Charles Votta arrived in New York City in 1901. By 1920, he had moved to Philadelphia, where he lived with his wife, Mary (Marie) Votta, and their six children (John [aged 18], Anna [14], Millie [11], Jerry [9], Mary [5] and Louis [4 months]) at 525 Washington Avenue. He became an American citizen on December 20, 1923. Prior to purchasing the Borton/Ballinger farm in 1932, Charles Votta worked as a laborer at a machine shop in 1920 and as a woodworker at a mill in Philadelphia in 1930. By 1930, the Votta household included Charles Votta, Mary (Marie) Votta, their seven children (their youngest daughter, Teresa, was born in 1922), Charles Votta's brother-in-law, Joseph Laterza, and his niece, Antoinetta Laterza.

The entire Votta household, including the Laterzas, moved to the Borton/Ballinger farm after Charles Votta purchased the property in 1932 (U.S. Federal Census of Pennsylvania, Population Schedules 1920, 1930; Thompson 1989).

Like Levi and Jacob Ballinger and Amos and Joseph H. Ashead, Charles Votta occupied the Borton/ Ballinger farm with his wife, children and members of his extended family. In 1940, the Votta household comprised Charles and Mary (Marie) Votta, their six unmarried children (Anna, Millie, Jerry, Mary, Louis and Teresa), their niece, Antoinetta Laterza, their oldest son John, their daughter-in-law, Rose, and their granddaughters, Marie and Betty. Charles Votta was then operating a produce farm on the Borton/Ballinger property with the help of his three sons and farm laborers. In 1940, his oldest son, John Votta, served as the foreman and his sons Jerry Votta and Louis Votta worked as laborers. During this period, Charles Votta grew corn, concord grapes, apples and peaches. He continued to run the farm until he died at the age of 82 in a traffic accident on N.J. Route 38 while working on the farm on June 20, 1960. He was buried with his wife, Mary (Marie) Votta in Holy Cross Cemetery in Delaware County, Pennsylvania (U.S. Federal Census of New Jersey, Population Schedules 1940).

After Charles Votta died intestate, the Burlington County Surrogate's Court divided the farm between his seven children. Louis Edward Votta, the youngest son of Charles Votta, went on to assume primary ownership of the farm, purchasing his siblings' shares of the property between 1962 and 1964. His brother John Votta and his sisters Mildred Di Santo and Theresa Rosati each sold a 1/14 interest in the Borton/ Ballinger farm to Louis on May 2, 1962, and a second 1/14 interest in the property to him on February 19, 1964 (Burlington County Deed 1504/555; Burlington County Deed 1559/475). Louis Votta purchased the remaining three 1/7 shares of the property from three of his siblings, Gerald (Jerry) Votta, Marie Brindisi and Anna Gibson, for $1.00 on January 24, 1964 (Burlington County Deed 1562/847). In 1964, the farm comprised a 77.166-acre parcel bounded by the New Jersey Turnpike, the Marne Highway (formerly the Moorestown-Mount Holly Road) and N.J. Route 38, an 8.37-acre parcel adjacent to Briggs Road on the south side of N.J. Route 38 and a 31.135-acre parcel on the east side of Briggs Road (Burlington County Deed 1562/847).

Shortly after Louis Votta formally acquired title to the farm, the property was reduced in size. Votta sold the 31.15-acre parcel on the east side of Briggs Road and a 1.0-acre parcel on Briggs Road to William E. Evans for $80,000.00 on June 26, 1968. He himself retained the 77.166-acre parcel bounded by the New Jersey Turnpike, the Marne Highway and N.J. Route 38 that formed the core of the farm along with the 8.37-acre parcel on the south side of N.J. Route 38. Louis Votta continued to own and operate the farm for the next 20 years, growing grapes, apples, pears and peaches, which he sold in New York and Philadelphia and at a white cinder-block produce stand that he built in front of the farm in 1980. In 1988, Louis Votta occupied the farmhouse with his wife, Mary Oliveto Votta, his brother, John Votta, his sister, Mildred Di Santo, and his cousin, Antoinetta Laterza (Thompson 1989).

The late 1980s brought dramatic change to the Borton/ Ballinger farm. The farm shrank again in size in 1987, when the State of New Jersey claimed three acres on the south side of N.J. Route 38 as part of a project to widen the highway approach to Interchange 40 on the New Jersey Turnpike (Saffron 1987; Thompson 1989). A year later, on December 28, 1988, after turning down numerous offers from developers, Louis Votta finally sold his farm, then containing 74.394 acres, for $4,500,000 to the Burlington County Board of Chosen Freeholders, who planned to construct a technology center for Burlington County Community College (Burlington County Deed 3780/109). Votta and his family remained living at the farm until the

fall of 1989, when they moved to Moorestown, New Jersey. Louis Edward Votta died in Moorestown at the age of 83 on March 26, 2003.

7. Burlington County College and Rowan College at Burlington County, 1989-present

The Burlington County Board of Chosen Freeholders took over the Borton/Ballinger farm after the Votta family relocated to Moorestown in 1989. Preparation for the construction of the new Burlington County College technology center began almost immediately, and the farmhouse was demolished in the early 1990s. In 1993, Mounier (1993:14) reported that no historic structures remained standing on the property. Construction on the Burlington County College technology center began sometime around 1993, with the first building being completed by 1995. The campus gradually expanded over the ensuing years and had assumed its current configuration by 2002. In 2015 Burlington County College partnered with Rowan University and was renamed Rowan College at Burlington County.

Chapter 3

ARCHAEOLOGICAL INVESTIGATIONS

A. METHODOLOGY

The Phase II and III archaeological fieldwork was conducted as a single continuous field operation in two stages over a four-week period by a team comprising a Principal Investigator, a Senior Archaeologist and two Archaeologists with the aid of a mechanical excavator.

1. Phase II Fieldwork

This stage of archaeological fieldwork entailed the mechanical excavation of two long trenches (Trenches 101 and 102) in a cruciform pattern across the site to determine the extent of survival of the historic archaeological deposits associated with the Borton/ Ballinger Farmhouse (Figure 3.1; Photograph 3.1). The trenches were excavated across the house site and farmyard roughly east-west (85-by-5-foot trench) and roughly north-south (75-by-5-feet). This archaeologically guided mechanical excavation extended through modern fill and heavily disturbed demolition strata in an effort to locate and assess the integrity of historic ground surfaces or archaeological features (in particular the house foundation) identified during the previous investigations. A series of shovel tests (Shovel Tests 1001 through 1011) were excavated within these trenches, and outside of the footprint of the house, to characterize the soil stratigraphy and potentially identified prehistoric archaeological deposits of the yard around the house foundation. If this phase of work had determined that the site had been substantially impacted to the degree where it no longer had archaeological integrity, the level of data recovery work necessary would have been reassessed in consultation with the New Jersey Historic Preservation Office (NJHPO). The Phase II fieldwork determined that significant elements of the Borton/ Ballinger Farmhouse foundation and surrounding historic cultural stratigraphy survived on site and the Phase III archaeological data recovery was conducted as originally planned.

2. Phase III Fieldwork

In all the data recovery fieldwork involved the planed mechanical excavation of an additional 8 trenches totaling 1,615 square feet (the data recovery work plan called for the excavation of 5, 50-foot-long, 5-foot-wide trenches, or 1,250 square feet) (Figure 3.1). Trenches were expanded as necessary to fully explore historic features identified during the course of the investigation. This included exposing the entire house foundation, which involved the excavation of a roughly 40 by 50-foot (2,000 square foot) area. Exposed features were then investigated and documented manually. Shovel testing was conducted of all soils beyond the house footprint at a 10-foot interval within the trenches. Fourteen excavation units were also excavated and all soils screened within and around trenches. Where possible, all excavations were extended through potentially culture-bearing strata.

Data recovery fieldwork adopted an open-area excavation strategy, with an emphasis on recovering structural and functional information about features and on obtaining maximum horizontal exposure of archaeological deposits through concurrent excavation of adjoining and diagonally contiguous trenches. This approach was intended to both have the most potential to identify smaller outlying features and maximize the information yield on spatial patterning

Photograph 3.1. View looking southeast of Borton/Ballinger Farmhouse Area prior to the start of excavation (Photographer: Joshua Butchko, August 2016) [HRI Neg. #16034/D1:003].

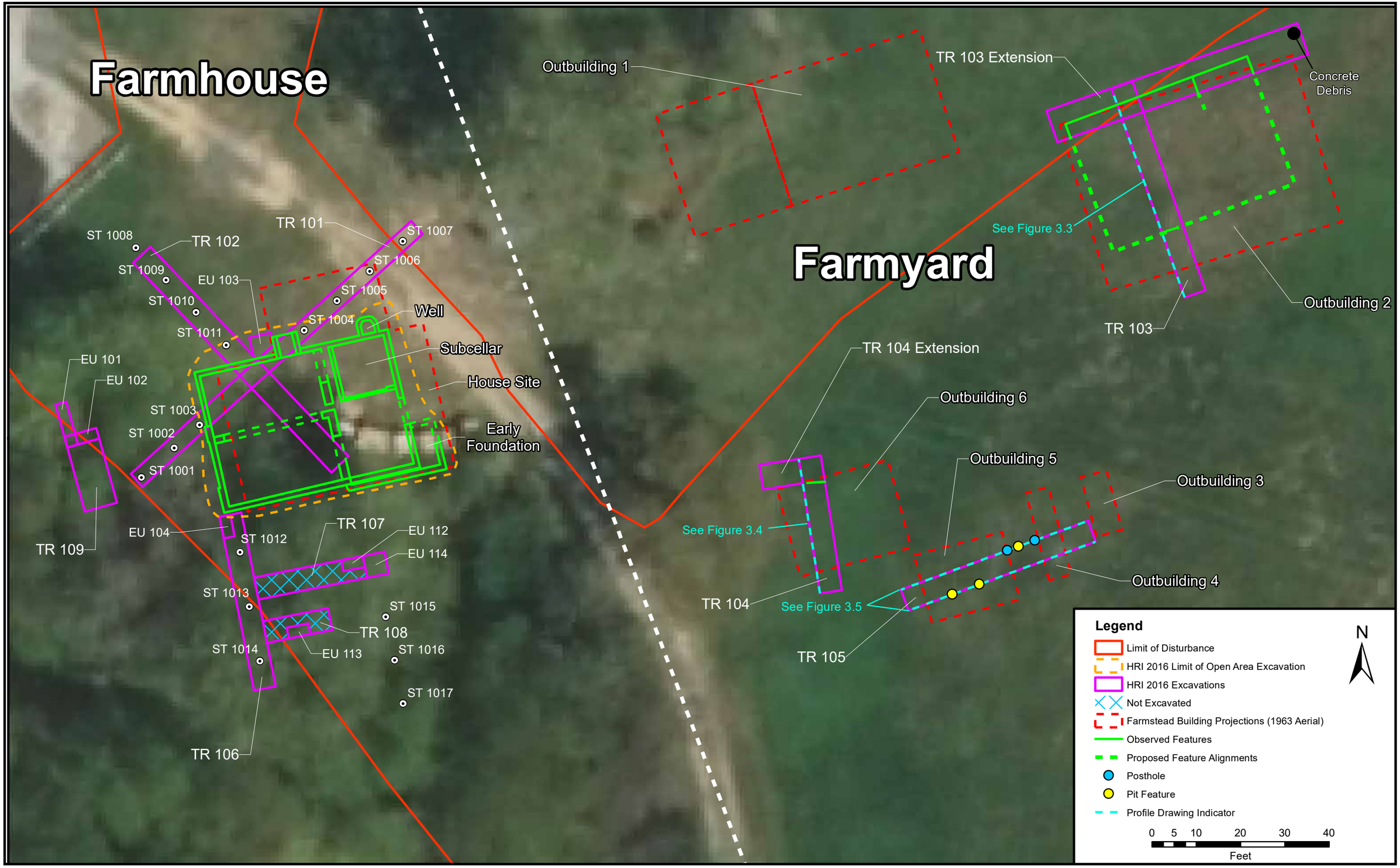


Figure 3.1. Borton/Ballinger Farmstead [28-Bu-949]: Aerial Photograph Showing Locations of Archaeological Excavations.

and stratigraphic relationships within the site. The locations of all features were mapped onto a master site plan. Typically, features were half-sectioned and recorded in profile with cultural materials being retrieved according to their stratigraphic provenience. Following completion of archaeological fieldwork, excavations were backfilled and the ground returned as closely as possible to its pre-excavation condition.

3. Archaeological Monitoring

A program of archaeological monitoring was conducted after the Phase III archaeological data recovery fieldwork had concluded. This monitoring, which is detailed below, was conducted according to an archaeological monitoring protocol that was approved by the NJHPO (email, Maresca to Lee, November 11, 2016 [HPO Project No. 16-1567-6]).

4. Laboratory and Data Analysis

Following completion of the field investigations, work commenced on the laboratory processing of artifacts and archaeological data. Most artifacts were washed and allowed to air-dry, but some categories of material were treated differently to ensure their preservation and fullest possible analysis. Basic stabilization tasks were undertaken in the Hunter Research laboratory. Faunal remains were treated to assure stability. All recovered artifacts and cultural materials were then sorted, identified and cataloged using MS Access relational database software from which a comprehensive inventory was compiled. Artifacts and cultural materials were not labeled for this project. An appropriate curational facility is being sought for these materials. Until a home is found the collections will be maintained at Hunter Research's office in Trenton, New Jersey.

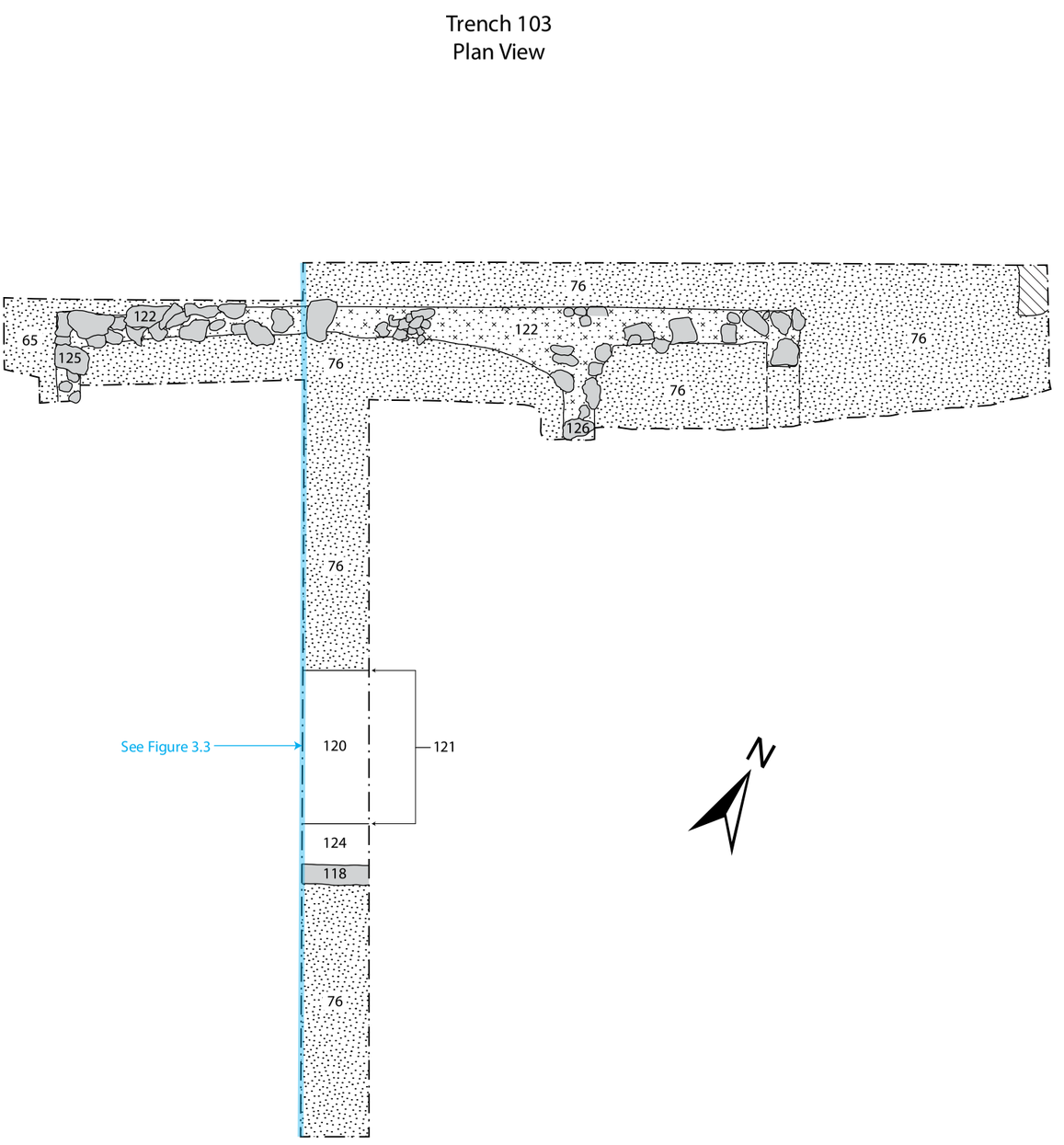
B. FIELD RESULTS

The Borton/Ballinger Farmstead site [28-Bu-949] consists of a roughly 0.5-acre site comprising the former location of the farmhouse, farmyard and several outbuildings. This site was the focus of activities on the much larger farm property and was largely identified through the analysis of historic maps and aerial photographs. For the purposes of this archaeological data recovery the site has been divided into two areas (Figure 3.1). The first is the Farmyard area, which includes the outbuildings and working space located east of the farm lane that roughly divides the site in two. The second is the Farmhouse area, which is centered on the foundation of the Borton/Ballinger Farmhouse but also includes several features in its immediate vicinity. Elements of the Farmhouse area may survive on site to the west of the project's limit of construction.

1. Farmyard Area

A review of historic aerials identified five to six possible outbuildings (numbered 1 through 6) east of the Borton/Ballinger Farmstead farm lane (Figure 3.1; Photograph 3.2). Using georeferenced historic aerials, the approximate footprints of these buildings were plotted and trenches were mechanically excavated in these areas with the specific goal of identifying the extent, character and integrity of any remaining archaeological features (outbuilding 1 was not investigated because it falls outside of the project's proposed limit of disturbance). These buildings were removed at the same time that the Borton/Ballinger Farmhouse was demolished and some ground disturbance was expected. Modern aerial photographs give some indication of the extent of ground disturbance caused by these activities.

Photograph 3.2. View looking northeast of Borton/Ballinger Farmyard Area prior to the start of excavation. GIS specialist Evan Mydlowski is pictured plotting the location of test trenches (Photographer: Joshua Butchko, August 2016) [HRI Neg. #16034/D1:202].

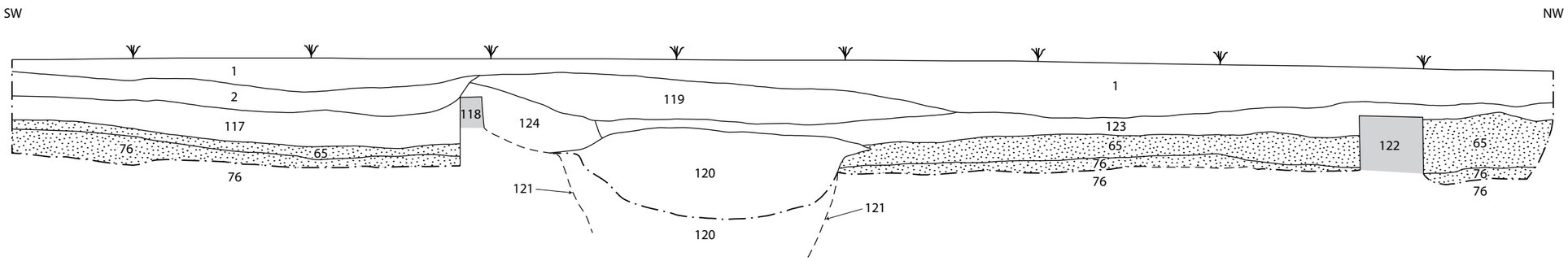


Context List

Context	*Description [Interpretation]*	*Munsell*
65	Medium sand [subsoil]	2.5Y 5/6
76	Stratified, fine sand w/ lamellae banding [subsoil]	5Y 7/4, 7.5YR 4/6
118	Dry-laid cobble footing [south wall of barn structure]	----------
120	Oily/odorous sand loam [20th-century disturbance fill]	10YR 2/1
121	Cut, filled by context 120 [20th-century disturbance]	----------
122	Large, dry-laid cobble footing [north wall of barn structure]	----------
124	Medium sand [upcast subsoil from excavation of context 121]	10YR 5/8
125	Large, dry-laid cobble footing [west wall of barn structure]	----------
126	Large, dry-laid cobble footing [interior wall of barn structure]	----------

Figure 3.2. Borton/Ballinger Farmstead [28-Bu-949]: Trench 103, Plan View.

Trench 103
West Profile



Context List

Context	*Description [Interpretation]*	*Munsell*
1	Sandy silt w/ gravel [modern topsoil]	10YR 4/2
2	Sandy silt w/ gravel [late 20th-century grading fill]	10YR 4/3
65	Medium sand [subsoil]	2.5Y 5/6
76	Stratified, fine sand w/ lamellae banding [subsoil]	5Y 7/4, 7.5YR 4/6
117	Mottled, compact silty sand [buried A-horizon]	10YR 4/4, 10YR 6/2
118	Dry-laid cobble footing [south wall of barn structure]	----------
119	Mottled, compact silty sand [barn demolition fill]	10YR 5/6, 10YR 6/2
120	Oily/odorous sand loam [20th-century disturbance fill]	10YR 2/1
121	Cut, filled by context 120 [20th-century disturbance]	----------
122	Large, dry-laid cobble footing [north wall of barn structure]	----------
123	Mottled, compact silty sand w/ gravel [modern barn demolition fill and grading]	10YR 6/2, 10YR 4/4
124	Medium sand [upcast subsoil from excavation of context 121]	10YR 5/8

Stone

Subsoil

Limit of Excavation

0 4

Feet

Figure 3.3. Borton/Ballinger Farmstead [28-Bu-949]: Trench 103, West Profile.

a. Trench 103

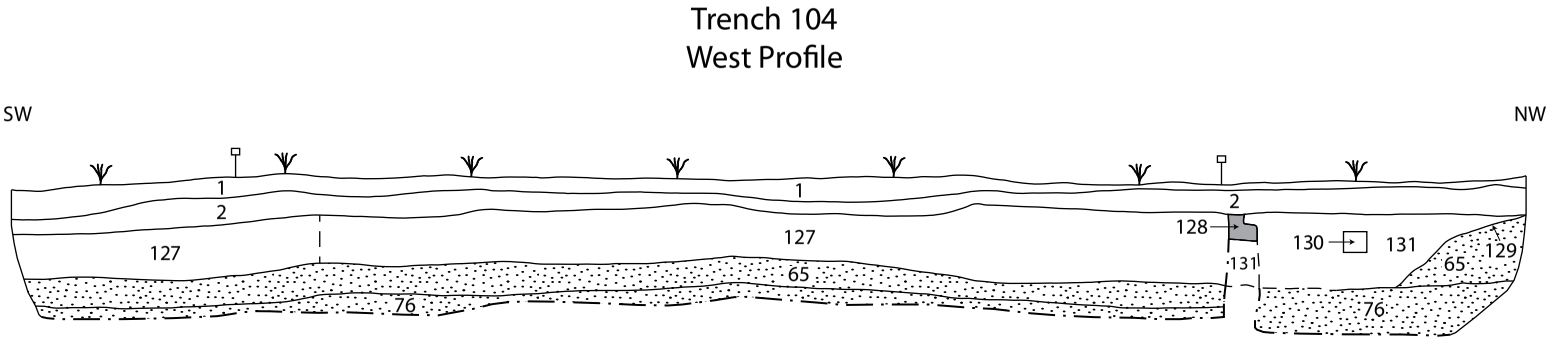
This 50-foot-long trench was positioned running north-south across the site of outbuilding 2, which is identifiable in aerial photographs as a large barn (Figures 3.1, 3.2 and 3.3; Photographs 3.3. and 3.4). A mortared fieldstone foundation [122] running east-west was identified almost immediately after starting this trench. A southern foundation wall [118] was also identified in this trench 33 feet to the south. The trench was extended to ensure that no other features existed further to the south. The northern end of the trench was expanded to the east and west, forming a "T", to "chase" the northern foundation in order to identify its northern corners. The remnants of the northwest corner were identified although the western foundation wall was only fragmentary. A possible interior rubble-stone wall footing [126] was identified running south from the northern foundation wall towards the southern end of the projected footprint and a possible northeastern corner was identified 43 feet east of the northwestern corner, making a roughly 43 by 33-foot barn foundation with a 10-foot wide (interior dimensions) bay running north-south. Concrete debris was identified at the projected northeastern corner of the barn and stratigraphy in this area suggested it had been disturbed by modern construction activities. Only the bottom few courses of stone of the mortared masonry foundations were identified in these trenches. A large block of dumped concrete, probably a Portland-type, was also identified along the northern foundation wall that appeared to represent a modern foundation repair episode. This concrete appears to have been used elsewhere to repair the foundation during the 20th century. Artifacts from this trench primarily consisted of unidentifiable ferrous metal fragments. A fragment of large mammal bone was recovered from the backdirt pile.

b. Trench 104

This 32-foot long north-south trench was situated to identify the remains of outbuilding 6 (Figures 3.1 and 3.4; Photograph 3.5). A shallow mortared fieldstone foundation [128] was identified running east-west at the north end of the trench in the approximate location where the georeferencing indicated that the northern edge of the building's footprint would be (Figure 3.1). Despite continuing the trench to the south beyond the projected southern edge of the outbuilding no other foundation remains were identified. The northern end of the trench was expanded 9 feet to the west, and a possible northwest corner (turning south) was identified, although the foundation remains were fragmentary after having apparently been damaged during the building's demolition. The absence of a southern foundation wall could be a result of the gentle slope down to the south in this area. The southern foundation may have projected further above ground to keep the building level and was removed because of this. It could also indicate that the outbuilding was three sided, as are many tractor sheds and some livestock pens. Small fragments of redware, creamware and shell were collected from the backdirt pile associated with this trench along with a small numbered metal tag and a modern plastic flower tag for chrysanthemums.

c. Trench 105

Trench 105 was excavated east-west across the projected locations of outbuildings 5 and 4 starting just southeast of the southern end of Trench 104 and extending 45 feet (Figure 3.1; Photograph 3.6). It is unclear if these outbuildings were permanent structures or if the objects from the aerial photographs were large trailers or wagons. Two features with rounded bottoms were observed in the southern profile 6.5 feet apart towards the western end of the trench (Figure 3.5). They fall roughly within the projected center of outbuilding 5 and may have held posts or piers that



Context List

Context	*Description [Interpretation]*	*Munsell*
1	Sandy silt w/ gravel [modern topsoil]	10YR 4/2
2	Sandy silt w/ gravel [late 20th-century grading fill]	10YR 4/3
65	Medium sand [subsoil]	2.5Y 5/6
76	Stratified, fine sand w/ lamellae banding [subsoil]	5Y 7/4, 7.5YR 4/6
127	Sandy silt [buried A-horizon]	10YR 6/4
128	Brick and concrete rubble footing [20th century garage/shed footing]	----------
129	Cut, filled by contexts 130 and 131	----------
130	Silty sand [field drain, fill of context 129]	10YR 5/4
131	Sandy silt [fill of context 129]	10YR 4/6

Rubble

Subsoil

Plotted Location of Outbuilding Extent Based on Historic Aerials

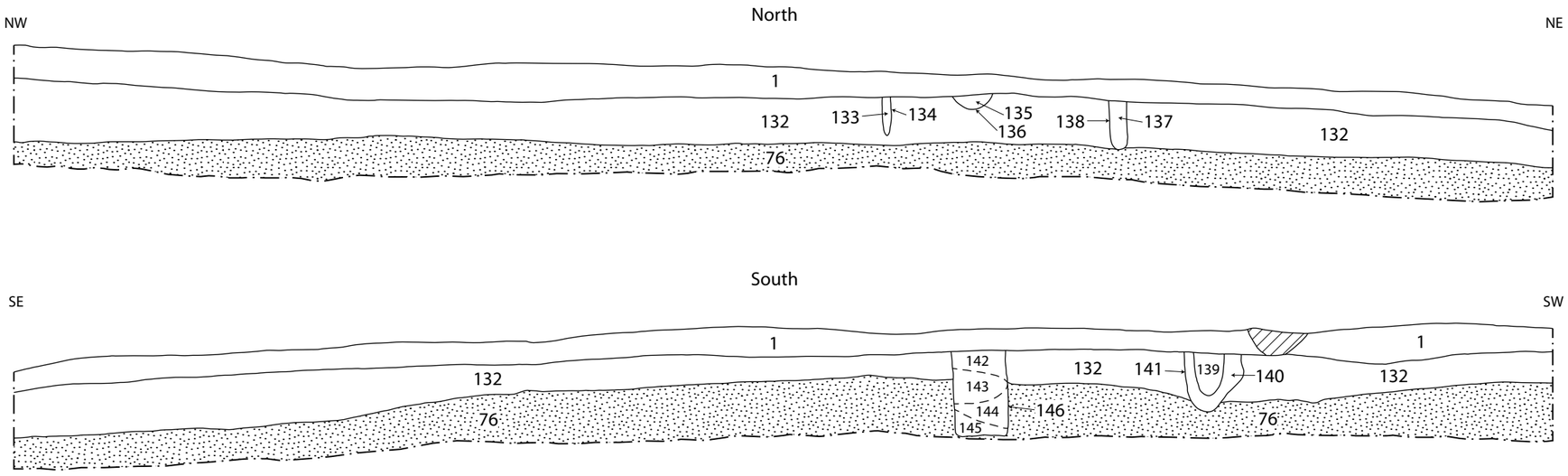
Limit of Excavation

0 4

Feet

Figure 3.4. Borton/Ballinger Farmstead [28-Bu-949]: Trench 104, West Profile.

Trench 105
North and South Profiles



Context List

Context	*Description [Interpretation]*	*Munsell*
1	Sandy silt w/ gravel [modern topsoil]	10YR 4/2
76	Stratified, fine sand w/ lamellae banding [subsoil]	5Y 7/4, 7.5YR 4/6
132	Mottled, compact sandy silt [Ap horizon]	10YR 5/6, 10YR 7/4
133	Sandy silt [fill of context 134]	10YR 5/3
134	Cut, filled by context 133 [fence post]	----------
135	Mottled, compact silty sand w/ gravel [fill of context 136]	10YR 6/2, 10YR 4/4
136	Cut, filled by context 135 [historic plow scar]	----------
137	Sandy silt [fill of context 138]	----------
138	Cut, filled by context 137 [fence post]	10YR 5/3
139	Compact silt [fill of context 141]	10YR 6/2
140	Mottled sandy silt [fill of context 141]	10YR 5/6, 10YR 7/4
141	Cut, filled by contexts 139 and 140 [posthole]	----------
142	Compact silt [fill of context 146]	10YR 6/2, 10YR 4/4
143	Silty loam [fill of context 146]	10YR 3/4
144	Mottled, medium sand [fill of context 146]	10YR 5/6, 10YR 7/4
145	Silty loam [fill of context 146]	10YR 3/4
146	Cut, filled by contexts 142, 143, 144, and 145 [square shaft feature]	----------

Figure 3.5. Borton/Ballinger Farmstead [28-Bu-949]: Trench 105, North and South Profiles.

Photograph 3.3. View looking northwest showing partial west profile for Trench 103 (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D1:312].

Photograph 3.4. View looking southwest showing north extent of barn foundation exposed in Trench 103 (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D2:165].

Photograph 3.5. View looking southwest showing partial west profile for Trench 104 (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D1:220].

Photograph 3.6. View looking northwest showing final view of Trench 105 (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D2:031].

supported the floor of this building. Two possible postholes were identified in the northern profile of the trench as well, 7 feet apart, with a small pit in between them (Figure 3.5). The westernmost posthole lined up with the eastern edge of outbuilding 5; the eastern posthole lined up with the projected western edge of outbuilding 4. Both of these postholes yielded corroded iron nail fragments and they could as easily be the remains of a fence line as the remnants of outbuildings. Fragments of a plow were also identified in this trench.

2. Farmhouse Area

While historic aerials were helpful in identifying outbuildings in the farmyard east of the Borton/Ballinger Farmstead farm lane, they were less useful in defining details of the immediate environs of the farmhouse due to heavy vegetation. The basic footprint of the house was approximated using these aerials as a supplement to the site plan produced during the course of R. Alan Mounier's Phase II investigations of the site. In particular, a specimen osage orange tree was identified on Mounier's site plan that was used as a surveying reference in the absence of a more formal survey datum (see above, Figure 1.3). Modern aerial photographs were also reviewed to establish the extent of ground disturbance around the farmhouse caused by its demolition. This enabled our archaeological team to focus its investigations on less disturbed areas.

a. Trenches 101 and 102 (including Shovel Tests 1001 to 1011 and Excavation Unit 103)

Trench 101 was oriented southwest-northeast, measured 87 feet long and was roughly 5 feet wide (Figure 3.6). It was positioned to identify the foundations of the Borton/Ballinger Farmhouse. Its location was based on the footprint of the house as mapped in the Phase II report. A tumbled foundation wall [5] was quickly identified near the trench's southwestern end along with an intact portion of the western mortared-stone wall of the house foundation [7] running north-south, situated at an oblique angle to the trench (Figure 3.7). The location and alignment of this wall were different from what was expected from the Phase II drawings. This trench continued further to the northeast and identified a similarly constructed northern foundation wall [23], in poor condition, running east-west. A bulkhead cellar entrance [8/24] with the remnants of a timber stairway was uncovered in this trench along the northern foundation wall. Excavation Unit 103 was excavated adjacent to the bulkhead entrance against the outside of the foundation wall to investigate what was thought to be a builders' trench along the northern side of the northern foundation wall. This feature proved ephemeral and yielded no significant material. The depth to which to the basement foundation was demolished (only one to two feet of wall remained above the cellar floor) indicated that archaeological deposits to the rear of the building were severely compromised. Shovel tests (Nos. 1004 through 1007) were excavated every 10 feet beyond the limits of the house foundation to search for historic and prehistoric deposits. Only Shovel Test 1005 yielded a significant number of historic artifacts including 18th- and 19th-century ceramic sherds. However this material was identified in a context overlying one with modern roofing nails, suggesting it was displaced.

Trench 102 was oriented northwest-southeast, perpendicular to Trench 101, and measured 65 feet long by 5 feet wide (Figures 3.6 and 3.8). As with Trench 101 it was placed to identify the limits of the farmhouse's foundation. This trench, again mechanically excavated, uncovered more of the northern foundation wall [23] of the house but did not locate the southern foundation wall, which was eventually located 6 feet beyond the end of this trench (Figure 3.8; Photograph 3.7). The northern foundation wall within this trench was significantly disturbed by both the installation of modern utilities (a modern pvc sewer pipe [113]) and the subsequent demolition of the house, which had

Photograph 3.7. View looking southeast during machine excavation of Trench 102 (Photographer: Joshua Butchko, August 2016) [HRI Neg. #16034/D1:045].

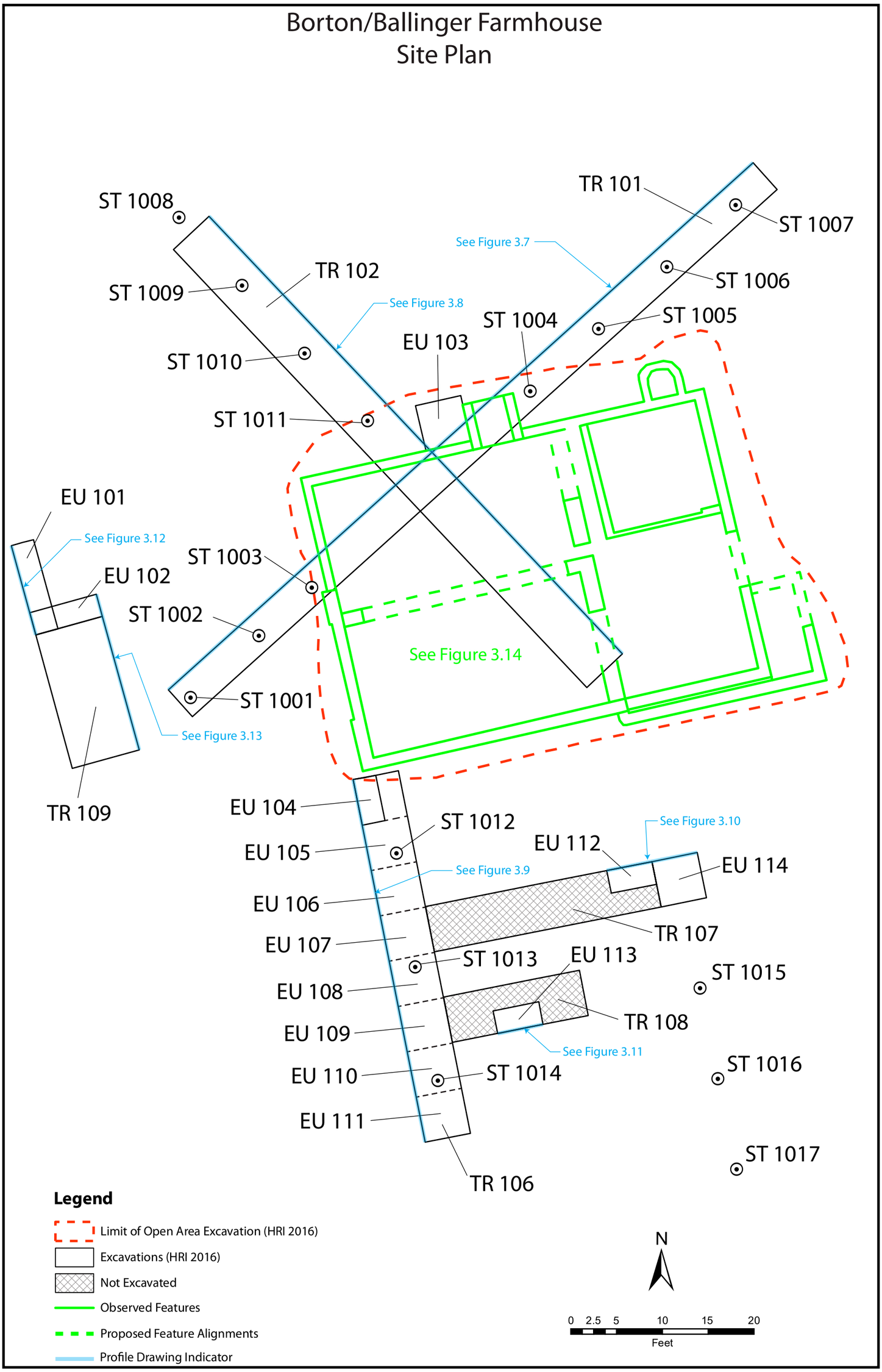
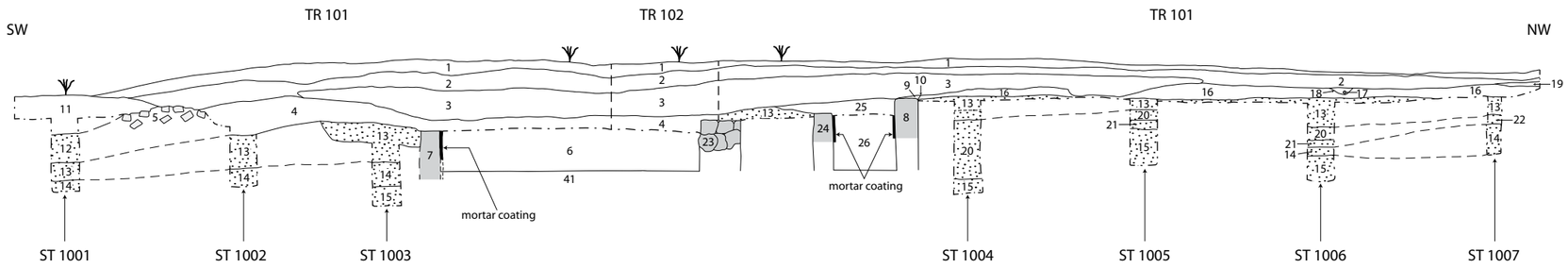


Figure 3.6. Borton/Ballinger Farmstead [28-Bu-949]: Archaeological Excavations Within the Farmhouse Area, Plan View.

Trench 101
North Profile



Context List

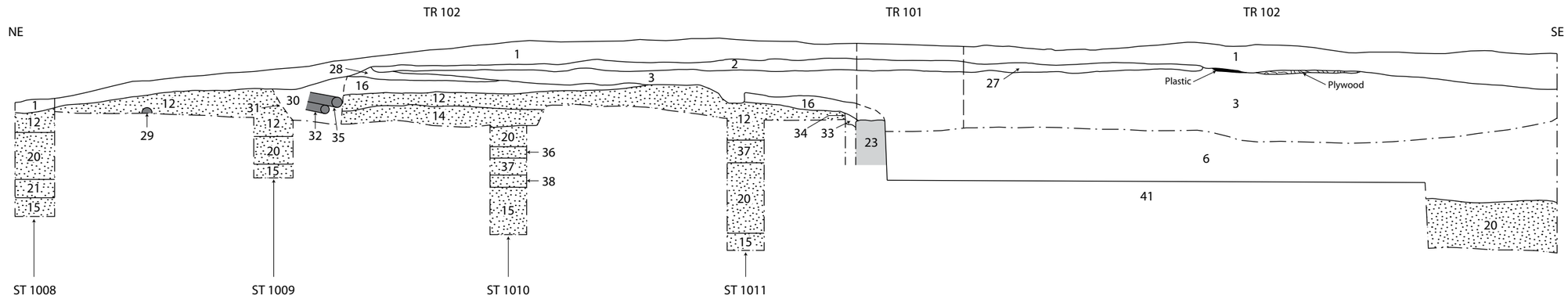
Context	Description [Interpretation]	Munsell
1	Sandy silt w/ gravel [modern topsoil]	10YR 4/2
2	Sandy silt w/ gravel [late 20th-century grading fill]	10YR 4/3
3	Unconsolidated gravel [late 20th-century house demolition fill]	----------
4	Mottled, compact silty sand [20th-century grading fill]	10YR 5/8, 10YR 7/6
5	Silty loam w/ dense brick and limonite rubble [19th-century house expansion/ demolition grading]	10YR 4/4
6	Mottled, silty clayey sand [late 20th-century house demolition fill]	2.5Y 6/6, 10YR 4/4, 10YR 5/6
7	Mortared limonite cobble foundation wall [main west wall, later addition]	----------
8	Mortared limonite cobble foundation wall [eastern bulkhead basement entry wall]	10YR 4/3
9	Mottled sandy silt [fill of context 10]	10YR 5/6, 10YR 3/6
10	Cut, filled by contexts 8 and 9 [builders' trench]	----------
11	Silty sand [pre-house demolition topsoil]	5Y 7/4, 7.5YR 4/6
12	Clayey sand [subsoil]	7.5YR 5/8
13	Silty clay sand [subsoil]	10YR 4/6
14	Mottled medium sand [subsoil]	10YR 5/6, 10YR 5/8
15	Medium sand [subsoil]	10YR 5/8
16	Compact silty sand [historic grading fill]	10YR 6/6
17	Gray PVC conduit (2-inch) w/ sand [modern utility, fill of context 18]	10YR 6/6
18	Cut, filled by context 17 [modern utility trench]	----------
19	Compact gravel [buried modern road surface]	----------
20	Mottled medium sand [subsoil]	2.5Y 6/6, 10YR 5/6
21	Clayey sand [subsoil]	10YR 5/3
22	Sandy clay [subsoil]	10YR 5/8
23	Mortared limonite cobble foundation wall [main north wall, west of bulkhead entry]	----------
24	Mortared limonite cobble foundation wall [west wall of northern bulkhead entry]	----------
25	Loose sandy silty [modern house demolition fill]	10YR 5/4
26	Loose sandy silty [modern house demolition fill]	10YR 4/4
41	Brick floor surface [floor of NW basement chamber, common brick laid N-S]	----------

Brick
Stone
Subsoil
Utility
Limit of Excavation

0 8
Feet

Figure 3.7. Borton/Ballinger Farmstead [28-Bu-949]: Trench 101, North Profile.

Trench 102
East Profile



Context List

Context	*Description [Interpretation]*	*Munsell*
1	Sandy silt w/ gravel [modern topsoil]	10YR 4/2
2	Sandy silt w/ gravel [late 20th-century grading fill]	10YR 4/3
3	Unconsolidated gravel [late 20th-century house demolition fill]	----------
12	Clayey sand [subsoil]	7.5YR 5/8
14	Mottled medium sand [subsoil]	10YR 5/6, 10YR 5/8
15	Medium sand [subsoil]	10YR 5/8
16	Compact silty sand [historic grading fill]	10YR 6/6
20	Mottled medium sand [subsoil]	2.5Y 6/6, 10YR 5/6
21	Clayey sand [subsoil]	10YR 5/3
23	Mortared limonite cobble foundation wall [E-W running, main north wall west of bulkhead entry]	----------
27	Coarse silty sand [modern house demolition fill]	10YR 7/4
28	Silty loam [modern house demolition fill]	10YR 5/2
29	Redware field drain pipe [historic utility]	----------
30	Compact sandy loam [fill of context 31]	10YR 5/2
31	Cut, filled by contexts 30, 32 and 35 [utility trench]	----------
32	Iron utility pipe [fill of context 31]	10YR 5/6
33	Mottled silty sand [fill of context 34]	10YR 3/4, 10YR 5/6
34	Cut, filled by context 33 [context 23 builders' trench]	2.5Y 5/6
35	Terracotta drain pipe [fill of context 31]	----------
36	Coarse sand [subsoil]	5YR 4/6
37	Wet clayey sand [subsoil]	2.5Y 5/6
38	Mottled medium sand [subsoil]	2.5Y 6/4, 10YR 5/8
41	Brick floor surface [floor of NW basement chamber, common brick laid N-S]	----------

Stone
Subsoil
Utility
Wood
Limit of Excavation

0 5
Feet

Figure 3.8. Borton/Ballinger Farmstead [28-Bu-949]: Trench 102, East Profile.

partially pushed the foundation wall into the cellar. A terracotta drain [35] and an iron water pipe [32] crossed the northern portion of this trench 25 feet north of the foundation. The terracotta pipe [35] is thought to have connected to a downspout on the rear of the house. Shovel tests (Nos. 1008 through 1011) were excavated in the northern portion of this trench outside of the house's footprint; again, these did not reveal significant archaeological deposits.

c. Trench 106 and Excavation Units 104 through 111

Trench 106 extended 40 feet south of the southwestern corner of the house's foundation [39], which had been identified as part of the open area excavation of the foundation discussed in detail below (Figure 3.6). This trench, which was initially excavated mechanically, shovel tested at 10-foot intervals and then internally subdivided into hand-dug excavation units, was located to delineate a historic midden described in the Phase II report. Excavation identified a substantial lens of material [5] apparently associated with the demolition of a structure, but not from the modern demolition of the Borton/Ballinger Farmhouse, as it largely lacked modern artifacts (Figure 3.9; Photograph 3.8). It relates to an earlier demolition/reconstruction episode. A buried historic yard surface [62] was identified underlying this demolition deposit, which was sampled and found to contain 18th- through 19th-century artifacts (Figure 3.9). These items were not found in sufficient quantity or concentration to be considered part of a historic trash midden and are likely part of a general scatter of artifacts broadcast around the historic ground surface. This surface overlay a thick lens of upcast subsoil [55] that, in turn, overlay a truncated subsoil [63]. This upcast material had very few artifacts and is most likely derived from the cellar excavation for the construction of the foundation [39]. Finally, a narrow builder's trench [61/60] was identified between the foundation [39] and a baulk of natural subsoil [12] (Photograph 3.9). The builder's trench was partially excavated but did not yield significant finds.

d. Trench 107 and Excavation Units 112 and 114

Trench 107 was planned as a 30-foot long trench extending east from and perpendicular to Trench 106, 15 feet south of the house foundation, to sample historic deposits expected in this area. It was partially excavated mechanically and, after features were identified below modern fill and topsoil excavation, was continued by hand in Excavation Units 112 and 114 (Figure 3.6). A deep cut [85] was observed running roughly north-south with several thick layers of historic fill [80, 82-84] to the west and intact natural subsoils [76] to the east (Figure 3.10; Photograph 3.10). The remnants of a more recent backfilled utility trench cut through these historic fill layers [53, 81, 54, 67], however evidence of a utility was identified and its interpretation remains unclear. This feature is likely related to the deep truncated subsoils and subsequent upcast soil observed in Trench 106 and interpreted as a result of the construction of the western portion of the house, although this cut extended 6.5 feet below the ground surface to a cobble C horizon context at the base of the excavation.

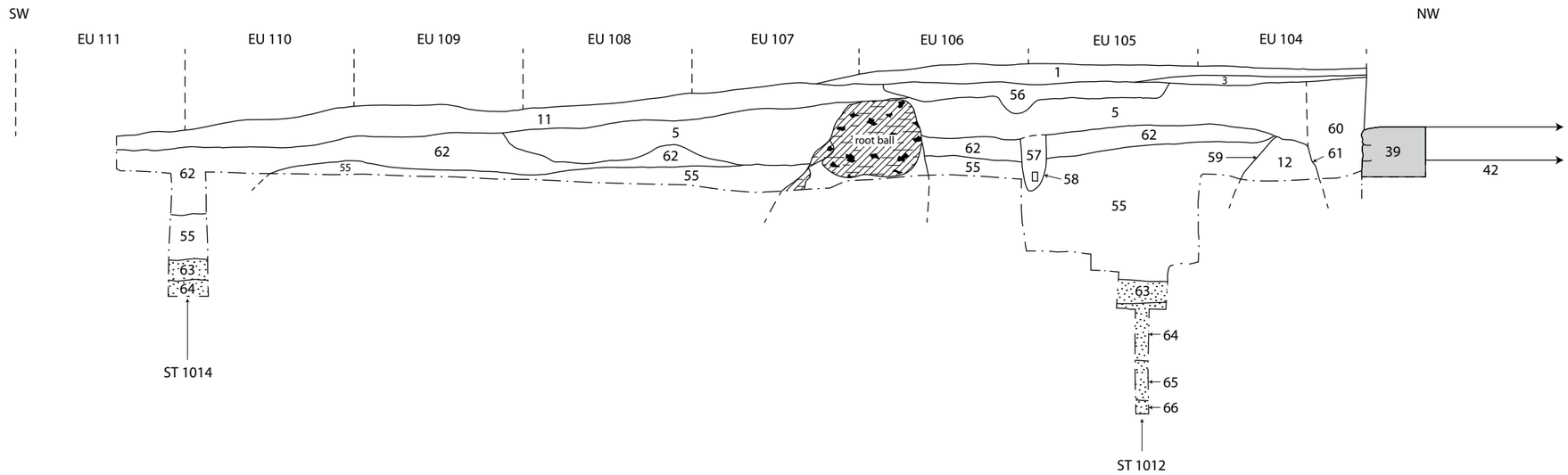
Three additional shovel tests were excavated at a 10-foot interval to the south of these units to locate the historic midden identified during the Phase II investigation. No evidence of this midden feature was uncovered.

e. Trench 108 (including Excavation Unit 113)

This trench, positioned 5 feet south of Trench 107, was also planned but not excavated after initial mechanical excavation identified shallow cultural stratigraphy and located the corner of Excavation Unit 3 from the Phase II investigations (Figures 3.6 and

Photograph 3.8. View facing northwest showing western profile of Trench 106 (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D2:231].

Trench 106
West Profile



Context List

Context	*Description [Interpretation]*	*Munsell*
1	Sandy silt w/ gravel [modern topsoil]	10YR 4/2
3	Unconsolidated gravel [late 20th-century house demolition fill]	----------
5	Silty loam w/ dense brick and limonite rubble [19th-century house expansion/demolition grading]	10YR 4/4
11	Silty sand [upcast/redeposited subsoil]	10YR 5/4
12	Clayey sand [subsoil]	7.5YR 5/8
39	Mortared limonite block foundation wall [south wall of main foundation, SW section]	----------
42	Brick floor surface [floor of SW basement chamber, uncommon and glazed brick laid E-W]	----------
55	Silty sand [fill of context 59, upcast/redeposited subsoil]	10YR 7/4
56	Compact coarse clayey sand [upcast fill]	10YR 5/6
57	Silty loam w/ brick rubble [fill of context 58]	10YR 4/4
58	Cut, filled by context 57 [posthole]	----------
59	Cut or natural slope, filled by context 55	----------
60	Silty loam [fill of context 61]	10YR 4/4
61	Cut, filled by context 61 [context 39 builders' trench]	----------
62	Mottled sandy silt w/ charcoal [buried-Ap horizon]	2.5Y 5/6
63	Compact silty sand [subsoil]	10YR 5/6
64	Mottled, compact silty sand [subsoil]	10YR 6/6, 10YR 6/1
65	Medium sand [subsoil]	2.5Y 5/6
66	Fine sand [subsoil]	5YR 5/3

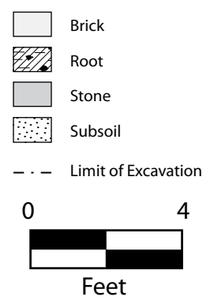


Figure 3.9. Borton/Ballinger Farmstead [28-Bu-949]: Trench 106, West Profile.

Photograph 3.9. View west showing the builder's trench identified in Trench 106 (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D2:224].

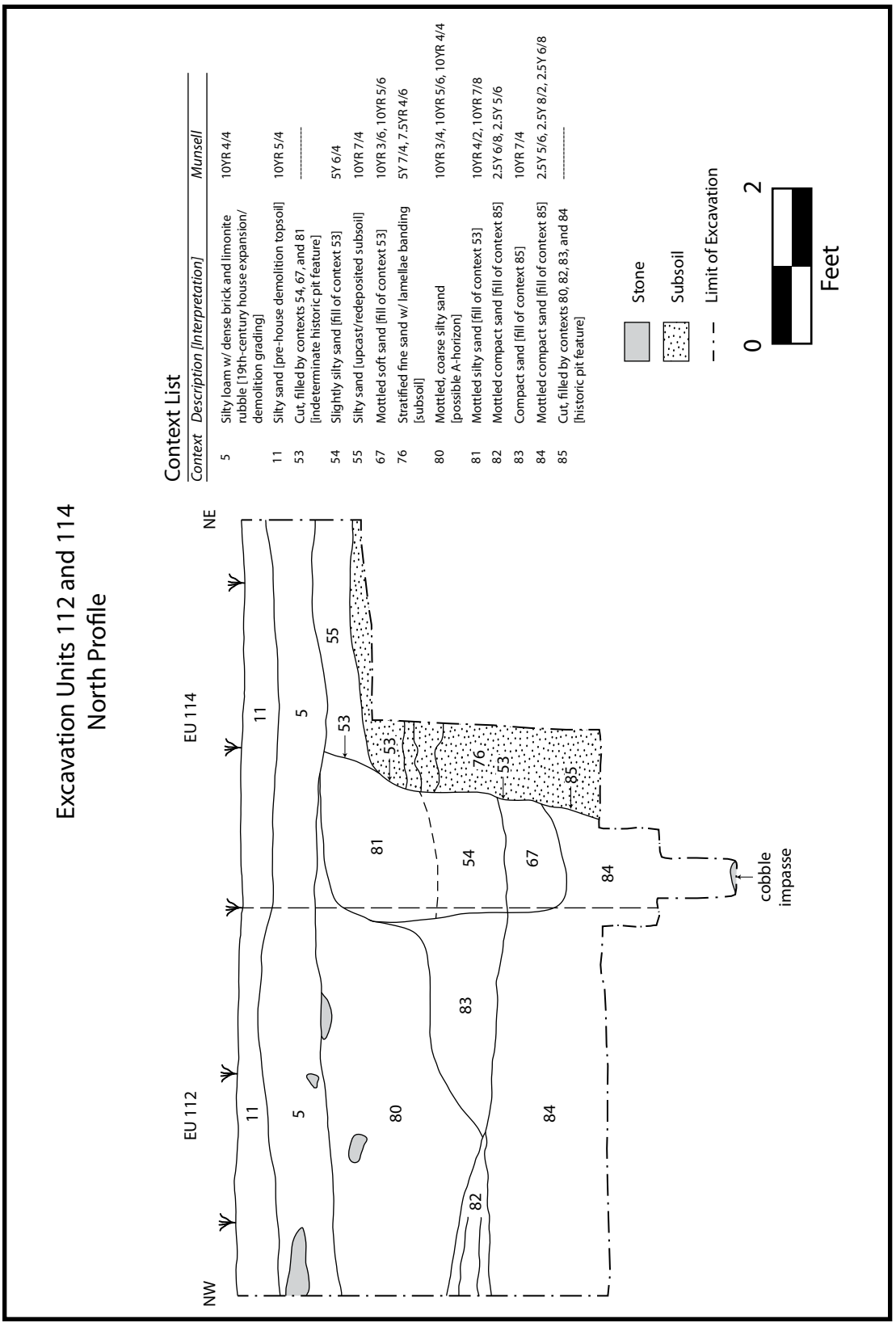


Figure 3.10. Borton/Ballinger Farmstead [28-Bu-949]: Excavation Units 112 and 114, North Profile.

Photograph 3.10. View looking south showing final profile view of Excavation Unit 114 (Photographer: Andrew Martin, September 2016) [HRI Neg. #16034/D3:193].

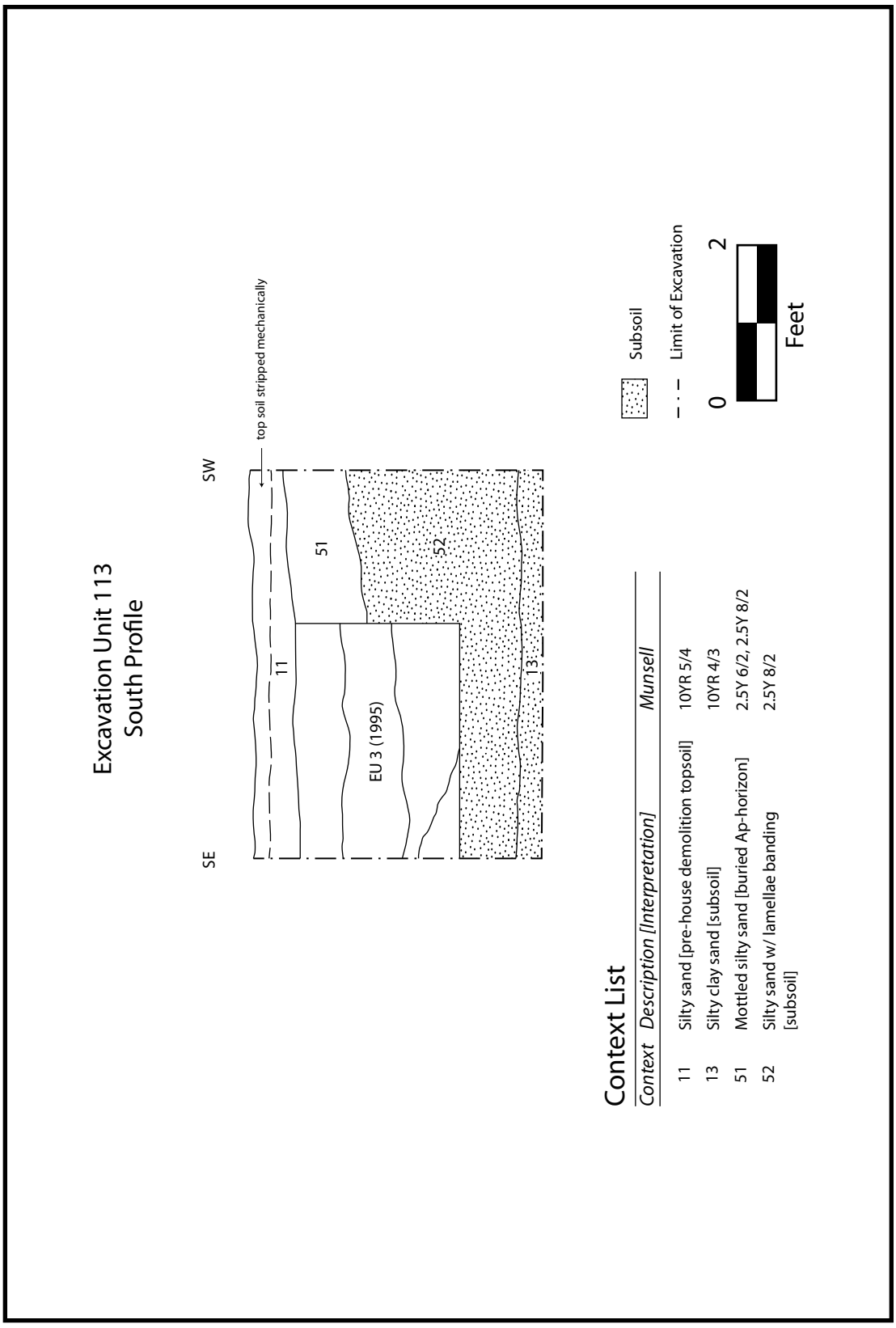


Figure 3.11. Borton/Ballinger Farmstead [28-Bu-949]: Excavation Unit 113, South Profile.

3.11; Photograph 3.11). Excavation Unit 113, a 2.5 by 5-foot rectangle, did yield historic artifacts (a total of 97) similar in date and character to those found elsewhere on site, but not in an isolated context that would suggest a midden. The stratigraphy in the undisturbed portions of this unit was simple with a capping layer of recently disturbed topsoil over an intact A horizon [51] and B horizon [52] sequence.

f. Trench 109 (including Excavation Units 101 and 102)

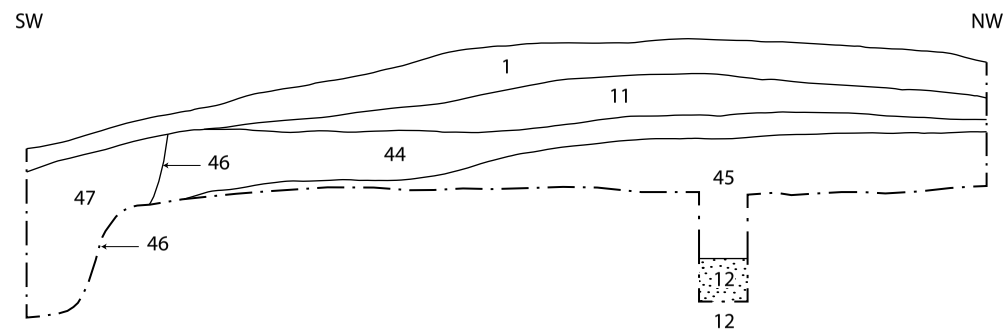
This 15-foot long, 7.5-foot-wide trench was oriented roughly northeast-southwest across a depression in the ground northwest of the house foundation (Figure 3.6). This depression was tentatively identified by Mounier as being a filled privy hole by the Phase II investigation (Mounier 1995). Artifacts were visible on the ground surface at this location, suggesting the area had been used as a dump into the 20th century. Excavation Units 101 and 102 were first manually excavated to identify the northern limit of the depression, however, no clear edge or shaft feature was identified. Instead a series of trash-filled contexts was identified overlying a natural band of marl [74] (Figures 3.12 and 3.13; Photographs 3.12 and 3.13). The trench was extended mechanically to the south of these excavation units with the aim of identifying a more formal privy feature below the later refuse. No such feature was identified. Another Phase II unit, like Excavation 4, was identified in profile. A one-foot-diameter iron drainage pipe [49] was located at the northern end of the eastern profile that appears to have been a sewer or drainage pipe from the house, likely carrying water from the gutters to the west towards the creek, or possibly towards an unidentified cesspit. This pipe must have been added late in the history of the house, possibly in the early 20th century, considering the relatively young age of the artifacts buried in the contexts beneath it. At most these artifacts date from the end of the 19th century and most date to the early 20th-century. Considering the lack of a natural A horizon it is possible that this area was excavated for the purpose of burying trash. A total of 3,207 artifacts were sampled from Excavation Units 101 and 102 and Trench 109, and are discussed in detail below.

g. Cellar Floor Plan

The cellar was excavated largely by machine until historic fabric was encountered, at which point the clearing of rubble and excavation were then conducted by hand. Since the building was demolished in the 1980s, the fill of the cellar was considered modern and only sampled on a limited basis. The goal of the cellar excavation was largely to expose and document the structural aspects of the house. A multi-phase foundation measuring 45 feet east-west by 33 feet north-south (exterior dimensions) was uncovered and documented (Figure 3.14; Photographs 3.14 through 3.17). The two major phases of the cellar consisted of a southwestern foundation [86/39/94] and an expanded cellar to the north and east [7/23/96/97/102/109]. The southeastern and northern foundation appears to postdate the southwestern foundation because it abuts this foundation in two places: the eastern half of the southern foundation wall [96] abuts the western half of the southern wall [94]; and the northern half of the western foundation wall [7] abuts the southern half [86] (Figure 3.14; Photograph 3.18). These differences are also visible in the different thicknesses, with the southwestern foundation being a thicker wall. The exact sequencing and its relevance to the history of the site is discussed below in Chapter 4.

Within this perimeter foundation the cellar was divided roughly into four quadrants by north-south and east-west mortared-stone partition walls. Very little of these walls was left in place but their limits could be discerned. The floor of the cellar within this foundation was at one time entirely paved with bricks, which were laid north-south in the northern half [41] and

Photograph 3.11. View facing south showing the Phase II unit within the southern profile of Excavation Unit 113 (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D2:241].



Context List

Context	*Description [Interpretation]*	*Munsell*
1	Sandy silt w/ gravel [modern topsoil]	10YR 4/2
11	Silty sand [pre-house demolition topsoil]	10YR 5/4
12	Clayey sand [subsoil]	7.5YR 5/8
44	Compact, silty loam [buried A-horizon]	10YR 5/3
45	Mottled, compact silty loam [buried A-horizon]	10YR 6/4, 10YR 6/6
46	Cut for stratified trash pit, filled by contexts 47, 71, 72, and 73 [late 19th/early 20th century trash deposit]	----------
47	Dense, modern and historic refuse with silty loam matrix [fill of context 46]	10YR 4/3

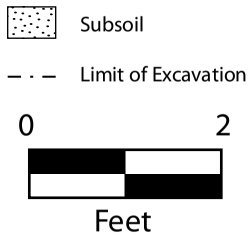
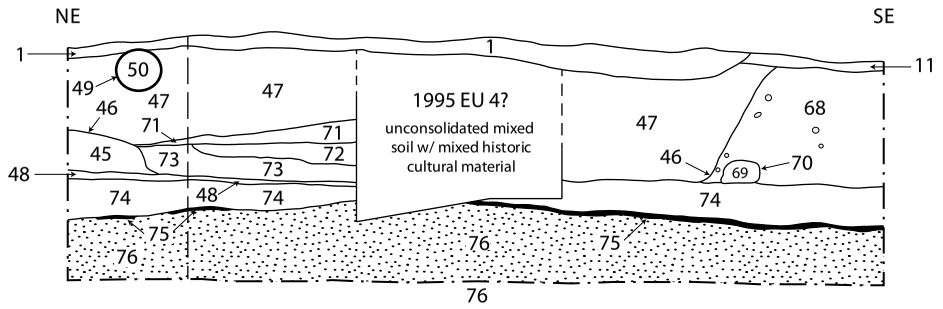


Figure 3.12. Borton/Ballinger Farmstead [28-Bu-949]: Excavation Unit 101, West Profile.

Excavation Unit 102 and Trench 109
East Profile



Context List

Context	Description [Interpretation]	Munsell
1	Sandy silt w/ gravel [modern topsoil]	10YR 4/2
11	Silty sand [pre-house demolition topsoil]	10YR 5/4
45	Mottled, compact silty loam [buried A-horizon]	10YR 6/4, 10YR 6/6
46	Cut, filled by contexts 47, 71, 72 and 73 [late 19th/early 20th century trash deposit]	----------
47	Dense modern and historic refuse w/ silty loam matrix [fill of context 46]	10YR 4/3
48	Silty sand [historic wetlands deposit; filled/graded by deposits in context 46]	----------
49	Iron drain pipe (1 ft)	----------
50	Sandy clay [clean fill in context 49]	5YR 6/4
68	Mottled, compact sandy clay w/ brick rubble [historic fill]	2.5Y 7/6, 2.5Y 8/4
69	Mottled loamy sand w/ roots [fill of context 70]	7.5YR 5/3, 7.5YR 3/3
70	Cut, filled by context 69 [root/rodent hole]	----------
71	Mottled, compact clayey sand [fill of context 46]	10YR 6/6, 10YR 4/2
72	Loose silty sand w/ dense historic refuse [fill of context 46]	10YR 4/4
73	Silty sand [fill of context 46]	10YR 5/3
74	Mottled, compact sand marl [natural marl deposit]	2.5Y 7/4, 5Y 8/4
75	Compact ferric sand [natural thick lamellae band]	7.5YR 4/6
76	Stratified fine sand w/ lamellae banding [subsoil]	10YR 5/8

Brick
Subsoil
Limit of Excavation

0 4
Feet

Figure 3.13. Borton/Ballinger Farmstead [28-Bu-949]: Excavation Unit 102 ad Trench 109, East Profile.

Photograph 3.12. View looking southeast showing final excavation view of Excavation Units 101 and 102 (Photographer: Dorothy Both, September 2016) [HRI Neg. #16034/D1:251].

Photograph 3.13. View looking northeast showing final excavation view of Excavation Units 101 and 102 and Trench 109 (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D2:336].

Context List

Context	*Description [Interpretation] (Munsell)*
6	Mottled silty clayey sand [late 20th-century house demolition fill] (2.5Y 6/6, 10YR 4/4, 10YR 5/6)
7	Mortared limonite cobble foundation wall [N-S running, main west wall, later addition]
8	Mortared limonite cobble foundation wall [N-S running, eastern bulkhead basement entry wall]
15	Medium sand [subsoil] (10YR 5/8)
23	Mortared limonite cobble foundation wall [E-W running, main north wall west of bulkhead entry]
24	Mortared limonite cobble foundation wall [N-S running, eastern bulkhead basement entry wall]
39	Mortared limonite block foundation wall [south wall of main foundation, southwest section]
40	Mortared limonite cobble interior wall [central E-W running wall that divides the NW and SW chambers of the basement floor plan]
41	Brick floor surface [floor of NW basement chamber common brick laid N-S]
42	Brick floor surface [floor of SW basement chamber uncommon and glazed brick laid E-W]
43	Brick support wall [abuts contexts 8 and 24; interior facing of bulkhead basement entry]
86	Mortared limonite block foundation wall [N-S running west wall of house footprint, abuts contexts 7, 39, 40, 41 and 42]
87	Dry-laid, cut blue slate floor surface [abuts contexts 40 and 41]
88	Wood frame staircase [abuts contexts 8 and 24]
89	Mortar-coated limonite block step [abuts contexts 8, 15 and 24; at the base of the bulkhead entry stairs]
90	Square cut concrete slab [2.5-ft square, 4-in thick]
91	Mortared limonite block interior wall [N-S running interior wall, probable support at west entry into subcellar]
92	Mortared limonite cobble footing [corner portion appears to be the central division of the four basement chambers]
93	Square limonite block pier [abuts exterior of context 39]
94	Mortared limonite block interior wall [N-S running; abuts contexts 39, 96, 98 and 99]
95	1.2-ft terracotta drain [cuts context 116]
96	Mortared limonite cobble foundation wall [E-W running; south wall of main foundation floor plan]
97	Mortared limonite cobble foundation wall [N-S running; south wall of main foundation floor plan]
98	Brick and steel rod support fill [abuts contexts 94, 96 and 99]
99	Mortared limonite cobble foundation wall [abuts contexts 94, 98, 100 and 101; E-W wall of earlier structure that predates house]
100	Mortared limonite cobble foundation wall [abuts contexts 15, 99 and 101; N-S wall of earlier structure that predates house]
101	Brick floor surface [abuts contexts 99 and 100; probable floor of earlier structure]
102	Mortared limonite cobble foundation wall [N-S running; east wall of main footprint; probably equal to context 97, compromised by modern demo]
103	Mortared limonite cobble interior wall [abuts context 109]
104	Dry-laid brick footing [abuts contexts 15 and 91]
105	Mortared brick wall [W wall of subcellar]
106	Mortared brick wall [S wall of subcellar]
107	Dry-laid brick floor surface [floor of subcellar]
108	0.8-ft terracotta drain [drain in the southeast corner of the subcellar]
109	Mortared limonite cobble foundation wall [N wall of main house bound to W by bulkhead entry and E by well shaft]
110	Mortared brick well shaft access port [cut into context 109 at the NE corner of the house for access to well from subcellar]
111	Mortared brick and dry-laid limonite block shaft [semi-ovoid well shaft beyond extant footprint accessed from subcellar]
112	Unconsolidated limonite building rubble w/ caution tape and loamy matrix [modern shaft fill from demolition phase of the house]
113	0.5-ft white PVC drain [modern utility in NW chamber of the basement]
114	0.5-ft cast iron pipe elbow [historic utility pipe]
115	0.5-ft cast iron pipe [historic utility pipe]
116	Dry-laid brick floor surface [floor of SE basement chamber; mixed brick stretched E-W]
147	Mortared limonite cobble footing [E-W running; north addition wall]
148	Mortared limonite cobble footing [N-S running; north addition wall]

Borton/Ballinger Farmhouse
Cellar Plan

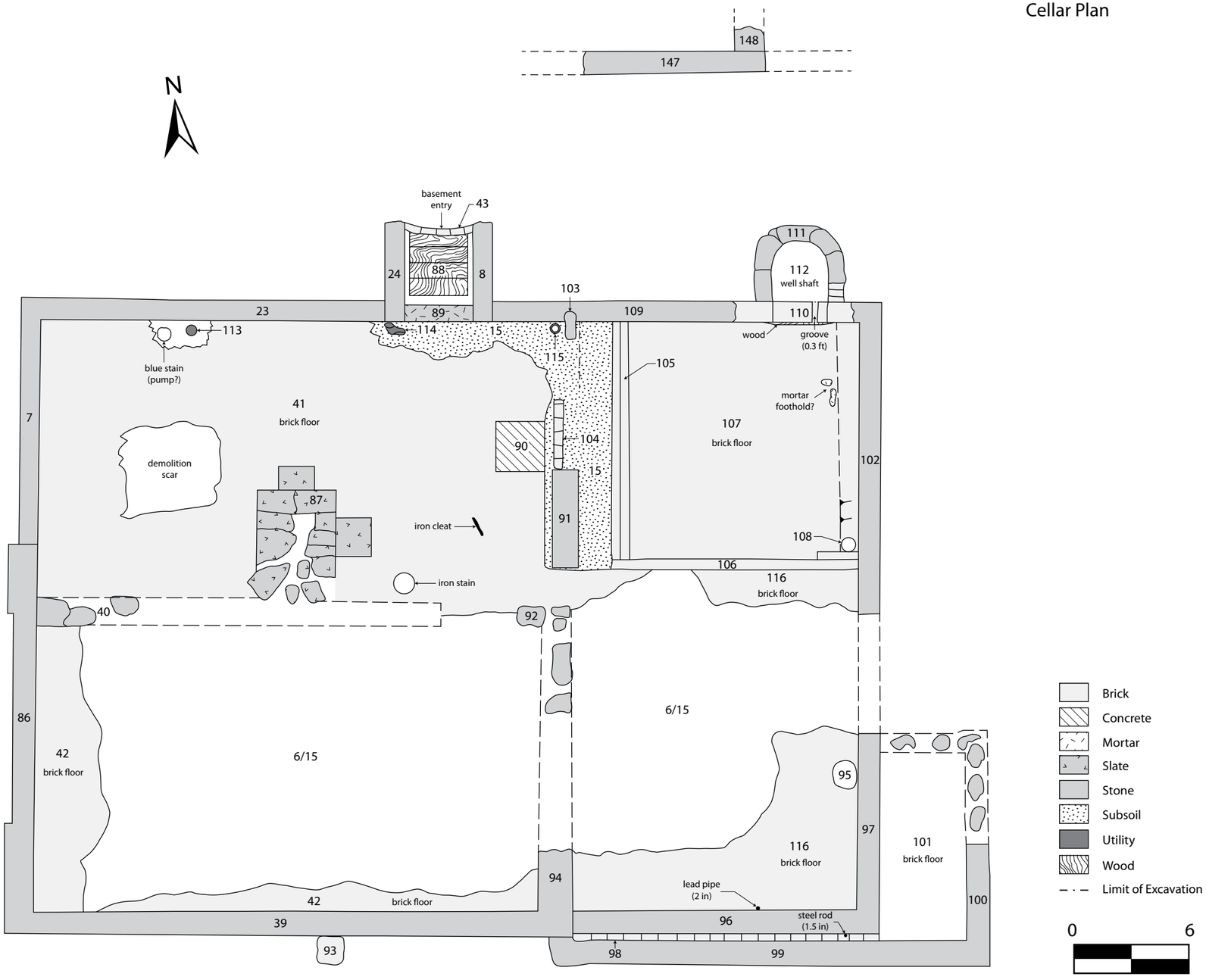


Figure 3.14. Borton/Ballinger Farmstead [28-Bu-949]: Farmhouse Cellar Plan.

Photograph 3.14. View looking northwest showing final view of the Borton/Ballinger Farm House basement floor plan (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D3:363].

Photograph 3.15. View looking northeast showing final view of the Borton/Ballinger Farm House basement floor plan (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D3:384].

Photograph 3.16. View looking southeast showing final view of the Borton/Ballinger Farm House basement floor plan (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D3:377].

Photograph 3.17. View looking southwest showing final view of the Borton/Ballinger Farm House basement floor plan (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D3:365].

Photograph 3.18. View looking west showing abutment of Contexts 86 and 7 along the west extent of the Borton/Ballinger Farm House basement foundation (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D3:146].

east-west in the southern half [42] of the cellar. The bricks in the southern half appeared less consistent in shape and several burnt bricks and bricks with glazed sides were observed, suggesting the brick floors were laid down at different times, or at least with a different source of bricks. Large sections of the both brick floors appear to have been removed when the building was demolished.

In the northeastern corner of the cellar a brick floor [107] was identified four feet deeper than the floor exposed over the rest of the cellar (Figure 3.14). This subcellar was apparently accessed by a doorway and stairs in the north-south interior partition wall (Photograph 3.19). A 2.5-foot-square slate paving stone [90] was incorporated into the brick floor just west of the subcellar and likely indicated the location of these stairs. No other evidence for stairs was identified. An opening in the northern foundation wall within this lower cellar gave access to a semi-circular, masonry-lined well shaft [110/111/112] that projected beyond the outer limit of the main house foundation (Figure 3.14; Photograph 3.20). Modern artifacts within the fill of the well suggest that it was filled when the house was demolished (it had been marked off with caution tape, presumably at the time of the house demolition in the 1980s). Excavation into the well shaft proved fruitless because of the narrow opening and loose, rubbly fill. A 0.8-foot-diameter terracotta drain pipe [108] extended into the floor of the subcellar in its southeastern corner.

A series of slate stone paving stones was also set into the center of the western half of the basement floor [87] (Figure 3.14; Photograph 3.21). This feature measured 4 feet east-west and roughly 7 feet north-south, although the southern limit was somewhat disturbed, and is interpreted as a pad for a heating furnace. A historic photograph of the house does appear to show a central chimney in this location in the 1980s. A stone bulkhead-style cellar entrance [24/89] was also identified in the center of the northern foundation wall. A series of rotted wooden steps [88] remained within this entrance. A square limonite block [93] was identified along the exterior of the southern foundation. This stone is interpreted as the remnants of a pier of footing for a porch because of its position 16 feet from the southwestern edge of the foundation. A porch is visible in the 1980s historic photograph of the house.

Several pipes were also documented entering or leaving the cellar including a modern pvc-drain pipe [113] in the northern corner, a six-inch iron pipe [114] projected from the northern wall and another [115] from the floor near the subcellar. A 1.2-foot-diameter terracotta drain pipe [95] also extended into the floor of the southeastern cellar room. It was not determined where the outlet for these drain pipes extended, however such a drain system may explain the depth of excavation observed in Trench 106.

Unexpectedly, on the second to last day of fieldwork, remnants of foundation walls were identified abutting the southern and eastern walls of the cellar foundation (Figure 3.14; Photographs 3.22 and 3.23). These foundations [99/100] turned to the east and south, respectively, before meeting in a corner southeast of the southeast corner of the farmhouse foundation (Photograph 3). The eastern foundation wall [100] was very fragmentary and appeared to have been torn down when the later foundation [97] was built. The southern foundation wall [99] cleanly abutted the later southern foundation [39]. These newly identified foundations appear to have supported a building, measuring approximately 23 by 12.5 feet, that pre-dated the more substantial Borton/Ballinger Farmhouse foundations. Bricks [98] were identified placed in between the southern foundation wall [99] and the newly-identified earlier southern foundation wall [96], apparently to fill the void that was created with the construction of the newer foundation. It

Photograph 3.19. View looking northwest showing final view of the subcellar in the northeast corner of the Borton/Ballinger Farm House basement (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D3:285].

Photograph 3.20. View looking north showing detail of well shaft feature extending north of the main footprint from the subcellar of the Borton/Ballinger Farm House (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D3:242].

Photograph 3.21. View looking southeast showing Context 87, a slate floor surface, in the northwest chamber of the main basement level in the Borton/Ballinger Farm House (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D3:113].

Photograph 3.22. View looking west showing foundations of possible earlier structure truncated by the original house foundation (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/ D3:358].

Photograph 3.23. View looking west showing foundations of possible earlier structure truncated by the original house foundation (Photographer: Joshua Butchko, September 2016) [HRI Neg. #16034/D3:310].

appears that a brick floor [101] had been built within this older cellar but had been heavily disturbed. No artifacts were recovered from this area.

C.. ARCHAEOLOGICAL MONITORING PROGRAM

An archaeological monitoring program was briefly conducted at the Borton/Ballinger Farmstead site in October 2016 after the completion of the archaeological data recovery. A monitoring protocol was prepared up as required by the NJHPO in their review of the Phase III end of fieldwork summary (email, Maresca to McGuire, dated 10/7/2016 [HPO-J2016-029]). The primary goal of this program was to document any unanticipated archaeological features that might be encountered during construction activities in and around the portions of the Borton/Ballinger Farmstead site within the limit of construction.

Archaeological monitoring fieldwork was carried out intermittently between October 12 and October 18, 2017 by Joshua Butchko and Andrew Martin. Monitoring took the form of periodic "observational monitoring" in coordination with the site engineer and contractor during which exposed soils were examined and documented. This observational monitoring involved the examination of potential archaeological deposits and features during contractor operations through visual observation, photography and written notes, the inspection of back dirt piles, and the documentation of discoveries in plan and profile. Short-term cessation of work (no more than 2 hours) was sometimes required in order to complete recordation. When archaeological resources of particular interest were encountered during the course of monitoring, coordination with the site engineer, contractor, developer and property owner typically took place to allow for an appropriate level of investigation and documentation. In this particular instance, one archaeological resource of interest was encountered.

Excavation for construction activities was performed by contractors from Winzinger, Inc. who employed a substantial excavator with a 5-foot-wide bucket. The process within the Borton/Ballinger farmstead site boundary began with the careful removal of the foundations that were documented during the preceding data recovery. At the main farmhouse location this required excavation of a large open area to approximately 4 to 5 feet below ground surface. Over 90% of the building footprint was removed during this process. Lower elements of the well shaft feature along the northeast exterior wall were not removed and likely remain intact below the new construction. Demolition and excavation was followed by sequences of grading and compaction with a mechanical roller (Photograph 3.24).

A shallow truncated foundation was identified north of the main house footprint when the contractors removed topsoil for grading along the northern limit of excavation (Figure 3.14; Photograph 3.25). This foundation was identified approximately 12 feet north of and partly parallel to the north wall of the main house foundation. Measuring 9 feet long and 1 foot wide, this feature [147] comprised mortared limonite cobbles with a smaller portion of the feature extended due north [148]. It was exposed 2 feet below ground surface, considerably shallower than the main house foundation, and it is interpreted as a porch addition to the main house. It likely measured approximately 12 by 20 feet assuming it was situated between the northeast corner of the house and the cellar entryway. The short section that extended north [148] may have been for steps. This feature was located along the northeast edge of new construction limits and did not need to be removed by the contractor. It was documented by the monitor and left in place.

The initial grading generally resulted in the complete removal of intact cultural deposits to the required depth well beyond the depth of any cultural deposits identified during the previous investigations in intact

natural subsoils (Photograph 3.26). Once this grade was reached across the site, the contractors performed narrower machine excavation within the construction footprint to facilitate installation of new utility pipes along what was expected to become the west edge of the proposed road alignment (Photograph 3.27). At the close of excavation this western extent was situated approximately 4 feet east of the two historic osage orange trees identified by the earlier surveys. The utility pipe trenching generally extended along the bottom of this western limit of excavation measuring 5 feet wide and approximately 8 to 10 feet below the original grade. As the new utilities were installed, the monitor was able to photograph in detail the western profile including the intact cultural deposits that were investigated during the data recovery (Photograph 3.28). Monitoring was completed at the north end of the Borton/Ballinger Farmstead site boundary where new surface outlets were installed along the east edge of the proposed road alignment connecting utilities to the extant campus system (Photograph 3.29).

With the exception of the truncated limonite outbuilding foundation, no additional archaeological features were identified and no intact cultural deposits were observed during archaeological monitoring. Limited historic cultural materials were recovered from the spoil piles of the construction excavations and are included in the analysis presented below.

Photograph 3.24. View looking south showing mechanical grading of Borton/Ballinger Farm House Site observed during archaeological monitoring program of new construction (Photographer: Joshua Butchko, October 2016) [HRI Neg. #16034/D4:046].

Photograph 3.25. View looking west showing northern addition footings (Contexts 147 and 148) of Borton/Ballinger Farm House Site observed during archaeological monitoring program of new construction (Photographer: Joshua Butchko, October 2016) [HRI Neg. #16034/D4:079].

Photograph 3.26. View looking east-southeast showing final grade for proposed road at Borton/Ballinger Farm House Site observed during archaeological monitoring program of new construction (Photographer: Joshua Butchko, October 2016) [HRI Neg. #16034/ D4:094].

Photograph 3.27. View looking northwest showing installation of new pipeline along west edge of proposed road across Borton/Ballinger Farm House Site observed during archaeological monitoring program of new construction (Photographer: Andrew Martin, October 2016) [HRI Neg. #16034/D5:010].

Photograph 3.28. View looking south showing partial west profile of pipe trench excavation observed during archaeological monitoring program of new construction (Photographer: Joshua Butchko, October 2016) [HRI Neg. #16034/D6:035].

Photograph 3.29. View looking north-northeast showing pipe trench excavation continuing beyond northern limit of project area observed during archaeological monitoring program of new construction (Photographer: Joshua Butchko, October 2016) [HRI Neg. #16034/D6:064].

Chapter 4

MATERIAL CULTURE

A. OVERVIEW

A total of 6,745 artifacts were recovered during the Phase III archaeological data recovery conducted at the Borton/Ballinger Farmstead. The vast majority of artifacts identified were historic in nature (6,728), but the assemblage also included 13 modern artifacts and 4 prehistoric artifacts.

The vast majority of the assemblage, 6179 artifacts or 91.6%, were collected from excavation units and shovel tests located within the Farmhouse Area of the project site. Excavation Units 101 and 102 were the only units conducted manually from ground surface, placed at the location of a depression and apparent midden. The remaining excavation units were placed within the open area excavation (Excavation Unit 103) or within Trenches 106, 107 and 108 (Excavation Units 104 through 114) that were started mechanically to more efficiently remove topsoil and modern grading fills from the project area. With these upper deposits removed, archaeologists were able to more effectively and safely excavate the deposits below with greater horizontal control within the framework of the units. Similarly, few of the shovel tests were completed from the ground surface. Most were placed within the bottom of trenches or excavation units to determine the depths of cultural deposits. A total of 6,027 artifacts were retained from stratified soils within excavation units. A total of 152 historic artifacts were retained from shovel tests. A total of 560 artifacts, or 8.3% of the total assemblage, were collected from what was broadly considered general provenience across the project site. This material was collected via surface collection and review of the soil stockpiles produced during the machine excavation of test trenches and open areas. Most of the general provenience material was collected from the Farmhouse Area (489 artifacts). Only 20 artifacts were retained from stockpiles for trenches excavated in the Farmyard Area. The remaining general provenience material (51 artifacts) was categorized as “all site”.

When considering all contexts, including general provenience, it is helpful to know the proportions of the different historic artifact classes (Table 4.1). Ceramic vessels are represented by 2,599 artifacts or 38.6% of the historic assemblage, followed by glass vessels represented by 2,246 artifacts (33.4%), building materials with 1,197 artifacts (17.8%), fauna with 367 artifacts (5.5%), and tools/hardware with 72 artifacts (1.1%). Other classes of historic artifacts such as agriculture, arms and armor, clothing related, commerce, energy, indeterminate, kitchen, personal items, and recreation/activities are each represented by less than one percent.

The 13 modern artifacts retained from the investigation represented a wide array of the artifact classes and were chiefly made of plastic and comprised three indeterminate fragments, one garden tag, one button, one comb, one wine bottle seal and one electrical socket. Three sparkplug fragments, composed of porcelain and ferrous metal were also identified. One steel nut and one aluminum dog bowl were identified rounding out the modern assemblage. Some of these objects were retained from general provenience (5 artifacts), but most were retained from excavation units. Generally, these were identified in modern deposits or as intrusive items in historic deposits placed there as a result of root growth or other means of bioturbation.

Three of the four prehistoric artifacts are considered non-diagnostic. However, the prehistoric assemblage did include a jasper projectile point of the Brewerton side-notched style. These are commonly dated to the Late Archaic period (4,000 to 2,000 B.C.). This tool was recovered along with a fragment of thermally altered rock from the historic buried plowzone (Context 62) identified in Excavation Unit 105. A quartzite flake was recovered from a probable buried A horizon (Context 80) in Excavation Unit 112. This deposit was likely the late 18th- or early 19th-century yard deposit or occupation layer extending from the southern exterior of the farmhouse. A chalcedony flake fragment was identified in the grading/demolition fill (Context 5) of Excavation Unit 114 which is associated with the 19th-century construction expansion of the Farmhouse. Most pertinent is that no intact prehistoric deposits were identified during this investigation and all prehistoric artifacts that were identified were retained from historically disturbed soils.

B. ARTIFACTS BY CLASS

1. Ceramic Vessels

Of the 2,599 ceramic vessel sherds recovered from this investigation, red-bodied earthenwares are the most dominant, with lesser amounts of ironstone, creamware, pearlware and buff-bodied slipware. Small, yet interesting amounts of refined redware (Jackfield or Jackfield-type), white salt-glazed stoneware and delftware were also identified. Relatively low amounts of porcelain, whiteware, gray-bodied stoneware and other wares were recovered. The ceramic wares have a broad date range from the early 18th century to mid-20th century, which is reflective of the long-term domestic occupation of the site (Table 4.2).

A broad distinction is normally made between refined wares, generally the more expensive imported ceramics intended chiefly to be used in formal dining settings (and reflect the social sophistication of their owners), and utilitarian wares, which are chiefly locally made and increasingly relegated to food preparation, storage and processing functions. However, studies of 18th- and 19th-century sites regularly show that the presence of refined wares is not of itself a reliable indicator of the social or economic status of the users.

The diminutive size of most ceramic sherds in the assemblage made the identification of their exact form (bowl, dish plate, storage jar, etc.) difficult. As a precaution to guard against subjective identification of forms, only those positively identified are named in the inventory. These forms consist of plates, dishes, bowls, teacups, cups/porringers, mugs/tankards, flower pots/planters, milk pans, jugs, saucers, crocks, bottles, teapots and vases/decorative vessels. It is understood that the classification of wares into specific functional forms somewhat precludes the use of those vessel forms in ways for which they were not intended when manufactured or even first purchased. An example would be to use a broken storage jar as a bowl. Most of the sherds in this assemblage have been identified as hollowware (2,087 or 80% of the historic ceramic assemblage). No whole vessels were identified or mended.

a. Earthenware

Red-Bodied Earthenware

A total of 1,513 red earthenware (or redware) sherds represents 58% of the total number of historic ceramics (2,600 sherds) recovered from this investigation. This percentage is surprisingly balanced against the rest of the assemblage. Utilitarian red earthenware was produced both locally and abroad and was the least expensive ware made during the 18th and 19th centuries. Therefore, one might expect the percentage of red earthenware found during this investigation to be higher than they actually are. The study of the

Table 4.1. Overall Historic Artifact Totals by Class, Material and Type.

Agriculture	**14**
earthenware drainage	12
ferrous metal pipe	1
stoneware drainage	1
Arms & Armor	**13**
brass bullet casings	11
gunflint	2
Building Materials	**1197**
brick	38
nail	498
roofing nail	4
window glass	648
flint construction chip	5
marble fabrication	2
mortar tile	1
quartz architectural stone	1
Ceramic Vessels	**2599**
Earthenware	1610
Porcelain	45
Refined Earthenware	878
Stoneware	66
Clothing-Related	**49**
brass buckle	2
indeterminate cloth type	1
copper alloy button	3
copper alloy clasp/catch	2
copper alloy zipper pull	1
ferrous metal buckle	2
glass and copper button	1
shoe leather	34
shoe leather with brass clasp	1
shell button	2
Commerce	1
coin [US one cent piece 1800]	1
Energy	**17**
charcoal briquette	2
glass insulator	2
ferrous metal slag	1
ferrous metal and glass fuse	1
carbon rod [battery part]	11
Fauna	**367**
Bone - remains	232
Shell - remains	135
Glass Vessels	**2246**
glass vessel fragment	2233
whole glass vessel	13
Indeterminate Class	**61**
indeterminate copper alloy	3
indeterminate ferrous metal	34
indeterminate flat glass	23
indeterminate white metal	1
Kitchen-Related	**11**
bone and metal utensil handle	1
copper alloy salt shaker cap	1
ferrous metal fork	2
ferrous metal kettle	1
ferrous metal stove part	2
ferrous metal and porcelain stove part	1
ferrous metal and tin mug/tankard	2
tin can	1
Personal Items	**52**
brass placard	1
copper alloy thimble	2
copper alloy and ferrous metal watch buckle	1
glass bead	6
glass eyeglass lens	1
clay tobacco pipe	41
Recreation/Activities	**29**
glass ashtray	1
ferreous metal bicycle wheel rim	2
ferrous metal ice skate blade	1
ferrous metal lid	1
ferrous metal wheel	1
porcelain and ferrous metal bottle stopper	5
tin bucket	17
candle wax	1
Tools/Hardware	**72**
brass lightswitch panel	1
brass wall hook	2
copper alloy chain	1
copper alloy eyelet	1
copper alloy gear	1
ferrous metal bolt	1
ferrous metal chain	1
ferrrous metal decorative hardware	1
ferrous metal door hinge	2
ferrous metal drawer pull/handle	3
ferrous metal garden hoe	1
ferrous metla grommet	1
ferrous metal handle	1
indeterminate ferrous metal garden tool	1
indeterminate ferrous metal hardware	25
ferrous metal knob	1
ferrous metal machine part	4
ferrous metal mason's trowel	1
ferrous metal screw	1
ferrous metal spike	10
ferrous metal spring	1
ferrous metal stake	1
ferrous metal turnkey	1
ferrous metal wall hook	1
ferrous metal wheel hub	1
ferrous metal wire	2
ferrous metal/porcelain electrical hardware	2
porcelain decorative knob	1
indeterminate porcelain hardware	1
rubber gasket	1
Grand Total	**6728**

Table 4.2. Overall Historic Ceramic Vessel Totals by Ware, A1Type and Decoration [Dates Included Where Applicable].

	Totals
Earthenware	**1610**
Buff bodied slipware	81
North Devon [17th to early 18th century]	1
Staffordshire [1670-1775]	71
Delftware [17th to early 18th century]	10
Indeterminate Mottled Glaze	9
Indeterminate Body	3
Red bodied slipware	344
Copper Oxide [late 18th century]	97
Indeterminate	17
Lead Glazed	18
Indeterminate Slip Trailed	42
White Slip Trailed	170
Redware	1169
Engine-Turned [late 18th to late 19th century]	3
Indeterminate	111
Lead and Manganese Glazed	2
Lead Glazed	187
Manganese Glazed	611
Mottled Lead and Manganese Glazed	192
Undecorated	63
Terracotta	1
Yellowware	2
Rockingham [1840-1890]	2
Refined Earthenware	**878**
Creamware	150
Annular [19th century]	2
Transfer Printed (Black) [1785-1820]	1
Undecorated [1762-1820]	147
Indeterminate Body	2
Undecorated	2
Ironstone	453
Gilt Enameled [1850-1920]	19
Transfer Printed (Black) [1840-1864]	4
Transfer Printed (Polychrome) [late 19th to early 20th century]	28
Undecorated [1840 to present]	402
Jackfield	5
Jackfield [1740-1770]	5
Pearlware	143
Annular [19th century]	9
Feather Edge (Green) [1820-1840]	1
Hand Painted (Blue) [1780-1810]	11
Hand Painted (Polychrome) [1795-1830]	4
Hand Painted (Red) [1830-1860]	1
Indeterminate Decoration (Blue)	3
Indeterminate Decoration (Red)	1
Molded (Scalloped)	1
Shell Edge (Blue) [1800-1840]	10
Shell Edge (Green) [1800-1840]	3
Transfer Printed (Black) [1785-1864]	2
Transfer Printed (Blue) [1784-1867]	23
Transfer Printed (Green) [1829-1859]	1
Undecorated [1780-1890]	73
Redware	57
Jackfield-type [19th century]	56
Lead Glazed	1
Whiteware	69
Annular [19th century]	17
Hand Painted (Polychrome) [1815-1830]	1
Indeterminate Decoration (Polychrome)	1
Molded	2
Shell Edge (Blue) [1800-1840]	2
Transfer Printed (Black) [1815-1864]	3
Transfer Printed (Green) [1829-1859]	2
Transfer Printed (Pink) [1829-1880]	2
Transfer Printed (Polychrome) [late 19th to early 20th century]	5
Transfer Printed (Red) [1829-1880]	1
Undecorated [1815 to present]	33

	Totals
Porcelain	**45**
Hard Paste	26
Molded	3
Molded (Scalloped)	1
Transfer Printed (Polychrome) [late 19th to early 20th century]	7
Transfer Printed (Purple) [late 19th to early 20th century]	2
Undecorated	13
Hotel China	2
Transfer Printed (Blue) [1784-1867]	1
Transfer Printed (Polychrome) [late 19th to early 20th century]	1
Indeterminate Body	14
Hand Painted (Blue) [1775-1810]	3
Transfer Printed (Blue) [1784-1867]	2
Transfer Printed (Polychrome) [late 19th to early 20th century]	2
Undecorated	7
Soft Paste	3
Transfer Printed (Blue) [1784-1867]	1
Undecorated	2
Stoneware	**66**
Brown Body	2
Lead Glazed	1
Salt Glazed	1
Buff Body	2
Manganese Glazed	1
Salt Glazed, Incised Cobalt Blue Decoration	1
Gray Body	47
Albany Slip [early 19th to 20th century]	9
Bristol Slip [19th to 20th century]	1
Bristol Slip, Albany Slip [19th to early 20th century]	22
Lead Glazed	2
Salt Glazed	6
Salt Glazed, Albany Slip [early 19th to 20th century]	1
Satl Glazed, Albany Slip [early 19th to 20th century]	6
Tan Body	1
Manganese Glazed	1
White salt-glazed	14
Incised [1685-1785]	1
Scratch Blue (Floral) [1745-1780]	3
Scratch Blue [1745-1780]	3
Undecorated [1685-1785]	7
Grand Total	**2599**

utilitarian redwares themselves is continually developing. It remains difficult to identify specific sources for redware vessels unless they exhibit particular decoration styles, and therefore to obtain information about the makers or marketing of these wares is difficult. These wares were low-fired, lead-glazed, fragile vessels. Given the inherent fragility of these wares coupled with the fact that much of the material was recovered from demolition-based or redeposited soils, the severely fragmentary nature of the redware assemblage comes as little surprise. Analysis of this collection has distributed the red earthenware into two broad categories, redware and red-bodied slipware, for the discussion of further varieties below.

Redware in the assemblage (1,169 sherds) was mostly either manganese-glazed (611), mottled lead and manganese glazed (192) or clear lead glazed (187). Redware accounted for 45% of the overall historic ceramic assemblage. Clear lead glazed surfacing was the cheapest and most common means for decorating utilitarian redwares and was specifically utilized to eliminate the interior porousness of vessels used for food and beverage consumption and storage. Manganese-glazed redware incorporated a manganese dioxide mix into the clear lead base to affect decorative variations of brown coloring on ceramic vessels. Mottled lead and manganese glazed vessels are those that exhibit a primarily clear lead glaze overlying mottled striped, dotted or sponged patterns of brown manganese decoration. Mottled lead and manganese-glazed redwares were made to further stylize this cheap and common ware type throughout the 18th and 19th centuries. In many respects these were probably produced by local potters emulating earlier refined styles from Britain including manganese mottled buff-bodied earthenwares, which are described below.

Indeterminate and undecorated redware vessels were represented by 174 sherds in the assemblage. Three sherds were identified as engine-turned redwares. Engine-turned redware combined cut or incised designs on different slips to affect complex patterns. Engine turning lathes were believed to be used in ceramic production from the late 18th to the late 19th century (Rickard 2006). At least two sherds from the assemblage had lead glaze on one surface and manganese glazed on the other. Most of the redware was too fragmentary and so the majority of the assemblage was identified as hollowware (1,102 sherds). The few identifiable vessel forms comprised milk pan, flower pot, bowl, teapot, planter, crock, flatware, mug/tankard and shelved jar.

Red-bodied slipware (344) accounted for 13% of the overall historic ceramic assemblage. Most of this assemblage is described as white slip-trailed redware (267 sherds). Slip trailed decoration is a technique where gobs of slip are applied directly to the surface of a vessel using a pointed dispenser and subsequently formed into lines or patterns of various thickness using different sized nibs. The slip gobs are typically yellow on earlier wares and white on later wares. Over time, especially in an archaeological context, the exterior of a white slip trailed vessel can degrade to a confusing yellow color. Most of this assemblage exhibits the yellow color on the vessel surface, but is actually white slip trailed upon inspection of the sherds in cross-section. At least two sherds in this assemblage appear to have a reverse slip trailed decoration that might be attributed to North Midlands Mottled wares. These wares were commonly exported to America until the 1770s. Overall, utilitarian slip-trailed wares like those in this assemblage were commonly produced from the late 17th century and into the early 19th century.

There are many points of distinction that archaeologists can draw from in identifying whether slip-trailed wares are being produced in America or abroad. Pertinent to the analysis of this assemblage is the presence of a mottled green decoration on several red-bodied slipware sherds. Approximately 36% of the white slip trailed redware (97 sherds) is decorated

with mottled green patterns formed by the use of copper oxide (Photograph 4.1). Slip trailed redwares with copper oxide decoration were a hallmark of German potters in Pennsylvania and very seldom used by their English counterparts. German emigrants began to arrive in Pennsylvania as early as 1683 and variants of the sgraffito style of slipware, which cannot be confirmed in this assemblage, were being produced in eastern Pennsylvania by at least 1733. Interestingly, many of the sherds in this assemblage (35) are rim based sherds impressed with a piecrust rim. This style of decoration would have been typical on a variety of vessels including pie plates and milk pans. However, it is noteworthy that pie plates did not generally come into fashion until around 1785, starting first in America and later emulated by European potters (Barber 1970). This being said, it is probable that much of the red-bodied slipware, though fragmentary, can be attributed to Pennsylvania German potters, operating in Philadelphia, and dates to the latter half of the 18th century.

Smaller quantities of less distinct red-bodied slipwares were also recovered. These comprised indeterminate slip-trailed sherds (42) and other indeterminate (17) or partially lead slipped sherds (18). These remaining 77 sherds were in various stages of degradation, many missing one or both surfaces with only trace amounts of slip remaining on the piece. Most of the assemblage, given its fragmentary nature, was analyzed as hollowware or indeterminate type (270 sherds). The remaining 74 sherds were identified as plates or flatware.

Buff-Bodied Staffordshire Ware

Buff-bodied Staffordshire ware, also known as "Dotware", has been attributed to the Staffordshire district of England, but production took place elsewhere in England (Grigsby 1993). This ware type was represented by 71 sherds. Buff-bodied Staffordshire ware exhibits a coarse buff to yellow earthenware body decorated with brown iron oxide dots and/or combed lines through white slip. Wares of this type commonly appear in the period *circa* 1670-1775 and typically include plates, platters and porringers (Hume 1969; Maryland Archaeological Conservation Laboratory 2018).

Most pieces in this assemblage are fragmentary hollowware body sherds (63 pieces). There are three basal sherds, one which looks to be from a bowl or large cup. The remaining assemblage includes five rim sherds with a generally vertical profile. These details coupled with the absence of identifiable plate sherds may indicate that the majority of Staffordshire ware sherds come from porringers/bulbous cups. This may reflect the use of inexpensive vessels at the site, possibly purchased by or for site's occupants, for the consumption of porridges, stews, soups or pottage (Beaudry et al. 1983). Porringers are a handheld vessel with a single handle on one side, which helped to hold the vessel in the person's hands while eating.

Other Buff-bodied Earthenware

This ware type was represented by ten sherds. These comprised eight body and two rim sherds, but were generally too small to confidently identify the ware or vessel type. One of these rim sherds (Catalog #38.41) has a reddish pink to gray body decorated in a yellow to brown lead glaze. This fragment has been interpreted as North Devon earthenware which was produced throughout the 17th century and into the early 18th century. It is probably a cup or porringer because it is glazed on both surfaces. The remaining sherds are probably manganese wares. Manganese mottled earthenware has a pale or buff body similar to Staffordshire ware. Both the interior and exterior of manganese mottled earthenware exhibit a clear lead glaze streaked and or speckled with iron oxide and common vessel types are mugs or tankards. Most of these sherds have lead or manganese glazed surfaces. However, only one of these sherds is large enough

Photograph 4.1. Selected red-bodied earthenware sherds from the Borton/Ballinger Farmhouse Site decorated with variations of slip-trail, copper oxide mottling and pie crust rims. These wares can probably be associated with Pennsylvania German potters, operating out of Philadelphia during the 18th century. All of these selections were recovered from Excavation Unit 105, Context 5. *Top row, left to right:* Plate sherd with piecrust rim and repair hole [Catalog #34.12] Plate sherd with piecrust rim [Catalog #34.14] Mended plate sherds with piecrust rim and repair hole [Catalog #34.17]. *Bottom row, left to right:* Plate sherd [Catalog #34.11] Plate sherd [Catalog #34.11] Mended hollowware sherds [Catalog #34.15] (Photographer: Alexis Alemy, July 2018) [HRI Neg. #16034/D7:008].

to distinguish the mottled of lead and manganese as indicated. It is only probable these few sherds are from manganese mottled vessels that date from between 1670 and 1780 (Maryland Archaeological Conservation Lab 2018).

Tin-Enameled Earthenware

Tin-enameled earthenware also known as "Delftware", "Majolica" or "Faience" is low-fired and exhibits a soft-paste, buff or pink body. The glaze is a mixture of lead and tin producing an opaque white to light blue surface intended to mimic Chinese porcelain. Decorations consist of hand-painted blue and red floral motifs. This ware type was represented by 10 small sherds. Most of these were small body sherds likely from hollow tablewares; one base sherd was also identified. Eight sherds were undecorated however some of these had a bluish or pinkish tint to them (2 each). One sherd was decorated with a blue hand painted floral pattern while another was hand painted with a blue stripe and purple mottling (both on the exterior surface). Tin-enameled earthenwares were produced in Europe (mainly Holland, England and Spain) and are found on sites throughout colonial America from the contact period through the end of the 18th century, although they are less common on sites in the second half of the 18th century (Hughes 1961; Hume 1969).

Other Earthenwares

Smaller quantities of other earthenwares were also recovered during this investigation. Three burned earthenware vessel sherds with indeterminate body types were retained. These were found in three separate contexts across Excavation Units 105 and 114 and likely do not represent a single vessel or cultural event. Two sherds of a yellowware pitcher were recovered from the General Provenience assemblage of Trench 109. These sherds, probably from the same vessel, included the body and handle elements for a vessel decorated with a Rockingham-style glaze. Most common yellowware, so-called for its coarse yellow body, was undecorated hollowware and was broadly produced between from 1828 to 1930. Rockingham decoration is not attributed to a particular ware type and can be found on both earthenwares and stonewares. They are generally characterized by mottled and streaked brown glaze with portions of the original body color showing through. Mugs, pitchers and teapots are the most common form for this type of decorated ware. These sherds of Rockingham-glazed ware can be more tightly dated between 1840 and 1890 (Maryland Archaeological Conservation Laboratory 2018). One terra-cotta planter base sherd was also recovered from this investigation.

b. Refined Earthenwares

Creamware

Creamware is a refined thin, white-bodied earthenware with a clear lead glaze. In contrast to other refined wares, it will typically have a light cream color, hence its name. This ware type was represented by 150 tableware sherds. It has been broadly dated from *circa* 1762 to 1820. Those produced after 1780 can be ascribed to a transitional period during which time pearlware was being developed as a more fashionable replacement. The beginning date for creamware has been questioned since the body type was in use (as "clouded ware" and "tortoiseshell wares") since *circa* 1740 (Hume 2001). These wares were ubiquitous and fashionable with the rich and elite, but were used by the middling and poor when available.

This assemblage is primarily undecorated (147 sherds) suggesting the unidentified vessel forms were probably of a more common and utilitarian nature than most high fashioned varieties. This may suggest they were from the latter half of the creamware production phase. Two sherds were decorated with underglaze

banding in the *Annular* style, which can also be referred to as dipped, banded or mocha. These wares were very common from the 1780s through the 19th century and were often the cheapest wares available with color decorations. One sherd is decorated with a *black transfer printed* pattern. While atypical on most creamwares, black transfer printed patterns were generally produced between 1785 and 1865 which does overlap with the end of creamware production (Maryland Archaeological Conservation Laboratory 2018).

Pearlware

Pearlware, also known as "Pearl White" and "China glaze", was refined, white-bodied earthenware in production from around 1780 until the 1890s. Pearlware exhibits a cream- to white-colored body typically with a cobalt-tinted lead glaze ranging from blue green, pale blue and grayish blue when exposed to fire. This ware type was represented by 143 sherds which were mostly identified as hollowware (94). Identifiable vessel forms comprised plates (33), dishes (6), saucers (2), teacups (2) and a bowl; five sherds were of indeterminate vessel type. Like other refined earthenwares, pearlware has been chronologically divided by decoration techniques and patterns. Most of the pearlware in this assemblage was undecorated (73 sherds).

Transfer-printed decorations were the most prevalent in the pearlware assemblage. Twenty-three sherds of blue printed patterns were identified that encompass a broad date range of 1784 to 1867. Only two sherds exhibited a black transfer-printed pattern bearing a slightly tighter date range from 1785 to 1864. One sherd of green transfer-printed pearlware was recovered with a tighter and later date range from 1829 to 1859.

Hand-painted pearlwares were represented by 16 sherds. These comprised chiefly blue hand-painted styles (11 sherds) and lesser amounts of polychrome (4) and red (1) painted patterns. Blue painted pearlwares were most common between 1775 and 1810, while polychrome patterns were generally used between 1795 and 1830. Single chrome colors, like red, were typically produced later between 1830 and 1860 (Maryland Archaeological Conservation Laboratory 2018).

Edged-decorated pearlware sherds were also present in this assemblage (15 sherds). This decoration style was generally reserved for larger tablewares like plates and serving dishes. It was rare on teacups and saucers after 1790. Toiletwares were also rarely decorated in such an elaborate style. Rococo-style edged ware, the earliest edged ware with origins in the late 18th century, was not present in this assemblage. Most of the sherds in this assemblage are painted blue (9) or green (3) and are scallop molded, with impressed curved or straight lines. These were most common between 1800 and the 1830s. One green edged sherd with a molded feather motif was retained; this pattern was common in greens and blues between the 1820s and 1830s. One unscalloped blue shell-edge sherd was retained; this unscalloped style was common between the 1840s and 1860s and almost always in blue. Lastly, one plain sherd with an even scalloped rim was also recovered.

Annular pearlwares were represented by nine sherds. As noted earlier, this decoration style was very common from the 1780s through the 19th century.

Whiteware

Whiteware was refined, white-bodied earthenware whose production began around 1815; it is still being produced today. These emerged as the use of cobalt in refined earthenwares, which had given pearlware its noteworthy blue tint, decreased over time. Some early whitewares will still have a slight blue hue and can be confused for pearlwares. In analyzing assemblages of mixed refined earthenwares, the simplest means

of differentiating between creamware, pearlware and whiteware can be to lay them out on a white sheet of paper. Those that most closely match the white of the paper are probably whiteware.

This strategy cannot always be employed when analyzing archaeological collections, especially if a high yield of the fragmentary objects are covered in decoration. One sherd from the refined earthenwares was simply identified as indeterminate because both surfaces were missing. Of late, the more substantive technique to dating refined wares has been to analyze and date these wares based on their decoration (Maryland Archaeological Conservation Laboratory 2018).

This ware type was represented by 69 sherds which were mostly identified as hollowware (56). Identifiable vessel forms comprised plates (4), bowls (3), cup/teacups (3) and shallow dish (2); one sherd was of indeterminate vessel type. Most of the whiteware in this assemblage was undecorated (33 sherds) and is broadly dated from 1815 to present.

Annular decorations, common throughout the 19th century, were dominant in the whiteware assemblage (17 sherds). Most sherds (16) exhibited simple solid color bands and washes in different shades of brown. One sherd had a light blue wash. Generally speaking, earthy tones like browns and oranges were common in the late 18th to early 19th centuries. These gave way to blues, blacks and grays by the mid-19th century.

Transfer-printed decorations of various colors and patterns were also in the whiteware assemblage (13 sherds). Five sherds of polychrome patterns were recovered. According to the Maryland Archaeological Conservation Laboratory, printing in multiple colors originated around 1835 (Maryland Archaeological Conservation Laboratory 2018). Three sherds exhibited a black transfer-printed pattern produced from 1785 to 1864. Two sherds of green transfer-printed whiteware were recovered dating from 1829 to 1859. Transfer printed patterns in red and pink were produced between 1829 and 1880. Two sherds with pink and one sherd with red transfer print was recovered from this investigation.

Edge-decorated whiteware was limited to two blue painted sherds that were scalloped with impressed lines. As noted previously, these were most common between 1800 and the 1830s. Other decorated whitewares found in smaller quantities comprised two plain molded sherds, one polychrome hand-painted sherd and one indeterminate polychrome pattern.

Ironstone

Ironstone was the most dominant refined earthenware recovered with 453 sherds (17.4% of the historic ceramic assemblage). Potters in Europe and America alike, began production of this ware around 1840. It was very popular in the United States until around 1870 and is still being made today. This ware is highly refined and typically has a dense, vitreous body. It can be difficult to distinguish ironstone from whiteware, especially in a fragmentary archaeological context. Generally speaking, ironstone will be heavier and have a thicker glaze in cross-section. Ironstone will also sometimes have a pale blue or gray cast to it. Identifiable vessel forms comprised mostly plates (92), dishes (52), mugs/cup/teacups (51) and bowls (11). Other vessel forms represented in smaller quantities included teapots, saucers, platters, flower pots and decorative vessels. One sherd was of indeterminate vessel type.

Most of the ironstone in this assemblage was undecorated (402 sherds). The undecorated hollowware (235 sherds) can probably be attributed to more utilitarian uses including both food service (large serving vessels) and toilet wares (chamber pots, etc.). The undecorated lot can be broadly dated from 1840 to present. Only 51 sherds of ironstone were decorated

and, unsurprisingly, these mostly tended to be found on tableware vessels including plates, dishes, bowls and teacups.

Transfer-printed patterns dominated the small assemblage of decorated ironstone (32 sherds). Most of these were polychrome patterns (28) that were common in the late 19th and early 20th century on this ware. Four sherds exhibited a black transfer-printed pattern which can be dated from 1840 to 1864.

Luster-painted patterns using copper, and less frequently gold, was a common motif used on ironstone from around the 1850s to the 1910s. This was most commonly employed as overglaze banding around the rims of vessels or in floral patterns on vessel exteriors. Nineteen sherds with gold banding or floral motifs, cataloged as gilt enameled, were recovered from this investigation.

Refined Redwares

A total of 62 refined redware sherds were recovered from this investigation. Most of these (61) have been identified as Jackfield or Jackfield-type wares. The distinction between the two is an important one. True Jackfield is a fine-bodied ware covered with a lustrous black glaze that can often be found with molded designs. Its hallmark is a thin purplish or gray body that almost looks like it is burnt when viewed in cross-section. To a degree this is true, in the sense that this particular redware is higher fired in comparison to more common coarse redwares. Jackfield has a narrow date range, especially in American archaeological contexts, which spans from about 1740 to 1770. Only five sherds from this investigation have been interpreted as true Jackfield.

Jackfield-type wares are those that emulate the original Jackfield brand, but may have been produced on coarse redwares or even terracotta and white-bodied wares. When reviewed in a fragmentary context, they do not have the signature purplish gray body of the original. These reproductions of the original ware were common in the late 18th and throughout much of the 19th century during various revival periods. Fifty-six sherds of Jackfield-type glaze on coarser red-bodied hollowwares and bowls were recovered from this investigation.

One sherd of simple lead glazed high fired redware was also retained, but was too fragmentary to identify in greater detail.

c. Stonewares

Stonewares are aptly named because they appear stone-like and are non-porous, often impervious to liquids when fired correctly. Their bodies can range in color from gray and brown to tan and buff. Stonewares emerged from Germany and other parts of Europe in the 13th century and peaked in the 17th century due to the shared enterprise of German and English potters of the time. Stoneware was probably being produced in North America no earlier than the 1720s, but domestic production was most popular throughout the 19th and early 20th century (Maryland Archaeological Conservation Laboratory 2018). Stoneware vessels are generally utilitarian in nature with jugs, bottles and other storage vessels being the most common forms. Sixty-six sherds of stoneware were recovered from this investigation and are discussed by body type below.

Gray-bodied Stoneware

Most of the stoneware assemblage from this investigation is gray bodied (47 sherds). Most of the vessel forms can be identified as jugs (21) or unidentified hollowware (14). Other vessel forms present include crock (6), bottle (2) and storage vessel (2). Single samples of an indeterminate lid and handle were also recovered.

Albany slip coated many of these sherds (16). Albany slip typically appeared in various dark shades of brown and would have been applied to both surfaces of a vessel. It originated in American production in the early 19th century, but was still quite popular into the 20th century. Bristol slip coated one of these pieces. Bristol slip, so-called for where it was developed in England in the 19th century, is most commonly identified as a smooth, white surface. Bristol slip remained popular well into the 20th century. Most of the gray-bodied stoneware sherds were dual coated in both the Albany and Bristol Slip (22). This combination was very popular in the late 19th century and was seldom utilized after 1920 (Greer 1981).

The remaining sherds in this group were simply salt-glazed (6) or lead glazed (2). These were probably the most common form of glazing used by American potters in the 19th century. Slip glazes were very popular during the last quarter of the 19th century, especially in America. It is likely that most of this assemblage was produced locally.

White Salt-Glazed Stoneware

White salt-glazed stoneware was manufactured in England and Scotland starting around 1685 and remained in production until *circa* 1785, but it was most popular between 1720 and 1770. This form of stoneware is thinner and more refined than common utilitarian gray-bodied stoneware and is normally associated with tablewares.

Amongst the 14 sherds recovered from this investigation are seven examples of dishes or bowls decorated with scratch blue floral designs dating from *circa* 1745 to 1780 (Noël Hume 1969). Scratch blue decoration is achieved by filling incised (scratched) designs with cobalt, which when fired results in a bright blue color. The remaining white-salt glazed hollowware sherds (7) are undecorated and very fragmentary.

Brown-, Buff- and Tan-bodied Stoneware

Small quantities of brown-, buff- and tan-bodied stoneware sherds were recovered from this investigation. Two brown-bodied stoneware sherds were recovered; one with a lead glaze and one with a salt glaze. These pieces are most probably of local production from the 19th century. Two hollowware sherds of mottled manganese glazed stoneware (one each of buff and tan bodied) were recovered as well. Mottled decoration on stoneware sherds are difficult to distinguish between English and German manufacture and overlap in production dates from the second half of the 17th century throughout the 18th century. These vessels are generally hollowwares such as storage jars, jugs/bottles, mugs/tankards/gorges or pipkins for cooking (Skerry and Hood 2009).

One interesting sherd of buff-bodied salt glazed stoneware was recovered from Excavation Unit 112, Context 5. This piece, salt glazed on both surfaces, appeared wheel-turned from the interior, and is decorated with underglazed incised lines and cobalt blue mottling. It appears to be a fish-scale or feather-like pattern. Given the under-fired nature of the body and rudimentary exercise of the decoration, it is likely that this is a locally produced vessel meant to emulate the German styles of the 17th and 18th century.

d. Porcelain

Porcelain comprises a variety of highly-fired, dense white-bodied ceramics. The three main types of porcelain are hard paste, soft paste and bone china. These can often be distinguished based on how vitrified and translucent they are. Forty-five porcelain sherds were recovered from this investigation.

Hard Paste

Hard paste porcelain is generally subdivided into Chinese, European and Japanese produced variants. It is typically the densest of the porcelains because it is subjected to the highest temperatures during the firing process. Chinese porcelain will typically have a light blue or gray tint. European porcelain will be most white in color and is the most impervious to staining and residue accumulation. Japanese porcelain, in contrast, will have an off-white color. Hard paste porcelain was dominant in this assemblage with 26 sherds, mostly from small tableware and teaware vessels.

Thirteen of the hard paste sherds are undecorated. The remaining sherds exhibit various patterns of polychrome (7) and purple (2) transfer printing which would have been more common in the later 19th century. The remaining four sherds show limited evidence of molding.

Soft Paste

Soft paste porcelain has a glossy, somewhat softer paste than hard paste porcelains. It was chiefly produced by the English from the mid-18th century and onward well into the 19th century. This analysis has identified three pieces of soft past porcelain in the assemblage; two undecorated and one with a transfer print blue pattern.

Indeterminate Body

Fourteen sherds of porcelain were classified as indeterminate body. Most of these were undecorated and very fragmentary (7). Four exhibited transfer printed patterns in blue (2) and polychrome (2) that would have been common in the 19th and 20th century. Transfer printed patterns were common on English soft paste porcelain, Japanese porcelain and Bone China. Three sherds were hand painted underglaze in blue patterns. Underglaze, blue hand-painted patterns were common on a variety of porcelains including English soft paste, Chinese hard paste and Bone China.

Hotel China

Hotel China was represented in the assemblage by only two sherds. This ware is in many ways a hybrid of the processes and materials used to create porcelain and ironstone. It was a durable and cost-effective ware that was introduced to North America in the late 19th century. It was very popular between the 1920s and 1940s, being commonly used across most commercial and institutional settings (prisons, orphanages, hospitals and *hotels*, etc.). The two sherds found here were transfer printed and likely date to the early 20th century.

2. Vessel Glass

Vessel glass was the second most dominant class in the historic assemblage with 2,246 artifacts. Approximately 86% of the glass vessel assemblage (1,942 artifacts) was retained from the 20th-century midden discussed below. Overall, a wide variety of vessel types was represented in the assemblage recovered across the site. These chiefly comprised bottles (beverage, ointment and pharmaceutical), drinking glasses (cups, stemware and tumblers) and storage vessels like jars, jugs and lids (canning, condiment and ointment). Approximately thirty-eight lamp chimney fragments were recovered. Other interesting vessel types found in smaller quantities included case bottle (1), olive oil bottle (2), punch bowl (1), shot glass (1) and vase (1).

Most of these vessel types are reflective of common household use over a prolonged period of occupation. Certain types, like the stemware and punchbowl, are perhaps indicative of an elevated socioeconomic

lifestyle. However, these may also be evidence of seldom-used materials from a family heirloom collection.

The lone case bottle fragment was recovered from Context 54 in Excavation Unit 114 which was interpreted as the fill of an indeterminate historic pit feature located approximately 20 feet south of the Farmhouse. Case or "case gin" bottles were squared-shaped storage bottles used for the efficient packing of liquor into packing boxes or "cases". Case bottles have their origins in 17th-century Europe, but were commonly reproduced in America throughout the 19th and into the 20th century. The best way to date these vessels is through identifying key manufacturing traits, but unfortunately the artifact recovered is too fragmentary in nature. Its dark olive color does, however, suggest it may be of earlier vintage (perhaps late 18th century).

With exception to the 20th-century midden, where many whole and fragmentary vessels were recovered, most of the vessel glass across the rest of the site was very fragmentary and therefore difficult to fully identify. Only seven whole glass objects were recovered across the rest of the site: four mason jar lids, two pharmaceutical bottles and one beverage bottle. One mason jar lid was recovered from Context 11 of Excavation Unit 113 and the remaining whole objects were from General Provenience. Despite the fragmentary nature of the glass vessel assemblage, some additional interesting information can be gleaned from this material.

A wide variety of glass colors were identified which can speak, in a way, to the long-term occupation of the site. Most vessel fragments were clear/uncolored (294), aqua (103) or milk (opaque white) (91). Colorless glass was efficiently mass-produced from the late 19th century onwards. American made aqua-colored vessels date back at least to the early 19th century and become less common after 1920. Milk or white glass was developed in the mid- to late 19th century. From about 1870 onwards, it becomes commonly used for cosmetic/toiletry bottles, ointment jars and eventually storage/canning jars. Most of the ointment and canning fragments from this assemblage were probably from the late 19th and early 20th centuries. Six fragments from the assemblage exhibited an amethyst color. This is a hallmark of the solarization process that exposes the magnesium additive used in glass production between approximately 1865 and 1920.

Other colors represented by smaller quantities in the assemblage comprise amber (3), blue (6), brown (11), frosted (4), green (16), olive (64), and red (1). The amber, brown and olive vessel fragments could perhaps be indicative of late 18th- and early 19th-century production although such colors were used in later reproductions into the early 20th century. The other colors like green and red, as well as the frosted fragments, also point to an early 20th century range of production.

Glass vessel fragments can also be dated by analyzing discernible production traits when available. Outside of the midden feature, only 14 vessel fragments bore evidence of their manufacturing technique. Two of these fragments were from mold blown vessels a process that flourished in the early 19th century before the advent of machine-made vessels. Twelve glass vessel fragments from this assemblage show evidence of mold seam production and are generally dated to the mid-19th to early 20th century Overall, the majority of the glass vessel assemblage points mainly from the mid-19th to early 20th century occupation of the site.

3. Building Materials

Building materials made up 1,197 artifacts or 17.8% of the historic assemblage and consist mainly of window glass and nails, but also include smaller amounts of brick, mortar and stone. A total of 648 flat glass fragments represent 54.3% of the identified building materials. The majority of flat window glass fragments is aqua-colored (399 pieces); other colors that are lesser represented include clear/uncolored (151) and light green (11). Much of the window glass assemblage (87 pieces) was retained from the 20th-century midden and not examined in further detail. The presence of approximately 502 nails corroborates the close-proximity to building related activities on the site. Most of these (127) were wrought nails. However, many more (194) were too corroded or fragmentary to firmly identify. Approximately 84 machine cut nails were also recovered. Wire nails were also well represented in the assemblage with 97 artifacts, four of which were distinctly roofing nails. Other building materials were found and retained in lesser quantity from across the archaeologically excavated areas. These comprised: brick (38 fragments), construction chipping (5 fragments), marble surface (2 fragments), terracotta drainage/tile (2 fragments), mortar tile (1 fragment) and cut quartz foundation block (1 fragment). These building materials, especially the diversity of the nail assemblage, vividly illustrate a site where building construction and renovation were routine across its occupied history. It is important to note that the majority of nails recovered date from before the mid-19th-century.

4. Fauna

Fauna was the fourth most dominant class in the historic assemblage with 369 artifacts. This class pertains specifically to faunal remains. This includes both unworked specimen and those that bear evidence of human consumption (butcher marks, cuts etc.). It does not include other worked bone or shell objects, whose numbers were few, because they have been ascribed to other more appropriate classes below.

Approximately 63% of this material was animal bone (232 artifacts). Few whole bones were recovered (10 of the 232). Most were fragmentary and difficult to identify at this level of analysis. Indeterminate non-human mammal remains were the dominant bone in the assemblage (215 artifacts). Only 20 of these fragments exhibited signs of butchering. One additional fragment was partially burned. There were also 8 whole mammal bones retained; 4 teeth, 3 tarsals, and 1 mandible. Species identification for these objects may be possible upon more expert inspection. Several mammal bones' species were identified at this level of study. These comprised 8 cow bones (5 mandible fragments and 3 loose teeth), 5 deer teeth and one pig tooth. Two avian bones were also identified in the assemblage. Both were identified as long bones (one whole) and are most probably chicken.

The remaining faunal material consists of shell remains; 135 artifacts or 37% of the faunal assemblage. Clam was the dominant shell identified with 98 pieces. Oysters were next with 34 pieces. Two indeterminate fragments were also retained. Lastly, one conch shell fragment was recovered. These are interpreted as food waste.

Most of the faunal assemblage was retained from the Farmhouse Area (356 artifacts or 97% of the total). The remaining 11 faunal remains were recovered from general provenience across the site (7) and at the Farmyard trenches (4).

5. Tools/Hardware

Seventy-two artifacts were classified as Tools/Hardware. This excludes a substantial amount of metal hardware because nails have already been

classified as building materials in the section above. Most of this group was ferrous metal (61 artifacts) and a substantial part of that was heavily corroded indeterminate hardware, machine parts or tool elements (30 artifacts). Approximately, 11 bolts/spikes, 4 knobs/drawer pulls and 2 pieces of wire were also in this group of ferrous materials. Otherwise single fragmentary samples of the following forms were also represented: chain, decorative fixture, door hinge, garden hoe, grommet, screw, spring, stake, turnkey, wall hook and wheel hub.

Other items in this class comprised indeterminate porcelain and metal electrical hardware (2), one porcelain knob/drawer pull, and an industrial porcelain fragment, probably from a sink or toilet. One rubber gasket was also counted amongst this class.

6. Personal Items

Personal Items were represented by 52 artifacts in the overall historic assemblage. A total of 41 tobacco pipe fragments fashioned from white ball clay were recovered from the investigation. None of the pipes have makers' marks that could help with dating and sourcing their origins. Bore diameters of 4/64, 5/64, and 6/64 inches were recorded from 37 pipe stems. In general, the larger the bore diameter, the older the pipe is. Pipe stems with bores of 4/64-inch diameter have been dated to between 1750 and 1800, pipe stems with bores of 5/64-inch diameter have been dated to between 1710 and 1750, and pipe stems with 6/64-inch diameter have been dated to between 1680 and 1710. These dates represent the most dominant broad temporal ranges for pipe stem bores as recorded by J.C. Harrington's 1954 landmark study for dating English pipe stems (Harrington 1954; Noel Hume 1969). In this assemblage, 5/64-inch diameter stems were most prevalent (23) followed by 4/64-inch (13). Only one stem fragment had a 6/64-inch diameter.

Other personal items were found in smaller quantities. Six glass beads, probably from jewelry like a necklace or bracelet, were recovered. Five of these beads were from the fill of the 20th-century midden. Two copper thimble fragments were recovered from Context 62 in Excavation Unit 105. One eyeglass lens was recovered from Context 5 in Excavation Unit 106. One copper and ferrous watch buckle fragment was retained from Context 5 in Excavation Unit 112. Lastly, a brass placard with partial embossed numbers "550" was recovered as general provenience.

7. Clothing Related

The Clothing-Related class was represented by 49 artifacts in the historic assemblage. These were dominated by 35 leather shoe fragments, one of which had a small brass clasp attached to it. Six buttons were also recovered. These comprised three of copper, two of shell and one of glass and copper. One copper alloy button, recovered from general provenience, was a dome-shaped, one piece cast type. This artifact can be identified as a South Type 12, per a typology created by Stanley South in his seminal study of buttons and further utilized by Hume (Hume 1969). This was a typical type throughout the 18th and 19th centuries. Additional clothing-related objects comprised iron buckles or fasteners (2), copper clasps (2), a copper zipper pull and an indeterminate decayed piece of cloth. Two brass fragments, which mend to form a shoe buckle, were recovered from Context 11 of Excavation Unit 114.

8. Other Artifact Classes

The remaining standard artifact classification groups were represented with lower frequency in the historic assemblage recovered during this investigation.

These classes include Recreation/Activities (29 artifacts), Energy (17), Agriculture (14), Kitchen-Related (11), Arms and Armor (13) and Commerce (1).

Recreation/Activities were mostly represented by tin-enameled ferrous bucket fragments (22). At least 3 vessels are represented here. Five porcelain and ferrous metal bottle closures were also recovered. Other single artifacts identified as Recreation/Activities comprised candle wax, glass ashtray, bicycle wheel rim, ice skate blade and indeterminate wheel fragments.

Energy is most typically represented in historic assemblage by coal or charcoal as the mineral waste from energy production. In this instance, very little of either was identified or retained. The 17 objects identified here as part of the Energy class were predominantly battery core fragments (11). These battery cores are carbon- or zinc-carbon-based rods that would have been used to power any number of common household equipment and machinery. Batteries that utilized such rods, which could be square or cylindrical, were developed as early as 1866 when the wet cell battery was invented by Georges-Lionel LeClanche. Dry-cell batteries, which more commonly used the cylindrical cores found in this assemblage, were developed later in the 19th century. One patent from 1888 identifies Carl Gassner as the person who created the first dry-cell battery (Painter 2018). Two charcoal barbecue briquettes, two fragments of glass electrical insulator, one metal and glass fuse, and one piece of ferrous metal slag were also recovered from during these excavations.

Fourteen artifacts from the historic assemblage were classified as Agriculture. All of these artifacts were identified as irrigation or drainage pipe fragments. Most of these fragments (11) were undecorated terracotta that may also be associated with the drainage system identified in the house's basement footprint as uncovered during this investigation. The other fragments were made of stoneware, redware and ferrous metal.

Eleven artifacts were classified as Kitchen-Related. These finds included three ferrous metal stove fragments, one of which had a porcelain knob attached. Two kitchen utensils fragments were recovered; one bone and ferrous metal handle and one three-tined fork head. Two tin-enameled mug or drinking vessel fragments were also recovered. The remaining Kitchen-Related artifacts comprised one fragment each of a tin can and iron kettle, as well as one whole copper salt shaker cap.

The Arms & Armor class is represented by thirteen artifacts in this assemblage. Most of these are brass bullet casings (11) which comprise a small variety of types: seven shotgun shells, three .22-gauge, and one unidentified. Two stone gunflints (one whole and one fragment) were also recovered from this investigation. The fragment, gray and black colored, is probably of English manufacture based on its size and shape and was recovered from the pre-demolition A horizon (Context 11) in Excavation Unit 101. The whole gunflint was brownish gray-colored and is a size typical to French manufacture. The French gunflint was recovered from Context 62 in Excavation Unit 105, which is discussed in further detail below. Generally speaking, gunflints were commonly used in Europe after 1600 A.D. True blonde French gunflints date to at least 1675 and were the most commonly used variety prior to 1800. With the introduction of source material from the Brandon quarries of England in 1790, English-made gunflints emerged to dominate both the European and American markets throughout much of the 19th century (Kenmotsu 1990).

One coin was recovered from this investigation and is classified under Commerce. Retained from Context 62 of Excavation Unit 105, it was a copper alloy U.S. one cent piece embossed with the year 1800

and Liberty facing to the right on the obverse and "UNITED STATES OF AMERICA ONE CENT" embossed on the reverse. Firmly dated objects such as this provide a *terminus post quem* on archaeological deposits which can prove useful in building the archaeological narrative of a site.

9. Indeterminate Class

Sixty-one artifacts from the historic assemblage were broadly associated as an Indeterminate Class. This means they were so fragmentary or corroded that they could not be comfortably attributed to a particular cultural theme or use. Most of these (38 artifacts) were heavily corroded indeterminate metal objects. Thirty-four indeterminate ferrous objects could either be associated with Building Material or Tools/Hardware, but were too encrusted to identify. Three fragments of copper and one fragment of white metal were also recovered, but far to fragmentary to adequately classify. Twenty-three of these were flat glass fragments that could either be Glass Vessel or Building Material (i.e. window glass) fragments.

C. ARTIFACTS BY CONTEXT

A few locations, features and deposits immediately surrounding the farmhouse cellar contained a significant number of artifacts that would warrant individual analysis and discussion. A discussion of these artifacts is provided below.

1. 20th-Century Trash Midden

A trash midden associated with the very late 19th- and 20th-century occupation of the site was identified due west of the farmhouse foundation and excavated during this investigation (Excavation Units 101 and 102, Trench 109) (see above, Figures 3.12 and 3.13). Approximately 3,144 artifacts, 47% of the overall artifact assemblage, are associated with this feature. Dense cultural material, chiefly of a 20th-century nature, was evident in a depression at ground surface and permeated the topsoil [Contexts 1 and 11] within the excavation area (991 artifacts). It should be noted that a unit excavated during the Phase II investigations in 1995 (Excavation Unit 4) identified and partially disturbed the current excavation area. The contexts discussed here are limited to two relevant stratigraphic elements of the excavation area: the contents of the midden from non-surficial intact layers and the limited cultural materials retained from two conceivably earlier deposits that were directly cut by the midden itself.

Context 47 was the primary concentration of dense historic and modern material within the midden cut [context 46]. It contained 2,153 artifacts; most of these were identified as historic (2,149), but also included several modern items (4). The content of this layer alone represents approximately 32% of the entire assemblage from this investigation, which explains why the overall quantity of materials skews towards the 20th century. The modern items in this group include two sparkplugs, a plastic button and a plastic comb.

The vast majority of this assemblage is classified as Glass Vessels (1,311 artifacts). Other substantially represented artifact classes included Building Materials (371) and Ceramic Vessels (311).

The glass vessel assemblage was liberally culled during the laboratory processing of this collection; 1,193 glass vessel fragments are identified only as assorted vessel type and were removed from the collection. Only a representative sample of the glass vessel assemblage from this deposit was retained (118 artifacts), generally those that were most complete or contained specific manufacturer related details on them. This comprised a wide variety of colors;

clear/uncolored (74), aqua (26), brown (7), milk (6) and cobalt blue (2). A variety of vessel forms was identified, chiefly beverage bottles (68). Most of the legible embossed manufacturers' marks are attributed to Philadelphia-based bottlers who operated from the late 19th to at least the early 20th century. At least one bottle was produced locally; a Hutchinson-style soda bottle embossed "JOHN BLAUFUSS RIVERSIDE NJ" (Photograph 4.2). Other forms identified included: drinking vessel, jar/jug, lamp chimney, canning lid, bottle stopper, and punch bowl.

Building Materials were represented by 371 artifacts. Ferrous nails accounted for 214 artifacts in this class. Many of these were wire nails (84 artifacts) probably from the late 19th to early 20th century. Forty-four cut nails were also recovered from this deposit. The remaining nail assemblage, 86 artifacts, were too heavily corroded and encrusted to properly identify at this level of analysis. Window glass (151 shards) appeared in limited colors: clear/uncolored (132) and light aqua (19). Other building materials retained from this context comprised five brick fragments and one fragment of cut marble presumably from some kind of interior fabrication (shelf, mantel, etc.).

This midden deposit yielded a diverse range of refined earthenwares (236 sherds) with smaller quantities of earthenware (35), stoneware (24) and porcelain (16 sherds). The majority is undecorated ironstone (204 sherds) with fewer selections of polychrome printed (21) or gilt-enameled (3). Other refined wares identified comprised small amounts of pearlware (5), whiteware (2) and redware (1). Decoration patterns on the pearlware and whiteware include limited examples of blue or green transfer print and blue hand-painted styles. Most of the earthenwares represented were common coarse redwares (28 sherds). Other earthenwares identified comprised red-bodied slipware (7) including 3 with the copper oxide decoration associated with Pennsylvania-German origin. The 24 stoneware sherds in this mostly comprised gray-bodied, salt-glazed vessel fragments with some combination of Bristol and/or Albany slips. Two fragments of brown bodied stoneware, one lead and one salt glazed, were also recovered. Porcelain in this assemblage comprised 14 hard paste and two soft paste sherds. Decoration styles on this ware included blue, purple or polychrome printed patterns typical of the late 19th and early 20th century. Most of this assemblage can be situated in a late 19th to 20th century context.

Other classes represented in smaller quantities comprised Tools/Hardware (44 artifacts), Fauna (39), Clothing-Related (21), Recreation/Activities (20), Energy (11), Arms and Armor (6), Agriculture (5), Kitchen-Related (4) and Indeterminate Class (4). Tools/Hardware artifacts from this deposit chiefly comprised ferrous metal objects (39) like door hinges, knobs and drawer pulls. Other items included one porcelain knob, one porcelain electrical insulator, one brass wall hook and two small pieces of copper (one chain and one gear). Fauna in this assemblage was represented by relatively small quantities of bones and shell. Mammal and avian bones of various degraded condition were present. Nine of the mammal bones showed evidence of butcher marks. Fifteen shell fragments, 11 clam and 4 oyster, were recovered here. Clothing-related artifacts in this deposit were dominated by leather shoe fragments (17). Other finds included one brass shoe clasp, one shell button and one indeterminate cloth fragment. Artifacts from the Recreation/Activities group comprised bucket/pail fragments (17), a bicycle wheel rim, and a glass ashtray. Energy-based artifacts comprised nine carbon battery rods, one glass insulator, and one charcoal briquette. Six shotgun shells in this assemblage were identified as Arms & Armor. Five terracotta drainage fragments were also collected. Kitchen-related items comprised two tin mug fragments, one tin can fragment, one ferrous fork tine and a copper salt shaker cap. Five corroded metal objects (four iron and one copper) were classified as Indeterminate.

Photograph 4.2. Selected glass vessels from the 20th century trash midden at the Borton/Ballinger Farmhouse Site. All of these selections were recovered from Excavation Unit 102, Context 47. *Left to right:* Beverage bottle, mold seam with crown finish, embossed "CAPACITY 9 OZ BELL BOTTLING CO 1711 S ORIANNA ST PHILADA PA" [Catalog #26.145] Beverage bottle, mold seam with one part stopper finish, embossed "CAMDEN BOTTLING CO. CAMDEN, NJ" [Catalog #26.144] Partial beverage bottle, mold seam, embossed on base "JOHN BLAUFUSS RIVERSIDE NJ" [Catalog #26.188]. Pharmaceutical bottle, mold seam with patent finish, embossed on base "2956" [Catalog #26.139] (Photographer: Alexis Alemy, July 2018) [HRI Neg. #16034/D7:002].

Context 73 was identified as the bottom layer within the midden feature. This was described as silty sand and, in comparison to Context 47, bore a dearth of cultural material. Bear in mind this deposit was exposed via mechanical trenching and items retained were recovered from careful cleaning of the context in the profile of Trench 109. Two layers separating Contexts 47 and 73 [Contexts 71 and 72] did not yield cultural material. Only 19 artifacts were recovered from the bottom of this midden. These comprised mostly vessel (10) and window glass. Vessel glass fragments were aqua or colorless and the window glass was light aqua. Four sherds of ironstone (1840 to present) were the only ceramics recovered from this context. One indeterminate mammal bone fragment was also recovered.

Context 44 was a compact, silty loam layer underlying modern topsoils [Contexts 1 and 11]. It was interpreted as a buried A horizon. This historic occupation layer was visibly cut by the midden feature as exposed in profile of Excavation Unit 101. A total of 56 historic artifacts were recovered from this level. The majority of this assemblage comprised building materials (24 artifacts). Building materials represented included 13 nails, 8 window glass fragments, and 3 brick fragments. Nineteen ceramic vessel sherds were also recovered. These included a wide variety of chiefly 19th-century wares: pearlware (10), ironstone (3), creamware (1) and whiteware (1). Four fragments of common coarse redwares were also recovered. Few glass vessel fragments (5), in aqua, brown or colorless variety, were recovered from this deposit. Five glass beads, presumably from some kind of late 19th- to early 20th-century costume jewelry was also found. Other small finds from this deposit included a copper zipper pull and indeterminate single pieces of copper alloy and ferrous hardware.

Context 45 was a mottled compact, silty loam layer underlying Context 44. It was interpreted as an earlier buried A horizon. This deposit was also visibly cut by the midden feature as exposed in profile of Excavation Unit 101. A total of 72 historic artifacts were recovered from this level. The majority of this assemblage comprised glass vessel fragments (23 artifacts). Most of these were colorless (17) and aqua (5) bottle fragments. Other glass vessel fragments comprised lamp chimney (2), canning lid (1) and indeterminate vessel (1). Twenty ceramic vessel sherds were also recovered. Most of these were coarse redware (11) decorated in common combinations of lead, manganese and mottled patterns. Four sherds of refined wares were also recovered; two of blue transfer-printed pearlware (1784-1867) and two of undecorated ironstone (1840 to present). Other ceramic vessel fragments found included three undecorated indeterminate porcelain and two gray-bodied, salt-glazed stoneware with Albany slip. Building materials represented included 13 window glass fragments and three nails. Indeterminate metal objects from this assemblage included ten of iron and one of copper; all were too fragmentary and corroded to identify. Other small finds from this deposit included one clam shell and one copper eyelet.

Useful information has been gleaned from the material culture analysis of the midden feature identified west of the house and the cultural deposits that were impacted by it. Intact buried A horizons [Contexts 44 and 45] have been identified in this area of the site that were likely disturbed when the midden was first created. Examination of their cultural contents suggests they were occupied no earlier than the mid-19th century and remained open until at least the early 20th century. The deeper of the two [45] is situated directly overtop an intact natural soil [Context 12]. The contents of the midden itself indicate that it was probably created in the early 20th century. It was, perhaps, seldom used to begin with, and likely evolved into the primary location for trash disposal on the property from the mid-20th century onward.

3. South of the Farmhouse

Context 55

Forty-eight historic artifacts were retained from Context 55, which was interpreted as the upcast fill soil associated with the 18th-century expansion of the house. A selection of finds from this deposit is pictured in this report (see above, Figure 3.9; Photograph 4.3).

The majority of this assemblage was ceramic vessel sherds (19 artifacts). Most of the ceramic sherds in this deposit were coarse redwares (15) and were mostly lead or manganese glazed (5 and 6 sherds respectively). One sherd of mottled lead and manganese and one sherd of engine-turned redware, as well as two indeterminate sherds were also in this deposit. Only four refined earthenware sherds were recovered from this deposit: two transfer printed pearlware, one plain creamware and one Jackfield-type reproduction. While many of the represented wares are produced into the 19th century, it is noteworthy that all of the observable decoration styles (engine turned and transfer print pearlware with black or blue colors) do have their origins in the late 18th century.

Faunal artifacts were the second dominant group in this deposit and represented by 18 fragments. These faunal remains were mostly very fragmentary in nature and therefore difficult to identify by species. Sixteen large mammal bones were recovered, most of which were of indeterminate type (12). Fragments of two teeth and two large butchered bones (one scapula and one long bone) can probably be attributed to domestic cow or pig. Two shell fragments were also recovered; one each of clam and oyster. All eight artifacts classified as building materials were also retained from this deposit. Building materials from Context 55 comprised 3 corroded nail fragments, 2 red brick fragments, 2 aqua-colored window glass shards, and one piece of stone interpreted as a construction trimming or chipping. Only two glass vessel fragments were recovered from this deposit, one olive green and the other clear/uncolored. One clay tobacco stem fragment with a 5/64" bore diameter was also recovered from this context. As discussed earlier, this bore diameter was most common between 1710 and 1750.

The clear glass fragment should not be present in an 18th-century context. However, it was recovered during augering of Shovel Test 1015, so it is probable this item is intrusive from this less delicate process. With this one exception, there is no indication in the assemblage that suggests Context 55 is later than the 18th century.

Context 62

Context 62 yielded 485 artifacts. This deposit was interpreted as a late 18th- to early 19th-century A horizon that should predate the mid-19th-century expansion of the house (see above, Figure 3.9). Of the few prehistoric artifacts recovered during this investigation, two were retained from this deposit: one piece of thermally altered sandstone and the jasper projectile point (Photograph 4.4).

The majority of this assemblage was historic ceramic vessel sherds (286 artifacts). A diverse array of earthenwares, refined earthenwares and stonewares are present in this deposit. The vast majority is common coarse redware (202 sherds) with a variety of lead, manganese or mottled lead and manganese decorations. Other earthenwares identified comprised red-bodied slipware (26) including 7 probably of Pennsylvania-German origin, 5 pieces of Delftware, and 18 sherds of buff bodied slipware including 16 Staffordshire and 1 North Devon. Twenty-seven sherds of refined earthenwares were found in this A horizon: 11 whiteware, 7 creamware, 6 pearlware and 3 Jackfield-type redware. Decoration styles on

Photograph 4.3. Selected historic artifacts from Context 55 at the Borton/Ballinger Farmhouse Site. Context 55 was interpreted as the upcast fill soil associated with the 18th-century expansion of the house. *Top row, left to right:* Redware hollowware body sherd with mottled lead and manganese decoration [Catalog #36.7] Redware hollowware body sherd with Jackfield-type glaze (19th century reproduction) [Catalog #40.3] Engine-turned redware hollowware body sherd with incised decorastion (late 18th to late 19th century)[Catalog #16.2] Pearlware hollowware base fragment with black transfer printed pattern (1785-1864) [Catalog #40.8]. *Bottom row, left to right:* Butchered mammal long bone, probable cow or pig [Catalog #36.1] Butchered mammal scapula, probable cow or pig [Catalog #36.2] (Photographer: Alexis Alemy, July 2018) [HRI Neg. #16034/D7:009].

Photograph 4.4. Selected historic and prehistoric artifacts from Context 62 at the Borton/Ballinger Farmhouse Site. Context 62 was interpreted as a late 18th- to early 19th-century A horizon that should predate the mid-19th-century expansion of the house. *Top row, left to right:* Delftware hollowware sherd with pinkish tint (17th to early 18th century) [Catalog #38.15] Buff-bodied hollowware sherd with Staffordshire glaze (1670-1775) [Catalog #38.12] North Devon hollowware rim sherd, possible pipkin (17th to early 18th century)[Catalog #38.41] Redware plate sherd with white slip trail, piecrust rim and repair hole [Catalog #38.23] Redware hollowware body sherd with Jackfield-type glaze (19th-century reproduction) [Catalog #38.17]. *Center row, left to right:* Pearlware dish rim sherd with underglaze red hand painted pattern (1830-1860) [Catalog #38.44] Pearlware teacup rim sherd with blue transfer printed floral pattern (1784-1867)[Catalog #13.5] Whiteware hollowware sherd with black transfer printed pattern (1785-1864) [Catalog #38.47] Pearlware plate rim sherd with green Shell Edge pattern (1800-1840) [Catalog #38.45] White salt-glazed stoneware basal sherd with Scratch Blue floral pattern (1745-1780) [Catalog #38.53]. *Bottom row, left to right:* Whole cut nail [Catalog #41.32] Whole roofing nail [Catalog #13.14] Copper alloy U.S. one cent piece embossed with the year 1800 and Liberty facing to the right on the obverse and "UNITED STATES OF AMERICA ONE CENT" embossed on the reverse [Catalog #38.65] English gunflint fragment [Catalog #38.74] Prehistoric jasper projectile point [Catalog #38.72] (Photographer: Alexis Alemy, July 2018) [HRI Neg. #16034/D7:016].

the whiteware and pearlware comprised annular, hand painted, shell edge and transfer printed patterns. Transfer printed patterns included black, blue, green and pink varieties. Most of these have origins in the late 18th or early 19th century; the pink transfer print was introduced latest of these styles (1829)

Around 102 artifacts from this deposit were classified as building materials. The majority of this group was window glass (54 fragments), which appeared in a variety of colors: aqua (43), light aqua (9) and clear/uncolored (2). Forty-two ferrous nails were also counted among this group. Most of these were cut nails probably from the early to mid-19th century, but three wire nails were also identified. Wire nails are typically not present until after 1850. Other building materials identified in this context comprised four flint construction chips and one fragment each of brick and terracotta structural debris.

Faunal artifacts were the third largest class in this deposit with 58 pieces. These included 51 medium to large mammal fragments of various fragmentary distinction. Most of these were indeterminate (34 fragments), but several teeth fragments were also recovered (15). One skull fragment and one tarsal fragment were also identified. Only seven shell fragments were recovered: three clam, two oyster and two indeterminate. All of the faunal remains in this deposit can probably be attributed to food waste.

Seventeen glass vessel fragments were also retained. These comprised 15 bottle fragments in various colors: clear/uncolored (8), olive green (4) and aqua (3). Two thin clear glass fragments, probably from a lamp chimney, were also identified.

Personal items from this deposit were limited to 12 artifacts. Ten of these were clay tobacco pipe fragments (9 stem and 1 bowl). All bore diameters on these stem fragments were 5/64" which were most common between 1710 and 1750. The other two artifacts were fragments of a copper thimble.

Five severely corroded pieces of indeterminate iron and one fragment of iron slag were also recovered from this context. Lastly, two of the more unique items from this assemblage were recovered from this deposit. One was a stone gunflint probably of English origin. The other was the only coin found during this investigation: a copper alloy United States one cent piece embossed with the year "1800".

Most of the cultural material recovered from Context 62 can probably be associated with the late 18th- to early 19th-century occupation of the site. The three wire nails (post-1850) are the only clear indication that this historic occupation layer was likely used into the latter half of the 19th century.

Context 5

Context 5 was a deposit of silty loam dense with brick and stone rubble and rich with cultural material. It was interpreted as a demolition/grading deposit attributed to the mid-19th century expansion of the house (see above, Figure 3.9). This layer yielded 1,669 historic artifacts. One modern steel nut was recovered from this deposit in Excavation Unit 114. It is viewed as an intrusive object probably finding its way into this layer during mechanical trenching in the early stages of this investigation. One prehistoric artifact, a chalcedony flake fragment, was also found in this context.

The majority of this assemblage was historic ceramic vessel sherds (1,124 artifacts). A diverse array of earthenwares (864 sherds) and refined earthenwares (246 sherds) were present with smaller quantities of stoneware and porcelain (3 sherds). Over 90% of this assemblage was broadly identified as hollowware; identifiable vessel forms comprised mostly plates (77

sherds) and smaller amounts of bowl (16), milk pan (8), dish (4), flower pot (2) and saucer (1). A sampling of these and other interesting small finds from this deposit are pictured in Photograph 4.5.

The vast majority of ceramics were common coarse redware (589 sherds) with a variety of lead, manganese or mottled lead and manganese decorations. Other earthenwares identified comprised red-bodied slipware (232) including 76 probably of Pennsylvania-German origin, 3 pieces of Delftware, and 39 sherds of buff-bodied slipware including 29 Staffordshire. Refined earthenwares in this context comprised mostly creamware (102 sherds), pearlware (66) and Jackfield-type reproduction redware (48 sherds). Most of the creamware (100) was undecorated with only two fragments decorated in the annular style. Most of the pearlware (33) was also undecorated. The remaining pearlware assemblage bore a wide variety of annular, blue and green transfer prints and blue and polychrome hand painted patterns broadly situating the material from the late 18th to late 19th century. Other refined wares were found in smaller quantities. These comprised annular or undecorated whitewares (21 sherds), authentic Jackfield (3 sherds) and ironstone (3 sherds). Of the 11 stoneware sherds in this assemblage, most were identified as white salt-glazed stoneware (7 sherds), the earliest dated ceramics from this collection (1685-1785). Four were undecorated, but three had Scratch Blue decoration (1745-1780). Other stoneware in this deposit includes two fragments of gray salt-glazed and one of buff body with manganese glaze. One final piece of buff-body stoneware is notable for its salt glaze decoration with incised and cobalt blue decoration. The pattern appears to be fish-scales or feathers and can probably be attributed to a local potter, in the 19th century, emulating earlier German stoneware decoration styles. Porcelain sherds in this assemblage were limited to three of indeterminate body with blue hand-painted decoration. Most of this ceramic assemblage can be situated in the first half of the 19th-century context, but substantive outliers of an earlier or later origin (white salt glaze stoneware and ironstone, respectively) more reasonably reflect the broader period of occupation for this site.

Building Materials were represented by 386 artifacts. The majority of this group was window glass (226 fragments) that appeared in a variety of colors: aqua (213), olive green (11) and clear/uncolored (2). Ferrous nails accounted for 153 artifacts in this class. Most of these were cut nails (94 artifacts) probably from the early to mid-19th century. Sixteen whole cut nails were recovered. The remaining nail assemblage, 59 artifacts, were too heavily corroded and encrusted to properly identify at this level of analysis. Other building materials retained from this context comprised four brick fragments and one fragment each of mortar and terra cotta structural debris.

Faunal remains were the third largest class in this deposit with 122 artifacts. These included 51 non-human mammal bones. Most of these were indeterminate (32 fragments). Thirteen teeth were recovered including 3 cow and 1 pig; 1 mandible fragment of a small rodent was also identified. Other identifiable bone fragments included 10 long bones, 1 rib and 1 tarsal. These can all probably be associated to common domestic farm animals (cow, goat, horse or pig). Sixty-four shell fragments were recovered: 45 clam and 19 oyster. While none of these artifacts bore any butcher marks, the faunal remains in this deposit can be attributed to food waste.

Ninety-nine glass vessel fragments were also retained from this context. These comprised mostly bottle fragments (82) in various colors: clear/uncolored (36), olive green (20), green (11), aqua (8), frosted (3) and cobalt blue (2). Drinking vessel fragments were represented in this group by 9 clear/uncolored fragments (8 tumbler and 1 stemware). Six clear lamp chimney fragments were also recovered. Other glass fragments included one clear vase and one milk glass canning lid. The latter is a useful find to aid in dating this

Photograph 4.5. Selected historic artifacts from Context 5 at the Borton/Ballinger Farmhouse Site. Context 5 was interpreted as a demolition/grading deposit attributed to the mid-19th century expansion of the house. *Top row, left to right:* Delftware hollowware sherd with blue and purple hand painted decoration (17th to early 18th century) [Catalog #44.3] Buff-bodied hollowware sherd with Staffordshire glaze (1670-1775) [Catalog #35.49] Red-bodied slipware hollowware sherd with white slip trail decoration [Catalog #44.4] Red-bodied slipware rim sherd with pie crust rim and white slip trail decoration [Catalog #34.26] Jackfield hollowware sherd with molded design (1740-1770) [Catalog #34.56]. *Center row, left to right:* Pearlware dish rim sherd with Annular decoration (late 18th to late 19th century) [Catalog #35.60] Pearlware plate rim sherd with blue transfer printed pattern (1784-1867) [Catalog #48.31] Pearlware plate rim sherd with blue Shell Edge pattern (1800-1840) [Catalog #48.34] White salt-glazed stoneware basal sherd with Scratch Blue linear pattern (1745-1780) [Catalog #35.56] Buff-bodied stoneware hollowware sherd with exterior salt glaze, cobalt blue and incised scale-like decoration [Catalog #44.34]. *Bottom row, left to right:* Cast iron kettle fragment [Catalog #35.75] Copper alloy watch buckle [Catalog #44.42] Olive green bottle fragment with applied irregular flanged finish [Catalog #34.81] Glass and copper alloy button fragment [Catalog #48.1] White clay tobacco pipe bowl and stem fragment [Catalog #34.74] (Photographer: Alexis Alemy, July 2018) [HRI Neg. #16034/D7:014].

assemblage. In the early days of canning, mason jars were simply sealed with a metal cap directly applied to the glass. This often led to a metallic taste of the jar's contents. Milk glass liners were patented in 1869 to resolve this problem (Lindsay 2017).

Personal items from this deposit included 20 artifacts. Most of these were clay tobacco pipe fragments (10 stem, 6 bowl/stem and 2 bowl). All measurable bore diameters in this lot were either 4/64" (8 fragments) or 5/64" (8 fragments). These suggest a broad range of production between 1710 and 1800. Other artifacts in this group included one whole eyeglass lens and one watch buckle fragment.

Other artifact classes were recovered from this layer in smaller quantities. Three Clothing-Related artifacts found in Context 5 comprised three copper button fragments, one of which had a glass decoration attached. Three .22-gauge brass bullet case fragments were identified as Arms & Armor in this assemblage. Tools/Hardware was represented by two ferrous metal objects: one screw and one bolt fragment. One Energy-related item, identified as a ferrous and metal fuse fragment was also recovered. Lastly, one Kitchen-Related item, identified as a corroded ferrous metal kettle fragment was found in this layer.

Evidence gleaned from the cultural material retained from this deposit lends itself to a broader 19th-century interpretation. Generally speaking, truly colorless glass was not produced earlier than the 1870s. Since the majority of glass vessel fragments in this deposit were colorless, it is reasonable to suggest this deposit can be associated with the later 19th century. As noted above, the canning jar fragment, which could be viewed as intrusive, post dates 1869. Finally, .22 caliber rimfire rounds, first designed in the 1850s, were not commonly available until after the 1880s.

Chapter 5

CONCLUSIONS

A. OVERVIEW

The archaeological data recovery of the Borton/ Ballinger Farmstead [28-Bu-949] focused on three of the four areas defined by the research design: the farmhouse cellar/foundation, the middens, and the farmyard. Very little of the underlying prehistoric deposits were identified; only a single prehistoric projectile point was recovered and that was from a historic fill layer. In summary these investigations have revealed: multi-phase cellar/foundation remains, incorporating a subcellar and well shaft; a late 19th- and early 20th-century trash pit; demolition layers capping historic ground surfaces; and evidence of at least two farm buildings. Investigations have also identified an earlier house foundation that provides a key to interpreting some of the complicated stratigraphy documented in the trenches outside of the farmhouse's footprint. In all, an area measuring over 3,200 square feet was excavated, almost 1,000 square feet more than originally proposed. We have adequately documented the features uncovered and obtained a substantial sample of historic artifacts (over 6,700) dating from the mid-18th into the 20th century. In addition to the archaeological findings a detailed history of the farmstead was developed through research into primary and secondary sources and this research has been tied to the archaeological discoveries.

B. THE FARMHOUSE CELLAR

The archaeological data recovery conducted at the Borton/Ballinger Farmstead identified extensive remains of the farmhouse foundation. This foundation presents a complicated sequence of construction and modification that mirrors the history of the farmstead. The rubble stone foundation [I] in the southeastern corner of the farmhouse appears to have been the earliest foundation identified at this site and was likely built in the early 1760s when William Borton Jr. inherited the property and moved there with his wife Martha Owen (Figure 5.1). This mortared-stone foundation supported a cellared house of unknown construction that may have had a rear shed addition. This is likely the earliest dwelling at the site, however earlier less substantial buildings, such as post-in-ground dwellings, cannot be ruled out. This foundation [I] was then partially removed when the southern half of the main block foundation [II] was constructed. These foundations were joined by a well-pointed joint that suggests that the earlier foundation was being maintained in place because the building that sits on top of it was still standing. At this point the older building over the original foundation may have functioned as a kitchen and the new main block would have been the parlor, dining room, and sleeping quarters. This new southwestern block of the house was probably the same three bays visible at the western end of the house in the 1988 photograph (Photograph 5.1). This photograph shows three western bays with a central chimney suggesting that it was a side hall-type house common in southern New Jersey during the late 18th century. In addition, the arrangement of the windows, particularly how the eave of the roof overlapped the tops of the windows, is also an 18th-century architectural trait. This first expansion may have happened

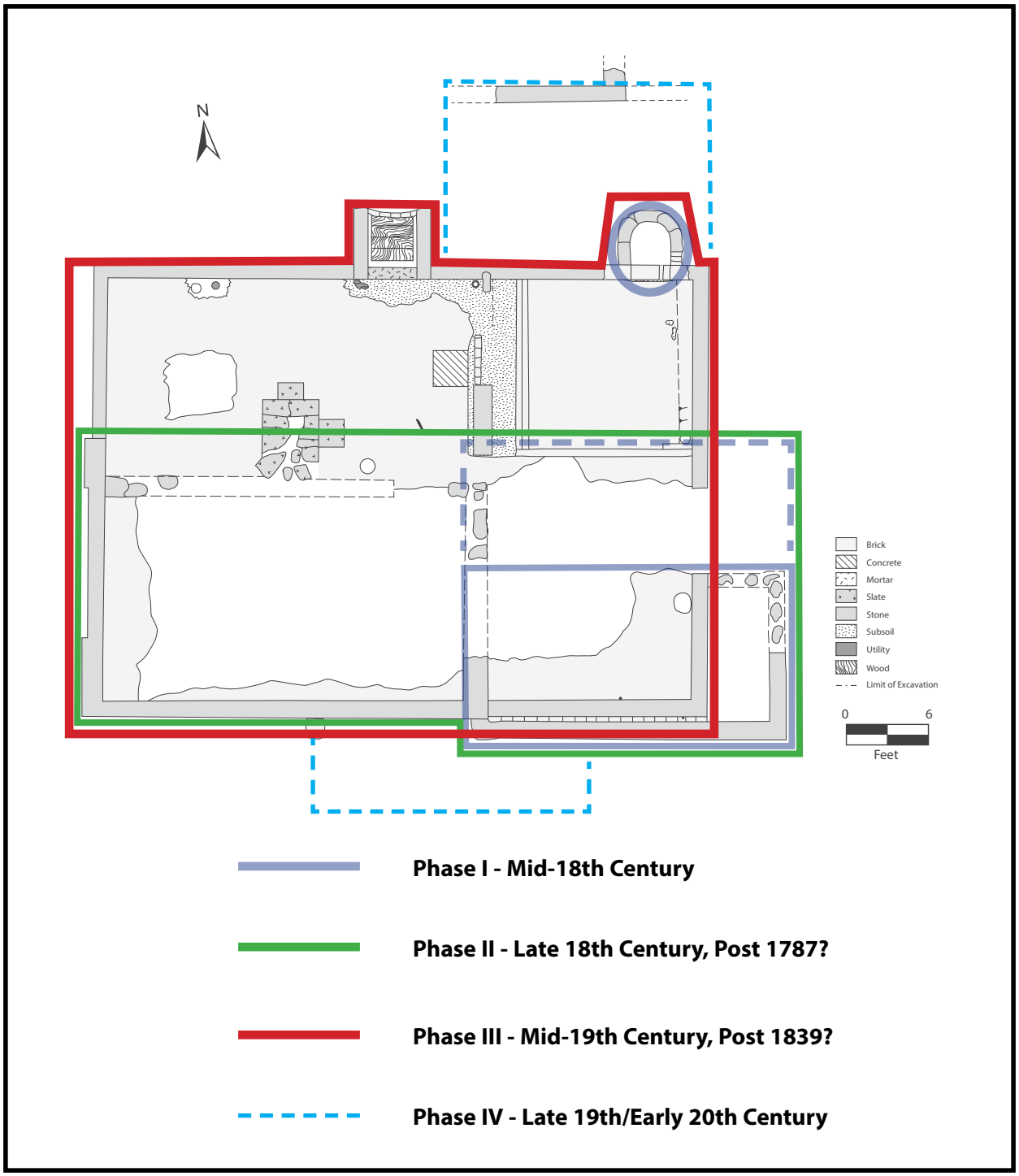


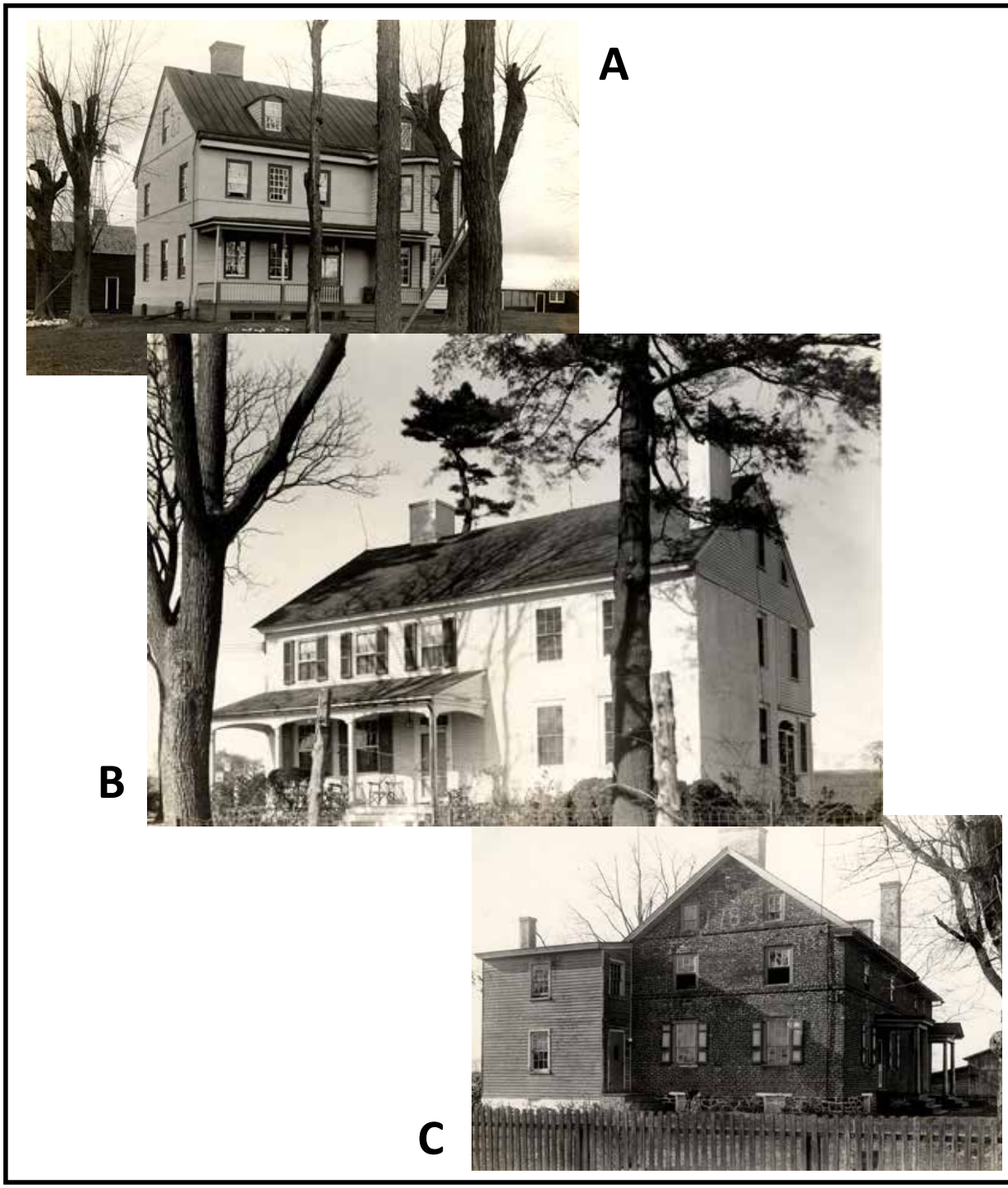
Figure 5.1. Borton Ballinger Farmstead [28-Bu-949]: Proposed Development of Farmhouse.

around 1787 when Hannah Ballinger (nee Borton) and husband Levi bought her sister Prudence's share of the farm. They had inherited the farm in 1779 when William Borton Jr. died.

At some point the addition over the earliest foundation [I] was removed and a new eastern wing built within the footprint of the earliest foundation, which at its northeastern corner was partially demolished, while the southern wall of the earliest foundation was incorporated into the new foundation [III]. Bricks were mortared between these two foundations [I and III], creating a section of thick foundation wall. At the same time that the eastern wing was constructed, judging by the similar thickness of this new foundation, an addition was added to the rear (north) of the entire length of the farmhouse, doubling the building's depth. This sequence is also supported by the orientation of the brick floors, which runs east-west in the southern half and north-south in the northern half of the cellar. The bricks in the southeastern quarter of the cellar run east-west and are likely left over from the original cellar [I]. A cellar entry is located in the middle of the rear of newly enlarged building, likely opposite the front door of the enlarged house. It is within this newest eastern addition [III] that the subcellar in the northeast corner of the farmhouse foundation was built, probably sometime in the first half of the 19th century. Although it is not possible to be certain, this subcellar likely had a corbelled brick roof. At the very eastern end of the northern foundation wall a well projected from the footprint of the house. The masonry of this well is integral to the foundation, which could suggest that it was either dug at the same time the addition was added or that an earlier well was consciously incorporated into the expanded home design. Very little evidence of the floor plan of the buildings above these foundations was identified. The north-south running wall that was the eastern end of the second foundation [II] extended to the north through the new addition and the east-west wall of this same foundation appears to have been left in place, creating a cellar with four rooms. The location of the internal north-south cellar wall likely indicates that the eastern addition was built as separate rooms from the main block, likely used as a kitchen, given the location of the well. The dating of this substantial enlargement of the house is uncertain. In 1839 Jacob Ballinger, the grandson of Levi and Hannah, inherited the farm and started buying adjacent properties, which suggests some degree of wealth. By 1850, Jacobs farm is producing significant amounts of produce, particularly Irish potatoes, and a large quantity of dairy products. The 1850 agricultural census states that he has 10 dairy cows producing 200 lbs. of butter and 1,000 lbs. of cheese. It is possible that these dairy products were being kept in a purpose-built subcellar that was constructed along with the rest of the last addition [III] in the 1840s.

Evidence of chimneys is largely lacking in the remnants of the cellar studied. There is a slight bump out in the masonry at the southeastern corner of the subcellar that might have been for a chimney integrated into the foundation. This is supported by the 1988 photograph of the house that shows a chimney at the eastern end of the foundation (Photograph 5.1). This photograph may also show an internal chimney between the first and second bays of the farmhouse. There is little evidence for this chimney in the foundation except for a semi-rectangular area of slates embedded within the bricks in the middle of the western half of the cellar. These slates appear to be the base of a more modern furnace, probably placed in this location during the early 20th century because of a pre-existing central chimney above it. There do not seem to be many substantial modifications to the foundation after this point. This may suggest a change in the fortunes of the farmers, who in the first three quarters of the 19th century were prosperous and expanding their family (and farmhouse). Evidence of the introduction of plumbing is apparent in several terracotta drains, circular iron stains, and iron pipes

Photograph 5.1. Inset of Photograph Borton/Ballinger House, *circa* 1988. Source: *The Philadelphia Inquirer*, Sunday December 11, 1988.



Photograph 5.2. Historic Photographs of Three Similar Houses in Burlington and Monmouth Counties: the Hough House near Juliustown/Houghton in Springfield Township (1763)(A); the Woodward House near Arneytown in Upper Freehold Township (Monmouth County) (1735/1783)(B); and the Evans House on Marlton-Medford Road in Evesham Township (1785)(C). Source: Ewan 1932-1949.

projecting from the cellar walls. Small frame porches were added to the front and back of the houses as well, but evidence for dating these additions was identified.

A comparison of the Borton/Ballinger Farmhouse with others in Burlington County does offer some support for the proposed sequence of construction. However, the presence of central chimney within the western wing appears to be rare. Of the 110 houses photographed as part of the Early Houses of Burlington County by Nathanial Rue Ewan in the first half of the 20th century, only three had central chimneys: the Hough House near Juliustown/Houghton in Springfield Township (1763), the Evans House on Marlton-Medford Road in Evesham Township (1785), and the Woodward House near Arneytown in Upper Freehold Township (Monmouth County) (1735/1783) (Photograph 5.2) (Ewan 1932-1949). All three of these houses have two-bay (likely original) eastern wings and three-bay wide, larger, western additions with centrally located chimneys. At the Hough and Woodward Houses these western additions are also side-halls, as observed at the Borton/Ballinger Farmhouse. The Evans and Woodward Houses, built in 1785 and 1783, respectively, are very similar in date to the proposed date for the second phase of construction of the Borton/Ballinger House around 1787. Finally, the Woodward House appears to have a rear frame addition on the rear of the apparently original two-bay home to widen this end to match the western addition, as suggested for the earliest phase of the Borton/Ballinger House (Photograph 5.2).

Examples of subcellars in 18th-century houses in and around Burlington County were harder to find. The most obvious example is the Indian King Tavern on the King's Highway in Haddonfield roughly 10 miles away. This tavern, built over stages in the mid-18th century, currently has a vaulted brick subcellar that is accessed through low archways in the basement. This subcellar, which extends under the sidewalk in front of the building, is only a foot below the rest of the cellar floor. However, recent excavations suggest that a deeper vault, built *circa* 1741, extended under a northeastern addition to the building approximately 6.5 feet below the level of the main block's cellar floor with a brick floor, walls and vaulted brick ceiling (Hunter Research, Inc. 2014:Figure 5.2). It was apparently used for storing food and beer. Although structurally similar, this relatively urban example was likely built much earlier and for a different purpose than the subcellar at Borton/Ballinger House. A more comparable example might be the Cowperthwaite House (dating to between 1742 and 1760), also located along the King's Highway, but much closer to the Borton/Ballinger House. Historic American Building Survey (HABS) documentation of this house prepared in 1937 shows a filled in 3.5 by 5.5 foot vault in the center of the floor of the central cellar room (HABS NJ 471, Sheet 1). Although the depth of this subcellar pit was never determined it was likely used as a root cellar and would have been covered with a wooden hatch. Again, this example is much earlier and for a different purpose. No other examples of a subcellar were found in a review of farmhouses in Burlington County documented by HABS, suggesting that while not unique, these features were rare and likely for specific purpose. In this case it seams plausible that it was related to Jacob Ballinger Jr.'s interest in expanding his dairying operation. This is also supported by research into the incorporation of the well into the foundation of the house. The closest example of this in Burlington County is the Lawrie House, also known as the Arnytown Tavern in North Hanover Township, Burlington County (HABS NJ 134). This house, the first elements of which were built *circa* 1731, has a "milk shed" that extends off the back of the building with a brick floor and a three-foot-diameter well incorporated into the back wall of the room. While this room is above ground it provides some evidence that the inclusion of a wall within a room was associated with dairying. This room likely served the same function as the springhouses more commonly found in eastern Pennsylvania and northern New Jersey.

2. MATERIAL CULTURE

Overall the historic artifact assemblage recovered from the Borton/Ballinger Farmstead site when viewed along with the archaeology support the story of a growing farm and family. Even though the first phase of occupation at the site was in a relatively small home, they possessed, either through purchase or inheritance, fine tablewares of the period such a white salt-glazed stonewares, Jackfield ware, creamware and pearlwares. They also appeared to have access to markets in Philadelphia, where they were able to buy German-style decorated redware vessels (Cress 2000). The presence of these colorful vessels, olive green wine and case bottle fragments appears to collide somewhat with the idea of 18th-century Quakers being sober mannered, plainly dressed, preferring plainly decorated goods and abstaining from alcohol. While the sample of these vessels is small, more recent research into the relationship between Quakers and alcohol suggests that they were not teetotalers and paints a much more complicated picture, which is supported by the presence of alcohol bottles are the Borton/Ballinger Farmstead (Chenoweth 2006). The faunal assemblage from this site is very small and the presence of cow, pig and chicken bones is no surprise. Five deer teeth may indicate that hunting may have been a means to supplement or add variety to the diet. Two gunflints suggest at least one musket was present on the farm.

Operating within the Lower Delaware Valley/ Philadelphia commercial sphere not only allowed the Borton/Ballinger family to purchase commercial goods but also provided a market in which to sell their crops. Capable farmers in the northern United States likely had a surplus of cash given the reported price of products like wheat in Philadelphia by the beginning of the 19th century (Friedlander 1991:26). The finer wares identified in the assemblage may reflect this with the late 18th-century, early transfer-printed pearlwares showing up at the site at the same time (around 1787) that the farmhouse was being expanded. There are relatively few whiteware sherds in the assemblage (2.7% of the historic ceramic assemblage). This ware, which gradually replaced pearlwares in the first half of the 19th century, might have been largely skipped over by the family because they had a number of heirloom wares. Some whiteware plates were obviously purchased, used and discarded, but the household did not change hands between 1787 and 1839(the period during which whiteware was first sold and gained popularity in the United States), and there appears to have been no need for the family to purchase an entirely new set of dinner and serving ware. Ironstone, however, which was introduced around 1840, is much more common in the archaeological assemblage (17.4%). It is possible that ironstone is more prevalent because it was becoming popular at same time as the farm was growing and the last major addition to the house was made, which required the family to purchase more table ware. The proximity of so many potteries in Trenton making these wares readily available in New Jersey might also explain their relative abundance.

A shaft feature was expected to the northwest of the house's foundation, as the 1989 photo of the farm appears to show an outhouse; however, the midden excavated in this area during the course of this data recovery proved to be late 19th- and early 20th-century in date. The earlier privy hole likely lies further to the northwest, outside the limit of construction. Given the few earlier ceramics at the base of the features, it may have been an earlier midden that was cleaned or disturbed when a pit was dug through it in the late 19th century and used through at least the first quarter of the 20th century. This midden illustrates the change in the disposal of household trash when compared with the deposits in front of the house. Consumer goods from the early 20th century had become much more substantial and harder to discard. While a redware pie plate or thin case bottle could be easily broken into harmless pieces, a large clear glass

beverage bottle or enameled tin bowl or bucket was not easily or safely broken down. This resulted in the creation of the 20th-century bottle dumps which often extend down a hillside or down the bank of stream but sometimes result in the creation of a purpose dug pit.

3. THE FARMYARD LAYOUT

Archaeological investigations of the farmyard portion of Borton/Ballinger Farmstead have revealed several truncated and fragmentary features that appear to relate to the outbuildings observed on historic aerial photographs of the site (see above, Figure 3.1). No evidence was identified that suggests the presence of earlier outbuildings or landscape features and it is considered likely that the building footprints investigated represent the historic layout of the farmyard from at least the beginning of the 20th century. The fragmentary nature of these remains combined with the limited number of artifacts recovered (as expected from typical farm-related outbuildings) suggests that very little additional archaeological information could be obtained from further investigations in this area.

Although the farmyard east of the farm lane was impacted by the original construction of the campus, the details gleaned from the historic aerial photography, the 1963 aerial in particular, were able to be confirmed and further refined through archaeology. The foundation of a 43 by 33-foot barn (Outbuilding 2) was identified and the foundation for a rear, internal, 10-foot-wide bay was observed at the eastern end of the barn. This barn likely served as a cow barn with the eastern bays for calfing or milking stalls. Hay and straw would have been stored in lofts above. The shape of the barn does not conform well with 18th-century barn types, being too square with an entrance on its western gable end (this was apparent in the aerial photographs) and a southerly hay loft door opening (see above, Photograph 2.2). This barn may be a more recent, late 19th-century vernacular barn.

No evidence of Outbuilding 3 was identified and only a single posthole was located in the vicinity of Outbuilding 4. This is probably because these small outbuildings were built on posts, which, along with their small size and linear shape, suggests they were poultry houses. Outbuilding 5 also proved elusive with only a single posthole observed along its projected eastern wall. Its size and shape suggest it was a simple shed, although considering the transition in the late 19th century and early 20th century by this family into fruit crops it may have been an apple shed. Outbuilding 6, for which a short section of mortared stone foundation was identified in Trench 104, appears to have been a wagon house and is shown in the 1988 photograph of the farm (see above, Photograph 2.1). This is supported by the absence of a foundation wall for this building to the south, where the entrance for the wagon shed would have been located. Finally, the 1963 aerial photograph shows a large rectangular building along the north side of the farmyard outside of the current project's limit of construction. Judging by its size and shape, and the tracks leading into it visible on historic aerial photographs, it was probably a wagon shed/corn crib or granary combination. This building is located closer to the upland fields more suitable for grain cultivation.

Overall the farmyard and farmhouse form a "Hollow Rectangular Plan" popular on New Jersey's inner coastal plain with the farmhouse facing south at western end (Manning 1993:20). The farmyard lies on the axis between the farmhouse and main barn. This provides a defined, partially sheltered area within the farmyard for farming activities. One area where the Borton/Ballinger Farmyard varies from the normal farmyard is in the orientation of the barn. Most barns are oriented to the south, however the gable end and ground floor opening of this barn is towards the farmhouse to the west (Manning 1983:16). As mentioned above, the hay loft door does face south and could be opened to provide light and heat and to load hay and

straw from a wagon up into the loft. Livestock in the barn and sheds along the southern side of the access could be led to the south towards the pasture that surrounded the small tributary stream to the west. The larger, possible apple shed, was also positioned on the southern side of the yard closer to the farm lane. Unfortunately, no orchards are visible in the historic aerials and its unclear where the orchards were located historically. The corn cribs appear to have formed the northern edge of the farmyard, making them easily accessible to the large open fields to the north. Overall, the Borton/Ballinger farmyard layout follows the "commonsense aesthetic of function and geometry" known throughout the Delaware Valley (Lanier and Herman 1997:233).

4. PREHISTORIC DEPOSITS

While a concerted effort was made to identify prehistoric archaeological deposits as well as historic period deposits at the Borton/Ballinger Farmstead site only four prehistoric artifacts and no prehistoric features were identified. The artifacts were all identified in mixed contexts around the farmhouse foundation and it is likely that the excavation's focus on obtaining every detail it could about the historic site resulted in less of a focus on testing areas of the site with little or no historic disturbance. Although units and trenches were excavated and screened outside of the footprint of the house that penetrated into natural soils,only one piece each of chalcedony and quartzite debitage, a single piece of thermally altered rock and one jasper project point were recovered. The most important of these, the Brewerton-type, Late Archaic period (4,000 to 2,000 B.C.) projectile point was found within a historic midden. It is not clear if it ended up there because it was collected by the historic-period occupants or if it was introduced to the midden along with the soils from nearby.

REFERENCES

Ashton, Charles H.
1976 The Domestic Architecture of Burlington County, New Jersey, 1677-1840. Unpublished Master's Thesis, Columbia University, New York, New York.

Barber, Edwin Atlee
1970 *Tulip Ware of the Pennsylvania-German Potters: An Historical Sketch of the Art of Slip-Decoration in the United States.* Dover Publications, Inc. New York.

Beaudry, Mary, et al.
1983 "A Vessel Typology for Early Chesapeake Ceramics: The Potomac Typological System". *Historical Archaeology*. Volume 17, Number 1. Pp. 18–43.

Bisbee, Henry H.
1971 *Sign Posts: Place Names in History of Burlington County, New Jersey*. Alexia Press, Inc., Willingboro, New Jersey.

Borton Family File
On file, Burlington County Historical Society, Burlington, New Jersey.

Burlington County Deeds
On file, Burlington County Clerk's Office, Mount Holly, New Jersey.

Burlington County Tax Ratables
On microfilm, New Jersey State Archives, Trenton, New Jersey.

Burlington County Wills and Probate Records
On file, New Jersey State Archives, Trenton, New Jersey.

Chenoweth, John M.
2006 ""What'll Thou Have": Quakers and the Characterization of Tavern Sites in Colonial Philadelphia." *Northeast Historical Archaeology*, Volume 35, Article 24, pp. 77-92.

Cress, George D.
2000 Michael and George Peter Hillegas: German Immigrant Potters and Prosperity in Colonial Philadelphia. M.A. Thesis, California State University Dominguez Hills.

Courier-Post (*CP*) [Camden, New Jersey]
1960 *Truck Runs into Cornfield*. 21 June: 11. Camden, New Jersey.

2003 "Louis Edward Votta Obituary." 29 March: 2B. Camden, New Jersey.

Cunningham, John T.
1953 *This is New Jersey*. Rutgers University Press, New Brunswick, New Jersey.

Decou, George
1929 *Moorestown and Her Neighbors: Historical Sketches*. Harris & Partridge, Philadelphia, Pennsylvania.

Ewan, Nathanial Rue
1932-1949 Early Houses of Burlington County [Photograph Album], 1932-1949. On file, New Jersey State Archives, Trenton.

Flack, John S., Jr.
2012 *Images of America: Evesham Township*. Arcadia Publishing, Charleston, South Carolina.

Friedlander, Amy
1991 "House and Barn; The Wealth of Farmers, 1795-1815." *Historical Archaeology*, Volume 25, No. 2., pp. 15-29.

Gordon, Thomas F.
1828 *Map of the State of New Jersey with Part of the Adjoining States*. Thomas Gordon, Trenton, New Jersey.

1834 *Gazetteer of the State of New Jersey*. Daniel Fenton, Trenton, New Jersey. Reprinted by Polyanthos, Inc., Cottonport, Louisiana.

Greer, Georgeanna
1981 *American Stonewares; The Art & Craft of Utilitarian Potters*. Schiffer Books. Pennsylvania.

Grigsby, Leslie B.
1993 *English Slip-Decorated Earthenware at Williamsburg.* The Colonial Williamsburg Foundation, Williamsburg, VA.

Griscom, Lloyd E.
1973 *The Historic County of Burlington*. The Burlington County Cultural and Heritage Commission, Mount Holly, New Jersey.

Haines, John Wesley (comp.)
1961 *Richard Haines and His Descendants: A Quaker Family of Burlington County, New Jersey, Since 1682*. Carr Publishing Company, Inc., Boyce, Virginia.

Harrington, J.C.
1954 "Dating Stem Fragments of Seventeenth and Eighteenth Century Clay Tobacco Pipes". Quarterly Bulletin of the Archeological Society of Virginia Volume 9(1), pp.10-14. Reprinted 1978 in *Historical Archaeology: A Guide to Substantive and Theoretical Contributions*, edited by Robert Schuyler, 63-65.

Baywood Publishing Company, Farmingdale, New York.

Historic American Building Survey
Prints & Photographs Online Catalog. Electronic document, http://www.loc.gov/pictures/. Accessed May 30, 2018.

Honeyman, A. Van Doren (editor)
1928 *Calendar of New Jersey Wills, Administrations, Etc., Volume IV – 1761-1770*. Documents Relating to the Colonial History of the State of New Jersey, First Series, Vol. XXXIII. The Unionist-Gazette Association, Somerville, New Jersey.

Horner, Maurice W.
1971 *A History of Evesham Township*. Dorrance & Company, Philadelphia, Pennsylvania.

Hughes, G.B.
1961 *English and Scottish Earthenwares 1660-1860*. New York.

Hume, Ivor Noel
1969 *A Guide to Artifacts of Colonial America*. University of Pennsylvania Press, Philadelphia.

Hunter Research, Inc.
2015 Stage II Cultural Resource Survey, Barclay Chase at Marlton, Block 16, Lots 1, 1.01 and 1.05 and Block 402, Lot 1, Evesham Township, Block 402, Lot 1, Medford Township, Burlington County, New Jersey. Report on file, Evesham Township and New Jersey Historic Preservation Office (NJDEP), Trenton, New Jersey.

2014 Archaeological Investigations in 2014 at the Site of the c. 1764 "Ark", The Indian King Tavern State Historic Site [28-Ca-134], 233 King's Highway East, Borough of Haddonfield, Camden County, New Jersey. Report on file, New Jersey Historic Preservation Office (NJDEP), Trenton, New Jersey.

Jones, Albert C.
1957 *Tax Assessment Map of the Township of Mt. Laurel, Burlington County, NJ*. On file, Burlington County Clerk's Office, Mount Holly, New Jersey.

Kenmotsu, Nancy
1990 Gunflints: A Study. *Historical Archaeology*. Volume 24, Number 2. pp. 92-124.

Lake, D.J. and S.N. Beers
1860 *Map of the Vicinity of Philadelphia*. J.E. Gillette & Co., Philadelphia, Pennsylvania.

Lanier, Gabrielle M. and Bernard L. Herman
1997 *Everyday Architecture of the Mid-Atlantic: Looking at Buildings and Landscapes*. The Johns Hopkins University Press, Baltimore, Maryland and London, England.

Lewis, Samuel
1795 *The State of New Jersey, Compiled from the Most Authentic Information*. Matthew Carey, Philadelphia, Pennsylvania.

Lindsey, Bill
2017 Historic Glass Bottle Identification and Information Website. Electronic document, https://sha.org/bottle/. Accessed June 26, 2018.

Mann, Betty M.
1979 *1679-1979: 300 Years of Bortons in North America*. Betty M. Mann, Lansing, Michigan.

1981 *1679-1979: 300 Years of Bortons in North America*, Volume II. Betty M. Mann, Lansing, Michigan.

Manning, Alice E.
1993 "Nineteenth Century Farmsteads On the Inner Coastal Plain of New Jersey." In *Historic Preservation Planning in New Jersey: Selected Papers on the Identification, Evaluation, and Protection of Cultural Resouces*. Olga Chesler, editor. New Jersey Department of Environmental Protection, Division of Parks and Forestry, Office of New Jersey Heritage, Trenton.

Maryland Archaeological Conservation Laboratory
2018 Colonial Ceramics: Manganese Mottled. Electronic document, http://www.jefpat.org/diagnostic/ColonialCeramics/Colonial%20Ware%20Descriptions/ManganeseMottled.html Accessed June 26, 2018.

Mason, Freeman C. (comp.)
1908 *History of the Borton and Mason Families in Europe and America*. F.C. Mason, Hillsdale, Michigan.

Mounier, R. Alan
1988 A Stage II Archaeological Survey of the Proposed Laurel Creek Development, Waterfront Development Area, Moorestown and Mount Laurel Township, Burlington County, New Jersey. On file, New Jersey Historic Preservation Office (NJDEP), Trenton.

1993 Stage I/II Cultural Resources Study of Proposed Burlington County College Mount Laurel Campus, Mount Laurel, Burlington Co., New Jersey. On file, New Jersey Historic Preservation Office (NJDEP), Trenton, New Jersey.

1995 Stage II Cultural Resources Study of Selected Locations on Burlington County College Mount Laurel Campus, Mount Laurel, Burlington Co., New Jersey. On file, New Jersey Historic Preservation Office (NJDEP), Trenton, New Jersey.

Nelson, William
1909 *Marriage Records, 1665-1800*. Documents Relating to the Colonial History of the State of New Jersey, Volume XXII. The Press Printing and Publishing Co., Paterson, New Jersey.

New Jersey State Census
1895 Census Place: Mount Laurel Township, Burlington County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1905 Census Place: Mount Laurel Township, Burlington County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

Otley, J.W. and R. Whiteford
1849 *Map of Burlington County Mostly from Original Surveys*. Smith & Wistar, Philadelphia, Pennsylvania.

Painter, Jeff
2018 An Electrifying Discovery: Early Batteries on MSU's Campus. Electronic document, http://campusarch.msu.edu/?p=5854. Accessed June 26, 2018.

Parry, W., G. Sykes and F. Earl
1858 *Map of Burlington County*. R.K. Kuhn and J.D. Janney, Philadelphia, Pennsylvania.

Philadelphia Yearly Meeting Minutes
On file, Swarthmore College, Swarthmore, Pennsylvania. Electronic document, http://www.ancestry.com, accessed October 2016.

Picken, Barbara and Gail Greenberg
1972 *Mount Laurel: A Centennial History*. On file, Burlington County Historical Society, Burlington, New Jersey.

Rickard, Jonathan
2006 *Mocha and Related Dipped Wares, 1770-1930.* University Press of New England, Lebanon, New Hampshire.

Saffron, Inga
1987 Byway to Americana, Memorial to Marne. *The Philadelphia Inquirer* 9 September: 2BR, 3BR, 19BR. Philadelphia, Pennsylvania.

Sawyer, Stephanie Marks
2014 *Images of America: Mount Laurel*. Arcadia Publishing, Charleston, South Carolina.

Scott, J.D.
1876 *Combination Map Atlas of Burlington County New Jersey*. J.D. Scott, Philadelphia, Pennsylvania.

Skerry, Janine and Hood, Suzanne.
2009 *Salt-Glazed Stoneware in Early America*. Colonial Williamsburg Foundation.

Snyder, James P.
1969 *The Story of New Jersey's Civil Boundaries, 1606-1968*. Bureau of Geology and Topography, Trenton, New Jersey.

The Philadelphia Inquirer (TPI) [Philadelphia, Pennsylvania]
2003 "Louis Edward Votta Obituary." 28 March: B10. Philadelphia, Pennsylvania.

Thompson, Neal
1988 County Determined to Put High-Tech Center on Farm. *The Philadelphia Inquirer* 11 December: 22BR, 26BR. Philadelphia, Pennsylvania.

1989 For a Farmer, a Reluctant Farewell. *The Philadelphia Inquirer* 15 January: 1B, 8B. Philadelphia, Pennsylvania.

U.S. Department of Labor
1921 United States Declaration of Intention. Electronic document, http://www.ancestry.com, accessed March 2018.

1923 United States Petition for Naturalization. Electronic document, http://www.ancestry.com, accessed March 2018.

U.S. Federal Census, Agricultural Schedules
1850 Census Place: Evesham Township, Burlington County, New Jersey. On file, New Jersey State Archives, Trenton, New Jersey.

1860 Census Place: Evesham Township, Burlington County, New Jersey. On file, New Jersey State Archives, Trenton, New Jersey.

1870 Census Place: Evesham Township, Burlington County, New Jersey. On file, New Jersey State Archives, Trenton, New Jersey.

1880 Census Place: Mount Laurel Township, Burlington County, New Jersey. On file, New Jersey State Archives, Trenton, New Jersey.

U.S. Federal Census, Population Schedules
1840 Census Place: Evesham Township, Burlington County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1850 Census Place: Delaware Township, Camden County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1850 Census Place: Evesham Township, Burlington County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1860 Census Place: Delaware Township, Camden County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1860 Census Place: Evesham Township, Burlington County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1870 Census Place: Delaware Township, Camden County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1870 Census Place: Evesham Township, Burlington County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1880 Census Place: Chester Township, Burlington County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1880 Census Place: Mount Laurel Township, Burlington County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1900 Census Place: Mount Laurel Township, Burlington County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1910 Census Place: Mount Laurel Township, Burlington County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1920 Census Place: Mount Laurel Township, Burlington County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

1930 Census Place: City of Philadelphia, Philadelphia County, Pennsylvania. Electronic document, http://www.ancestry.com, accessed March 2018.

1940 Census Place: Mount Laurel Township, Burlington County, New Jersey. Electronic document, http://www.ancestry.com, accessed March 2018.

Watson, William
1812 *A Map of the State of New Jersey*. W. Harrison, Philadelphia, Pennsylvania.

Woodward, E.M. and John F. Hageman
1883 *History of Burlington and Mercer Counties*. Everts and Peck, Philadelphia, Pennsylvania.

Appendix A

SUMMARY OF SUBSURFACE TESTING

APPENDIX A

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Open Area		1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			2	sandy silt with gravel [late 20th century grading fill]	10YR 4/3	
			3	unconsolidated gravel [late 20th century house demolition fill]	--	
			6	mottled silty clayey sand [late 20th century house demolition fill]	2.5Y 6/6, 10YR 4/4, 10YR 5/6	
			7	mortared limonite cobble foundation wall [N-S running, main west wall, later addition]	--	
			8	mortared limonite cobble foundation wall [N-S running, eastern bulkhead basement entry wall]		
			9	mottled sandy silt [fill of context 10]	10YR 5/6, 10YR 3/6	
			10	cut for Context 8 builders' trench [filled by context 9]	--	
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	
			39	mortared limonite block foundation wall [south wall of main foundation, southwest section]	--	
			40	mortared limonite cobble interior wall [central E-W running wall that divides the NW and SW chambers of the basement floor plan]		
			41	brick floor surface [floor of NW basement chamber, common brick laid N-S]		
			42	brick floor surface [floor of SW basement chamber, uncommon and glazed brick laid E-W]		
			43	brick support wall [abuts contexts 8 and 24; interior facing of bulkhead basement entry]		
			86	mortared limonite block foundation wall [N-S running west wall of house footprint, abuts contexts 7, 39, 40, 41 and 42]		
			87	dry-laid, cut blue slate floor surface [abuts context 40 and 41]		
			88	wood frame staircase [abuts contexts 8 and 24]		
			89	mortar-coated limonite block step [abuts contexts 8, 15 and 24; at the base of the bulkhead entry stairs]		
			90	square cut concrete slab [2.5' square, 4" thick]		

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Open Area		91	mortared limonite block interior wall [N-S running interior wall, probable support at west entry into subcellar]	--	--
			92	mortared limonite cobble footing [corner portion appears to be the central division of the four basement chambers]		
			93	square limonite block pier [abuts exterior of context 39]		
			94	mortared limonite block interior wall [N-S running; abuts contexts 39, 96, 98 and 99]		
			95	1.2' redware drain [cuts context 116]		Historic Fired Clay - Ceramic
			96	mortared limonite cobble foundation wall [E-W running south wall of main foundation floor plan]		--
			97	mortared limonite cobble foundation wall [N-S running south wall of main foundation floor plan]		
			98	brick and steel rod support fill [abuts contexts 94, 96 and 99]		
			99	mortared limonite cobble foundation wall [abuts 94, 98, 100 and 101; E-W wall of earlier structure that predates house]		
			100	mortared limonite cobble foundation wall [abuts 15, 99, 101; N-S wall of earlier structure that predates house]		
			101	brick floor surface [abuts context 99 and 100; probable floor of earlier structure]		
			102	mortared limonite cobble foundation wall [N-S running east wall of main footprint; probably equal to context 97, compromised by modern demo]		
			103	mortared limonite cobble interior wall [abuts context 109]		
			104	dry-laid brick footing [abuts contexts 15 and 91]		
			105	mortared brick wall [W wall of subcellar]		
			106	mortared brick wall [S wall of subcellar]		
			107	dry-laid brick floor surface [floor of subcellar]		

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Open Area		108	0.8' terra cotta drain [drain in southeast corner of the subcellar]	--	--
			109	mortared limonite cobble foundation wall [N wall of main house bound to W by bulkhead entry and E by well shaft]		
			110	mortared brick well shaft access port [cut into 109 at the NE corner of the house for access to well from subcellar]		
			111	mortared brick and dry-laid limonite block shaft [semi-ovoid well shaft beyond extant footprint accessed from subcellar]		
			112	unconsolidated limonite building rubble with caution tape and loamy matrix [modern shaft fill from demolition phase of the house]	10YR 4/3	
			113	0.5' white PVC drain [modern utility in NW chamber of the basement]	--	
			114	0.5' cast iron pipe elbow [historic utility pipe]		
			115	0.5' cast iron pipe [historic utility pipe]		
			116	dry-laid brick floor surface [floor of SE basment chamber; mixed brick stretched E-W]		
			147	mortared limonite cobble footing [E-W running north addition wall]		
			148	mortared limonite cobble footing [N-S running north addition wall]		
			149	0.5' terra cotta drain [historic utility]		
Borton/Ballinger Farm, Farm House	Shovel Test	1015	11	silty sand loam [pre-house demolition topsoil]	10YR 4/4	Historic Fauna Historic Fired Clay - Ceramic Historic Glass
			55	compact silty sand [upcast/redeposited subsoil]	10YR 7/4	Historic Fired Clay - Ceramic Historic Glass
			63	mottled clayey sand [natural subsoil]	10YR 5/6, 10YR 7/4	--
Borton/Ballinger Farm, Farm House	Shovel Test	1016	11	silty sand loam [pre-house demolition topsoil]	10YR 4/4	Historic Fauna Historic Fired Clay - Ceramic

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Shovel Test	1016	11	silty sand loam [pre-house demolition topsoil]	10YR 4/4	Historic Fired Clay - Non-ceramic
						Historic Glass
						Historic Metal
			55	compact silty sand [upcast/redeposited subsoil]	10YR 7/4	--
			63	mottled clayey sand [natural subsoil]	10YR 5/6, 10YR 7/4	
Borton/Ballinger Farm, Farm House	Shovel Test	1017	11	silty sand loam [pre-house demolition topsoil]	10YR 4/4	Historic Composite
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
			55	compact silty sand [upcast/redeposited subsoil]	10YR 7/4	--
			63	mottled clayey sand [natural subsoil]	10YR 5/6, 10YR 7/4	
Borton/Ballinger Farm, Farm House	Excavation Unit	101	1	sandy silt with gravel [modern topsoil]	10YR 4/2	Historic Composite
						Historic Fauna
						Historic Fired Clay - Ceramic*
						Historic Glass*
						Historic Metal
						Historic Mineral
						Modern Composite
			2	sandy silt with gravel [late 20th century grading fill]	10YR 4/3	--
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	Historic Fired Clay - Ceramic
						Historic Glass
						Historic Metal
						Historic Stone
						Modern Composite
			12	clayey sand [natural subsoil]	7.5YR 5/8	--
			44	compact silty loam [Buried A horizon]	10YR 5/3	Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Excavation Unit	101	44	compact silty loam [Buried A horizon]	10YR 5/3	Historic Metal
			45	mottled compact silty loam [Buried A horizon]	10YR 6/4, 10YR 6/6	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Glass
						Historic Metal
			46	cut for stratified trash pit [filled by contexts 47, 71, 72 and 73; late 19th/early 20th century trash deposit]	--	--
			47	dense modern and historic refuse with silty loam matrix [fill of context 46]	10YR 4/3	Historic Composite*
						Historic Fauna*
						Historic Fired Clay - Ceramic
						Historic Glass
						Historic Metal*
			48	silty sand [historic wetlands deposit; filled/graded by deposits in Context 46]	10YR 6/3	--
Borton/Ballinger Farm, Farm House	Excavation Unit	102	1	sandy silt with gravel [modern topsoil]	10YR 4/2	Historic Fired Clay - Ceramic
						Historic Glass
						Historic Metal
			2	sandy silt with gravel [late 20th century grading fill]	10YR 4/3	--
			12	clayey sand [natural subsoil]	7.5YR 5/8	
			45	mottled compact silty loam [Buried A horizon]	10YR 6/4, 10YR 6/6	
			46	cut for stratified trash pit [filled by contexts 47, 71, 72 and 73; late 19th/early 20th century trash deposit]	--	
			47	dense modern and historic refuse with silty loam matrix [fill of context 46]	10YR 4/3	Historic Composite*
						Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic*
						Historic Glass*
						Historic Metal*

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Excavation Unit	102	47	dense modern and historic refuse with silty loam matrix [fill of context 46]	10YR 4/3	Historic Mineral
						Historic Stone
						Modern Composite
			48	silty sand [historic wetlands deposit; filled/graded by deposits in Context 46]	10YR 6/3	--
			49	1' iron drain pipe [in upper portion of Context 47]	--	
			50	sandy clay [clean fill in Context 49]	5YR 6/4	
			71	mottled compact clayey sand [fill of context 46]	10YR 6/6, 10YR 4/2	
			72	loose silty sand with dense historic refuse [fill of context 46]	10YR 4/4	
			73	silty sand [fill of context 46]	10YR 5/3	
			74	mottled compact sand marl [natural marl deposit]	2.5Y 7/4, 5Y 8/4	
			75	compact ferric sand [natural thick lamellae band]	7.5YR 4/6	
			76	stratified fine sand with lamellae banding [natural subsoil]	5Y 7/4, 7.5YR 4/6	
Borton/Ballinger Farm, Farm House	Excavation Unit	103	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			12	clayey sand [natural subsoil]	7.5YR 5/8	
			33	mottled silty sand [fill of context 34]	10YR 3/4, 10YR 5/6	Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Metal
Borton/Ballinger Farm, Farm House	Excavation Unit	104	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			3	unconsolidated gravel [late 20th century house demolition fill]	--	
			5	silty loam with dense brick and limonite rubble [19th century house expansion/demolition grading]	10YR 4/4	Historic Composite
						Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Excavation Unit	104	5	silty loam with dense brick and limonite rubble [19th century house expansion/demolition grading]	10YR 4/4	Historic Metal
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	--
			12	clayey sand [natural subsoil]	7.5YR 5/8	
			39	mortared limonite block foundation wall [south wall of main foundation, southwest section]	--	
			55	silty sand [upcast/redeposited subsoil]	10YR 7/4	
			59	cut or natural slope [filled by context 55]	--	
			60	silty loam [fill of context 61]	10YR 4/4	
			61	cut for Context 39 builders' trench [filled by context 61]	--	
			62	mottled sandy silt with charcoal [buried Plow Zone]	10YR 5/4, 10YR 4/4	
Borton/Ballinger Farm, Farm House	Excavation Unit	105	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			3	unconsolidated gravel [late 20th century house demolition fill]	--	
			5	silty loam with dense brick and limonite rubble [19th century house expansion/demolition grading]	10YR 4/4	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
						Historic Metal
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	--
			55	silty sand [upcast/redeposited subsoil]	10YR 7/4	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
						Historic Metal
						Historic Stone
			56	compact coarse clayey sand [upcast fill]	10YR 5/6	Historic Fauna

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Excavation Unit	105	56	compact coarse clayey sand [upcast fill]	10YR 5/6	Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
						Historic Metal
						Modern Composite
			57	silty loam with brick rubble [fill of context 58]	10YR 4/4	--
			58	cut for post hole [filled by context 57]	--	
			62	mottled sandy silt with charcoal [buried Plow Zone]	10YR 5/4, 10YR 4/4	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
						Historic Metal
						Historic Stone
						Prehistoric Stone
			64	compact mottled silty sand [natural subsoil]	10YR 6/6, 10YR 6/1	--
			65	medium sand [natural subsoil]	2.5Y 5/6	
			66	fine sand [natural subsoil]	5YR 5/3	
Borton/Ballinger Farm, Farm House	Excavation Unit	106	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			3	unconsolidated gravel [late 20th century house demolition fill]	--	
			5	silty loam with dense brick and limonite rubble [19th century house expansion/demolition grading]	10YR 4/4	Historic Composite
						Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
						Historic Metal
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	--

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Excavation Unit	106	55	silty sand [upcast/redeposited subsoil]	10YR 7/4	Historic Fauna
						Historic Fired Clay - Ceramic
			56	compact coarse clayey sand [upcast fill]	10YR 5/6	--
			57	silty loam with brick rubble [fill of context 58]	10YR 4/4	
			58	cut for post hole [filled by context 57]	--	
			62	mottled sandy silt with charcoal [buried Plow Zone]	10YR 5/4, 10YR 4/4	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
						Historic Metal
Borton/Ballinger Farm, Farm House	Excavation Unit	107	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			3	unconsolidated gravel [late 20th century house demolition fill]	--	
			5	silty loam with dense brick and limonite rubble [19th century house expansion/demolition grading]	10YR 4/4	
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	
			55	silty sand [upcast/redeposited subsoil]	10YR 7/4	
			62	mottled sandy silt with charcoal [buried Plow Zone]	10YR 5/4, 10YR 4/4	
Borton/Ballinger Farm, Farm House	Excavation Unit	108	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			5	silty loam with dense brick and limonite rubble [19th century house expansion/demolition grading]	10YR 4/4	
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	
			62	mottled sandy silt with charcoal [buried Plow Zone]	10YR 5/4, 10YR 4/4	
			78	sandy silt [fill of context 79]	10YR 4/1	
			79	cut for historic plow scar [filled by context 78]	--	
Borton/Ballinger Farm, Farm House	Excavation Unit	109	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			5	silty loam with dense brick and limonite rubble [19th century house expansion/demolition grading]	10YR 4/4	
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Excavation Unit	109	62	mottled sandy silt with charcoal [buried Plow Zone]	10YR 5/4, 10YR 4/4	--
			77	loamy coarse sand [modern grading fill]	10YR 5/6	
Borton/Ballinger Farm, Farm House	Excavation Unit	110	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	
			62	mottled sandy silt with charcoal [buried Plow Zone]	10YR 5/4, 10YR 4/4	
			63	compact silty sand [natural subsoil]	10YR 5/6	
			64	compact mottled silty sand [natural subsoil]	10YR 6/6, 10YR 6/1	
			77	loamy coarse sand [modern grading fill]	10YR 5/6	
Borton/Ballinger Farm, Farm House	Excavation Unit	111	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	
			62	mottled sandy silt with charcoal [buried Plow Zone]	10YR 5/4, 10YR 4/4	
			77	loamy coarse sand [modern grading fill]	10YR 5/6	
Borton/Ballinger Farm, Farm House	Excavation Unit	112	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			5	silty loam with dense brick and limonite rubble [19th century house expansion/demolition grading]	10YR 4/4	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
						Historic Metal
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
			53	cut for indeterminate historic pit feature [filled by contexts 54, 67 and 81]	--	--
			54	slightly silty sand [fill of context 53]	5Y 6/4	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Excavation Unit	112	54	slightly silty sand [fill of context 53]	5Y 6/4	Historic Glass
						Historic Metal
			80	mottled coarse silty sand [possible A horizon]	10YR 3/4, 10YR 5/6, 10YR 4/4	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
						Prehistoric Stone
			81	mottled silty sand [fill of context 53]	10YR 4/2, 10YR 7/8	--
			82	mottled compact sand [fill of context 85]	2.5Y 6/8, 2.5Y 5/6	
			83	compact sand [fill of context 85]	10YR 7/4	
			84	mottled compact sand [fill of context 85]	2.5Y 5/6, 2.5Y 8/2, 2.5Y 6/8	
			85	cut of historic pit feature [filled by contexts 80, 82, 83 and 84]	--	
Borton/Ballinger Farm, Farm House	Excavation Unit	113	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
						Historic Metal
			13	silty clay sand [natural subsoil]	10YR 4/6	--
			51	mottled silty sand [buried Plow Zone]	2.5Y 6/2, 2.5Y 8/2	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
						Historic Metal
			52	silty sand with lamellae banding [natural subsoil]	2.5Y 8/2	--

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Excavation Unit	114	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			5	silty loam with dense brick and limonite rubble [19th century house expansion/demolition grading]	10YR 4/4	Historic Composite
						Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
						Historic Metal
						Modern Metal
						Prehistoric Stone
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Glass
						Historic Metal
			53	cut for indeterminate historic pit feature [filled by contexts 54, 67 and 81]	--	--
			54	slightly silty sand [fill of context 53]	5Y 6/4	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
						Historic Metal
			55	silty sand [upcast/redeposited subsoil]	10YR 7/4	--
			67	mottled soft sand [fill of context 53]	10YR 3/6, 10YR 5/6	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Glass
						Historic Metal
			84	mottled compact sand [fill of context 85]	2.5Y 5/6, 2.5Y 8/2, 2.5Y 6/8	--

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Excavation Unit	114	85	cut of historic pit feature [filled by contexts 80, 82, 83 and 84]	--	--
Borton/Ballinger Farm, Farm House	Trench	101	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			2	sandy silt with gravel [late 20th century grading fill]	10YR 4/3	
			3	unconsolidated gravel [late 20th century house demolition fill]	--	
			4	mottled compact silty sand [20th century grading fill]	10YR 5/8, 10YR 7/6	
			5	silty loam with dense brick and limonite rubble [19th century house expansion/demolition grading]	10YR 4/4	
			6	mottled silty clayey sand [late 20th century house demolition fill]	2.5Y 6/6, 10YR 4/4, 10YR 5/6	
			7	mortared limonite cobble foundation wall [N-S running, main west wall, later addition]	--	
			8	mortared limonite cobble foundation wall [N-S running, eastern bulkhead basement entry wall]		
			9	mottled sandy silt [fill of context 10]	10YR 5/6, 10YR 3/6	
			10	cut for Context 8 builders' trench [filled by context 9]	--	
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	
			12	clayey sand [natural subsoil]	7.5YR 5/8	
			13	silty clay sand [natural subsoil]	10YR 4/6	
			14	mottled medium sand [natural subsoil]	10YR 5/6, 10YR 5/8	
			15	medium sand [natural subsoil]	10YR 5/8	
			16	compact silty sand [historic grading fill]	10YR 6/6	
			17	2" gray PVC conduit [modern utility, fill of Context 18]	--	
			18	cut for Context 17 modern utility trench [filled by context 17]		
			19	compact gravel [buried modern road surface]		
			20	mottled medium sand [natural subsoil]	2.5Y 6/6, 10YR 5/6	
			21	clayey sand [natural subsoil]	10YR 5/3	
			22	sandy clay [natural subsoil]	10YR 5/8	
			23	mortared limonite cobble foundation wall [E-W running, main north wall west of bulkhead entry]	--	

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Trench	101	24	mortared limonite cobble foundation wall [N-S running, west wall of northern bulkhead entry]	--	--
			25	loose sandy silt [modern house demolition fill]	10YR 5/4	
			26		10YR 4/4	
			27	coarse silty sand [modern house demolition fill]	10YR 7/4	
			43	brick support wall [abuts contexts 8 and 24; interior facing of bulkhead basement entry]	--	
Borton/Ballinger Farm, Farm House	Trench	102	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			2	sandy silt with gravel [late 20th century grading fill]	10YR 4/3	
			3	unconsolidated gravel [late 20th century house demolition fill]	--	
			6	mottled silty clayey sand [late 20th century house demolition fill]	2.5Y 6/6, 10YR 4/4, 10YR 5/6	
			12	clayey sand [natural subsoil]	7.5YR 5/8	
			14	mottled medium sand [natural subsoil]	10YR 5/6, 10YR 5/8	
			15	medium sand [natural subsoil]	10YR 5/8	
			16	compact silty sand [historic grading fill]	10YR 6/6	
			20	mottled medium sand [natural subsoil]	2.5Y 6/6, 10YR 5/6	
			21	clayey sand [natural subsoil]	10YR 5/3	
			23	mortared limonite cobble foundation wall [E-W running, main north wall west of bulkhead entry]	--	
			28	silty loam [modern house demolition fill]	10YR 5/2	
			29	redware field drain pipe [historic utility]	--	
			30	compact sandy loam [fill of context 31]	10YR 5/2	
			31	cut for Context 32 and 35 utility trench [filled by contexts 30, 32, 35]	--	
			32	iron utility pipe [fill of context 31]		
			33	mottled silty sand [fill of context 34]	10YR 3/4, 10YR 5/6	
			34	cut for Context 23 builders' trench [filled by context 33]	--	
			35	terra cotta drain pipe [fill of context 31]		

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Trench	102	36	coarse sand [natural subsoil]	5YR 4/6	--
			37	wet clayey sand [natural subsoil]	2.5Y 5/6	
			38	mottled medium sand [natural subsoil]	2.5Y 6/4, 10YR 5/8	
Borton/Ballinger Farm, Farm House	Trench	106	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			3	unconsolidated gravel [late 20th century house demolition fill]	--	
			5	silty loam with dense brick and limonite rubble [19th century house expansion/demolition grading]	10YR 4/4	
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	
			12	clayey sand [natural subsoil]	7.5YR 5/8	
			39	mortared limonite block foundation wall [south wall of main foundation, southwest section]	--	
			55	silty sand [upcast/redeposited subsoil]	10YR 7/4	
			56	compact coarse clayey sand [upcast fill]	10YR 5/6	
			57	silty loam with brick rubble [fill of context 58]	10YR 4/4	
			58	cut for post hole [filled by context 57]	--	
			59	cut or natural slope [filled by context 55]		
			60	silty loam [fill of context 61]	10YR 4/4	
			61	cut for Context 39 builders' trench [filled by context 61]	--	
			62	mottled sandy silt with charcoal [buried Plow Zone]	10YR 5/4, 10YR 4/4	
			63	compact silty sand [natural subsoil]	10YR 5/6	
			64	compact mottled silty sand [natural subsoil]	10YR 6/6, 10YR 6/1	
			65	medium sand [natural subsoil]	2.5Y 5/6	
			66	fine sand [natural subsoil]	5YR 5/3	
			77	loamy coarse sand [modern grading fill]	10YR 5/6	
			78	sandy silt [fill of context 79]	10YR 4/1	
			79	cut for historic plow scar [filled by context 78]	--	
Borton/Ballinger Farm, Farm House	Trench	107	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			55	silty sand [upcast/redeposited subsoil]	10YR 7/4	

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Trench	107	67	mottled soft sand [fill of context 53]	10YR 3/6, 10YR 5/6	--
			80	mottled coarse silty sand [possible A horizon]	10YR 3/4, 10YR 5/6, 10YR 4/4	
			81	mottled silty sand [fill of context 53]	10YR 4/2, 10YR 7/8	
			82	mottled compact sand [fill of context 85]	2.5Y 6/8, 2.5Y 5/6	
			83	compact sand [fill of context 85]	10YR 7/4	
			84	mottled compact sand [fill of context 85]	2.5Y 5/6, 2.5Y 8/2, 2.5Y 6/8	
			85	cut of historic pit feature [filled by contexts 80, 82, 83 and 84]	--	
Borton/Ballinger Farm, Farm House	Trench	108	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
Borton/Ballinger Farm, Farm House	Trench	109	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			11	silty sand [pre-house demolition topsoil]	10YR 5/4	
			46	cut for stratified trash pit [filled by contexts 47, 71, 72 and 73; late 19th/early 20th century trash deposit]	--	
			47	dense modern and historic refuse with silty loam matrix [fill of context 46]	10YR 4/3	
			48	silty sand [historic wetlands deposit; filled/graded by deposits in Context 46]	10YR 6/3	
			68	mottled compact sandy clay with brick rubble [historic fill]	2.5Y 7/6, 2.5Y 8/4	Historic Fired Clay - Non-ceramic
			69	mottled loamy sand with roots [fill of context 70]	7.5YR 5/3, 7.5YR 3/3	--
			70	cut for root/rodent hole [filled by context 69]	--	
			71	mottled compact clayey sand [fill of context 46]	10YR 6/6, 10YR 4/2	
			72	loose silty sand with dense historic refuse [fill of context 46]	10YR 4/4	
			73	silty sand [fill of context 46]	10YR 5/3	Historic Fauna Historic Fired Clay - Ceramic Historic Glass
			74	mottled compact sand marl [natural marl deposit]	2.5Y 7/4, 5Y 8/4	--
			75	compact ferric sand [natural thick lamellae band]	7.5YR 4/6	

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House	Trench	109	76	stratified fine sand with lamellae banding [natural subsoil]	5Y 7/4, 7.5YR 4/6	--
Borton/Ballinger Farm, Farm House Transect 101,	Shovel Test	101 10	11	silty sand [pre-house demolition topsoil]	10YR 5/4	Historic Fired Clay - Ceramic
						Historic Glass
			12	silty sand [natural subsoil]	10YR 6/6	--
			13	silty clayey sand [natural subsoil]	10YR 4/6	
			14	mottled sand [natural subsoil]	10YR 5/6, 10YR 5/8	
Borton/Ballinger Farm, Farm House Transect 101,	Shovel Test	101 10	4	mottled compact silty sand [20th century grading fill]	10YR 7/6, 10YR 5/8	Historic Glass
			13	compact silty sand [natural subsoil]	10YR 4/6	--
			14	mottled sand [natural subsoil]	10YR 5/6, 10YR 5/8	
Borton/Ballinger Farm, Farm House Transect 101,	Shovel Test	101 10	13	sandy clay [natural subsoil]	10YR 4/6	--
			14	mottled sand [natural subsoil]	10YR 5/6, 10YR 5/8	
			15	medium sand [natural subsoil]	10YR 5/8	
Borton/Ballinger Farm, Farm House Transect 101,	Shovel Test	101 10	1	sand loam [modern topsoil]	10YR 3/3	Historic Fired Clay - Ceramic
			13	sandy clay [natural subsoil]	10YR 5/6	--
			15	sand [natural subsoil]	10YR 5/8	
			20	mottled sand [natural subsoil]	10YR 5/6, 2.5Y 6/6	
Borton/Ballinger Farm, Farm House Transect 101,	Shovel Test	101 10	1	mottled sand loam with gravel and brick [modern topsoil]	10YR 3/4, 10YR 5/6	Historic Fired Clay - Ceramic
						Historic Glass
						Historic Metal
			13	clayey sand [natural subsoil]	10YR 5/6	
			15	sand [natural subsoil]	10YR 5/8	--
			20	mottled sand [natural subsoil]	2.5Y 6/6, 10YR 5/6	Historic Fired Clay - Ceramic
						Historic Glass
			21	sandy clay [natural subsoil]	10YR 5/3	--

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House Transect 101,	Shovel Test	101 10	13	clayey sand [natural subsoil]	10YR 5/6	--
			14	mottled medium sand [natural subsoil]	10YR 5/6, 10YR 5/8	
			15	sand [natural subsoil]	10YR 5/8	
			20	mottled sand [natural subsoil]	10YR 5/6, 2.5Y 6/6	
			21	sandy clay [natural subsoil]	10YR 5/3	
Borton/Ballinger Farm, Farm House Transect 101,	Shovel Test	101 10	1	compact silty sand loam [modern topsoil]	10YR 4/6	--
			13	compact clayey sand [natural subsoil]	10YR 5/6	
			14	mottled sand [natural subsoil]	10YR 5/6, 10YR 5/8	
			22	sandy clay [natural subsoil]	10YR 5/8	
Borton/Ballinger Farm, Farm House Transect 102,	Shovel Test	102 10	1	sand loam [modern topsoil]	10YR 4/3	--
			12	compact clayey sand [natural subsoil]	10YR 6/6	
			15	medium sand [natural subsoil]	10YR 5/8	
			20	mottled clayey sand [natural subsoil]	2.5Y 6/6, 10YR 5/6	
			21	clayey sand [natural subsoil]	10YR 5/3	
Borton/Ballinger Farm, Farm House Transect 102,	Shovel Test	102 10	12	clayey sand [natural subsoil]	10YR 5/6	--
			15	medium sand [natural subsoil]	10YR 5/8	
			20	mottled clayey sand [natural subsoil]	2.5Y 6/6, 10YR 5/6	
Borton/Ballinger Farm, Farm House Transect 102,	Shovel Test	102 10	15	medium coarse sand [natural subsoil]	10YR 5/8	--
			20	mottled clayey sand [natural subsoil]	2.5Y 6/6, 2.5Y 5/6	
			36	coarse sand [natural subsoil]	5YR 4/6	
			37	wet clayey sand [natural subsoil]	2.5Y 5/6	
			38	mottled medium sand [natural subsoil]	2.5Y 6/6, 2.5Y 5/8	
Borton/Ballinger Farm, Farm House Transect 102,	Shovel Test	102 10	12	clayey sand [natural subsoil]	10YR 5/6	--
			15	medium coarse sand [natural subsoil]	10YR 5/8	

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm House Transect 102,	Shovel Test	102 10	20	mottled medium sand [natural subsoil]	2.5Y 6/6, 10YR 5/8	--
			37	wet clayey sand [natural subsoil]	2.5Y 5/6	
Borton/Ballinger Farm, Farm House Transect 106,	Shovel Test	106 10	5	loamy sand [19th century house expansion/demolition grading]	10YR 5/3	Historic Fired Clay - Ceramic
						Historic Fired Clay - Non-ceramic
						Historic Glass
			55	silty sand [upcast/redeposited subsoil]	10YR 6/6	--
			62	silty sand [buried Plow Zone]	10YR 4/4	Historic Fired Clay - Ceramic
Borton/Ballinger Farm, Farm House Transect 106,	Shovel Test	106 10	55	silty sand [upcast/redeposited subsoil]	10YR 6/6	--
			62	loamy sand with rubble [buried Plow Zone]	10YR 4/4	Historic Fauna
						Historic Fired Clay - Ceramic
						Historic Glass
						Historic Metal
Borton/Ballinger Farm, Farm House Transect 106,	Shovel Test	106 10	11	silty loam [pre-house demolition topsoil]	10YR 4/3	--
			55	compact silty sand [upcast/redeposited subsoil]	10YR 6/4	
			62	mottled silty sand [buried Plow Zone]	10YR 5/4, 10YR 6/4	Historic Fired Clay - Ceramic
			63	compact silty sand [natural subsoil]	10YR 5/6	--
			64	mottled compact silty sand [natural subsoil]	10YR 6/6, 10YR 4/1	
Borton/Ballinger Farm, Farm Yard	Trench	103	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			2	sandy silt with gravel [late 20th century grading fill]	10YR 4/3	
			65	medium sand [natural subsoil]	2.5Y 5/6	
			76	stratified fine sand with lamellae banding [natural subsoil]	5Y 7/4, 7.5YR 4/6	
			117	mottled compact silty sand [Buried A horizon]	10YR 4/4, 10YR 6/2	
			118	dry-laid cobble footing [S wall of barn structure]	--	
			119	mottled compact silty sand [barn demolition fill]	10YR 5/6, 10YR 6/2	

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm Yard	Trench	103	120	oily/odorous sand loam [20th century disturbance fill]	10YR 2/1	--
			121	cut for 20th century disturbance [filled by context 120]	--	
			122	dry-laid large cobble footing [E-W running north wall of barn structure]		
			123	mottled compact silty sand with gravel [modern barn demo fill and grading]	10YR 6/2, 10YR 4/4	
			124	medium sand [upcast subsoil from excavation of context 121]	10YR 5/8	
			125	dry-laid large cobble footing [N-S running west wall of barn structure]	--	
			126	dry-laid large cobble footing [N-S running interior wall of barn structure]		
Borton/Ballinger Farm, Farm Yard	Trench	104	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			2	sandy silt with gravel [late 20th century grading fill]	10YR 4/3	
			65	medium sand [natural subsoil]	2.5Y 5/6	
			127	sandy silt [Buried A horizon]	10YR 6/4	
			128	brick and concrete rubble footing [E-W running; 20th century garage/shed footing]	--	
			129	cut for field drain [filled by contexts 130 and 131]		
			130	silty sand [fill of context 129]	10YR 5/4	
			131	sandy silt [fill of context 129]	10YR 4/6	
Borton/Ballinger Farm, Farm Yard	Trench	105	1	sandy silt with gravel [modern topsoil]	10YR 4/2	--
			132	mottled compact sandy silt [Plow Zone]	10YR 5/6, 10YR 7/4	
			133	sandy silt [fill of context 134]	10YR 5/3	Historic Metal
			134	cut for fence post [filled by context 133]	--	--
			135	sandy silt [fill of context 136]	10YR 5/3	Historic Metal
			136	cut for historic plow scar [filled by context 135]	--	--
			137	sandy silt [fill of context 138]	10YR 5/3	Historic Metal
			138	cut for fence post [filled by context 137]	--	--
			139	compact silt [fill of context 141]	10YR 6/2	

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Location	Unit Type	No.	Context	Soil Description [Interpretation]	Munsell	Cultural Materials
Borton/Ballinger Farm, Farm Yard	Trench	105	140	mottled sandy silt [fill of context 139]	10YR 5/6, 10YR 7/4	--
			141	cut for post hole [filled by contexts 139 and 140]	--	
			142	compact silt [fill of context 146]	10YR 6/2	
			143	silty loam [fill of context 146]	10YR 3/4	
			144	mottled medium sand [fill of context 146]	10YR 5/6, 10YR 7/4	
			145	silty loam [fill of context 146]	10YR 3/4	
			146	cut for square shaft feature [filled by contexts 142, 143, 144, 145]	--	

*** Discarded**

Appendix B

ARTIFACT INVENTORY

APPENDIX B
ARTIFACT INVENTORY

Borton/Ballinger Farm, All Site, Trench Monitoring, General Provenience Surface Collection **Catalog # 60**

Historic

Ceramic Vessels

1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, Staffordshire glazed both surfaces	Row #	18
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], indeterminate type body fragment, reverse slip with copper oxide decoration, exterior surface missing	Row #	17
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, white slip trailed with manganese mottled interior, piecrust rim	Row #	14
2	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate base fragment, interior white slip trailed	Row #	15
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, interior white slip trailed, piecrust rim, burned	Row #	16
1	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, flower pot body fragment, undecorated, wheel thrown	Row #	4
2	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, lead glazed with manganese mottling both surfaces	Row #	13
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware rim fragment, interior manganese glazed	Row #	8
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware base fragment, both surfaces manganese glazed	Row #	9
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed, molded design	Row #	10
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior dripped manganese glazed	Row #	12
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row #	11
1	Fired Clay - Ceramic, Earthenware, Redware, Indeterminate, indeterminate type fragment, gray mortar attached to surface	Row #	33
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, milk pan rim fragment, interior lead and manganese glazed	Row #	6
12	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, milk pan rim to body fragment, interior manganese glazed	Row #	5
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, mug/tankard handle and body fragment, both surfaces manganese glazed	Row #	7
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], flatware body fragment, undecorated	Row #	19
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], dish rim to base fragment, undecorated, Maker's Mark, partial black printed mark reads "HANCOCK" or "HARCOOK"	Row #	30
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], mug/tankard rim fragment, undecorated, porcelaneous	Row #	31
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Shell Edge (Blue) [1800-1840], hollow ware rim fragment, Shell Edge, blue, unscalloped impressed pattern, 1841 - 1857	Row #	24

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Hand Painted (Polychrome) [1795-1830], hollow ware body fragment, polychrome hand painted floral	Row #	20
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware base fragment, undecorated	Row #	21
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Shell Edge (Blue) [1800-1840], plate rim fragment, Shell Edge, blue, unscalloped impressed pattern, 1841 - 1857	Row #	23
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Hand Painted (Blue) [1780-1810], teacup rim fragment, underglaze blue sponge decoration exterior	Row #	22
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Indeterminate Decoration (Polychrome), hollow ware rim fragment, polychrome floral pattern	Row #	25
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Molded, hollow ware base fragment, molded design	Row #	26
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Molded, plate rim fragment, molded design, impressed pattern	Row #	27
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Transfer Printed (Red) [1829-1880], plate rim fragment, red transfer printed interior	Row #	29
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Transfer Printed (Green) [1829-1859], teacup rim fragment, green transfer printed interior	Row #	28
	Fauna		
5	Fauna, Bone - remains, cow, upper mandible fragment, includes one upper molar	Row #	1
1	Fauna, Bone - remains, mammal, indeterminate type fragment, butchered	Row #	2
1	Fauna, Shell - remains, clam fragment	Row #	3
	Glass Vessels		
1	Glass, Curved, lamp chimney body fragment, olive green	Row #	34
	Personal Items		
1	Fired Clay - Non-ceramic, White Clay, smoking pipe, stem fragment, D 4/64"	Row #	32

Total Artifacts in Context 0: 51

Total Artifacts in All Site General Provenience : 51

Borton/Ballinger Farm, Farm House, Trench Basement Fill, General Provenience **Catalog # 3**

Modern

Indeterminate Class

1	Composite, Plastic, indeterminate furnishing fragment, chair leg stopper	Row #	1

Tools/Hardware

1	Composite, Plastic, electrical socket fragment	Row #	2

Historic

Agriculture

1	Fired Clay - Non-ceramic, Earthenware, Redware, drainage fragment, undecorated	Row #	10

Building Materials

3	Fired Clay - Non-ceramic, Earthenware, Brick, structural fragment, burned and glazed	Row #	32
1	Glass, Flat, window fragment, light aqua	Row #	31

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Glass, Flat, window fragment, mirror surface	Row #	13
2	Glass, Flat, window fragment, greenish white enamel with geometric pattern	Row #	32
7	Glass, Flat, window fragment, aqua	Row #	40
1	Metal, Ferrous metal, nail whole, wire, corroded, L 3in	Row #	14
1	Stone, Quartz, architectural stone fragment, cut and polished, decorative trim or railing fragment	Row #	16
	Ceramic Vessels		
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], bowl base fragment, interior Staffordshire glazed	Row #	20
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, Staffordshire glazed both surfaces	Row #	21
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, interior Staffordshire glazed	Row #	18
1	Fired Clay - Ceramic, Earthenware, Delftware, [17th to early 18th century], hollow ware base fragment, bluish tint	Row #	22
4	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, white slip trailed and lead glazed marbling, green copper oxide decoration	Row #	19
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, white slip trailed	Row #	17
3	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware rim and body fragment, white slip trailed and lead glazed marbling, green copper oxide decoration and piecrust rim	Row #	16
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Lead Glazed, plate rim fragment, interior lead glazed, piecrust rim	Row #	14
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, white slip trailed and lead glazed marbling, piecrust rim	Row #	18
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, crock rim fragment, both surfaces manganese glazed, molded design, burned	Row #	10
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, flatware body fragment, interior lead and manganese glazed	Row #	15
3	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, interior lead and manganese glazed	Row #	6
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, interior lead glazed	Row #	13
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware handle fragment, mottled lead and manganese glazed	Row #	17
1	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, hollow ware base fragment, undecorated, interior surface missing	Row #	12
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware rim fragment, interior lead and manganese glazed	Row #	9
2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed, molded design	Row #	8
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware rim fragment, exterior lead and manganese glazed, surface missing	Row #	16

APPENDIX B (Cont.)
ARTIFACT INVENTORY

7	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, interior lead and manganese glazed, incised linear decoration on unglazed exterior, large storage crock/pot	Row #	5
2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior manganese glazed	Row #	12
2	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, interior lead glazed	Row #	15
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, interior lead and manganese glazed	Row #	1
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row #	2
1	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, hollow ware body fragment, undecorated	Row #	3
2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware base fragment, interior manganese glazed	Row #	11
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware base fragment, interior lead and manganese glazed	Row #	10
2	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware rim fragment, interior lead and manganese glazed	Row #	9
2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware rim fragment, interior manganese glazed	Row #	8
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, exterior manganese glazed	Row #	13
3	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row #	14
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, shelved jar shoulder fragment, both surfaces manganese glazed, molded design, burned	Row #	11
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, teapot base fragment, both surfaces manganese glazed	Row #	4
4	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, teapot body fragment, both surfaces manganese glazed	Row #	7
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, teapot base fragment, both surfaces mottled lead and manganese glazed	Row #	3
1	Fired Clay - Ceramic, Porcelain, Hard Paste, Undecorated, hollow ware base fragment, undecorated	Row #	23
2	Fired Clay - Ceramic, Porcelain, Hard Paste, Undecorated, ointment jar body fragment, undecorated	Row #	4
1	Fired Clay - Ceramic, Porcelain, Hard Paste, Transfer Printed (Polychrome) [late 19th to early 20th century], plate rim fragment, underglaze, floral pattern, blue and brown	Row #	20
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], cup rim fragment, undecorated	Row #	24
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate base fragment, undecorated	Row #	5
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Hand Painted (Blue) [1780-1810], hollow ware body fragment, blue hand painted, floral pattern	Row #	28
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware base fragment, undecorated	Row #	21
4	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], indeterminate type fragment, undecorated	Row #	26
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Molded (Scalloped), plate rim fragment, scalloped	Row #	25

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], plate base fragment, undecorated	Row # 6
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Transfer Printed (Blue) [1784-1867], saucer rim fragment, blue transfer printed floral	Row # 27
2	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], cup rim fragment, undecorated	Row # 7
5	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], hollow ware body fragment, undecorated	Row # 29
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Hand Painted (Polychrome) [1815-1830], hollow ware body fragment, polychrome sponged	Row # 30
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Transfer Printed (Black) [1815-1864], hollow ware body fragment, black transfer printed, scenic pattern	Row # 31
4	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Transfer Printed (Polychrome) [late 19th to early 20th century], hollow ware body fragment, polychrome transfer printed, floral pattern	Row # 8
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Transfer Printed (Black) [1815-1864], hollow ware body fragment, black transfer printed, scenic pattern	Row # 9
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Shell Edge (Blue) [1800-1840], plate rim fragment, Shell Edge, blue, even scallop, impressed wavy lines	Row # 22
1	Fired Clay - Ceramic, Stoneware, Gray Body, Albany Slip [early 19th to 20th century], hollow ware body fragment, Albany slip interior	Row # 23
1	Fired Clay - Ceramic, Stoneware, White salt-glazed, Undecorated [1685-1785], hollow ware lid fragment, orange peel surface	Row # 25
1	Fired Clay - Ceramic, Stoneware, White salt-glazed, Undecorated [1685-1785], hollow ware body fragment, undecorated	Row # 24
	Fauna	
2	Fauna, Bone - remains, large mammal, long bone fragment, pieces mend	Row # 7
1	Fauna, Bone - remains, mammal, indeterminate type fragment, butchered	Row # 6
4	Fauna, Shell - remains, clam fragment	Row # 1
1	Fauna, Shell - remains, clam fragment	Row # 5
1	Fauna, Shell - remains, oyster fragment	Row # 2
	Glass Vessels	
1	Glass, Curved, bottle base fragment, aqua, mold seam, embossed on base "REG IN US PATENT OFFICE" "SERIAL No. 57505"	Row # 33
1	Glass, Curved, bottle finish fragment, two-part finish, clear/uncolored, mold seam	Row # 29
6	Glass, Curved, bottle body fragment, clear/uncolored	Row # 11
1	Glass, Curved, bottle body fragment, purplish tint, solarized	Row # 35
1	Glass, Curved, bottle finish and neck fragment, one-part rounded finish, aqua	Row # 37
1	Glass, Curved, bottle finish and neck fragment, one-part cap seat, clear/uncolored, mold seam	Row # 38
1	Glass, Curved, lamp chimney body fragment, purplish tint, solarized	Row # 36
1	Glass, Curved, lamp chimney rim fragment, flowered lip, clear/uncolored	Row # 39

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Glass, Curved, mason jar lid whole, white, embossed "GENUINE PORCELAIN LINED MASON CAP"	Row #	28
1	Glass, Curved, ointment jar base fragment, milk glass, white	Row #	34
1	Glass, Curved, ointment jar base fragment, milk glass, white	Row #	27
1	Glass, Curved, tumbler base fragment, aqua, octagonal paneled body	Row #	30
1	Glass, Curved, wine bottle body fragment, dark olive	Row #	12
	Indeterminate Class		
1	Glass, Flat, indeterminate type fragment, dark olive green	Row #	41
1	Metal, Ferrous metal, indeterminate type lid, corroded and encrusted, semicircular	Row #	36
	Kitchen-Related		
1	Metal, Ferrous metal, stove part fragment, corroded and encrusted, section of probable cast iron stove, sampled from larger lot discarded in field	Row #	37
	Personal Items		
1	Fired Clay - Non-ceramic, White Clay, smoking pipe, stem fragment, D 5/64"	Row #	26
	Recreation/Activities		
1	Composite, Wax, candle fragment, white	Row #	3
1	Fired Clay - Ceramic, Porcelain, Industrial, bottle stopper whole, partially legible red and black label "WILLINSKI (sp?) RICHMOND ST PHILA"	Row #	19
	Tools/Hardware		
1	Composite, Ferrous Metal and Porcelain, electrical hardware fragment, ferrous bracket and ceramic insulators	Row #	4
1	Metal, Brass, lightswitch panel whole, corroded	Row #	33
1	Metal, Brass, wall hook fragment, corroded	Row #	34
1	Metal, Ferrous metal, garden hoe head fragment, corroded	Row #	15
1	Metal, Ferrous metal, mason's trowel fragment, corroded and encrusted, decaying wood handle partially intact	Row #	35

Total Artifacts in Suface Collection: 148

Borton/Ballinger Farm, Farm House, Trench 109, General Provenience Surface Collection **Catalog # 27**

Modern

Recreation/Activities

1	Metal, Aluminum alloy, dog bowl whole, corroded *	Row #	77

Historic

Agriculture

4	Fired Clay - Non-ceramic, Earthenware, Terra Cotta, drainage fragment *	Row #	80
	Building Materials		
4	Glass, Flat, window fragment, light aqua	Row #	6
2	Glass, Flat, window fragment, aqua	Row #	6
1	Metal, Ferrous metal, nail whole, cut, corroded and encrusted, L 2.5in	Row #	7
1	Stone, Marble, interior fabrication fragment, counter or shelf; one drill hole present	Row #	75

APPENDIX B (Cont.)
ARTIFACT INVENTORY

Ceramic Vessels

3	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, flower pot rim to base fragment, undecorated	Row #	74
1	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, flower pot fragment, undecorated	Row #	1
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware rim fragment, both surfaces manganese glazed	Row #	2
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware fragment, lead glazed with manganese mottling, interior surface missing	Row #	2
2	Fired Clay - Ceramic, Earthenware, Yellowware, Rockingham [1840-1890], pitcher body and handle fragment, Rockingham-type glaze, 1828 - 1930	Row #	69
1	Fired Clay - Ceramic, Porcelain, Hotel China, Transfer Printed (Polychrome) [late 19th to early 20th century], hollow ware base fragment, overglaze polychrome floral pattern	Row #	40
1	Fired Clay - Ceramic, Porcelain, Hotel China, Transfer Printed (Blue) [1784-1867], vase rim fragment, underglaze blue floral pattern, molded design	Row #	39
1	Fired Clay - Ceramic, Porcelain, Indeterminate Body, Transfer Printed (Blue) [1784-1867], shallow dish 20-30% complete, dark blue underglaze floral and geometric print	Row #	73
1	Fired Clay - Ceramic, Porcelain, Indeterminate Body, Transfer Printed (Polychrome) [late 19th to early 20th century], vase rim fragment, overglaze polychrome floral pattern, molded design, black residue attached to all surfaces	Row #	43
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Gilt Enameled [1850-1920], bowl rim fragment, gilded wreath border pattern	Row #	46
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], bowl rim and body fragment, slightly scalloped rim	Row #	59
2	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], bowl rim to body fragment, undecorated	Row #	55
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], decorative vessel rim and body fragment, undecorated	Row #	60
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], dish base fragment, undecorated, Maker's Mark, green print mark underglaze "CROOKSVILLE CHINA CO."	Row #	49
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], flatware base fragment, undecorated, Maker's Mark, green print maker's mark "M.T.& K. S----Y CHINA"	Row #	65
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware base fragment, undecorated, Maker's Mark, green print maker's mark on base "DERWOOD W.S. GEORGE 128"	Row #	68
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware rim fragment, molded design	Row #	42
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware rim to base fragment, molded design	Row #	63
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware rim to body fragment, undecorated	Row #	62
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], indeterminate type base fragment	Row #	57
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], mug/tankard base fragment, undecorated	Row #	53
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate rim to base fragment, undecorated	Row #	58

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Transfer Printed (Polychrome) [late 19th to early 20th century], plate rim fragment, overglaze polychrome floral pattern, gilded border	Row # 44
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], platter rim to base fragment, undecorated	Row # 56
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], platter rim to base fragment, undecorated, Maker's Mark, black print maker's mark on base with Lion and Unicorn crest, "LIDDLE ELLIOT & SON"	Row # 67
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], saucer rim to base fragment, undecorated, Maker's Mark, truncated illegible black print maker's mark	Row # 48
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], saucer 40-50% complete, undecorated, Maker's Mark, truncated illegible maker's mark on base	Row # 64
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Transfer Printed (Polychrome) [late 19th to early 20th century], shallow dish rim to base fragment, overglaze polychrome floral pattern, gilded border	Row # 45
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], shallow dish rim to base fragment, undecorated, Maker's Mark, truncated illegible black print maker's mark on base	Row # 66
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], shallow dish rim to base fragment, undecorated	Row # 54
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], teacup rim and body fragment, undecorated	Row # 51
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], teacup 30-40% complete, undecorated	Row # 50
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Transfer Printed (Polychrome) [late 19th to early 20th century], teacup 30-40% complete, underglaze polychrome geometric on rim and handle	Row # 47
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], teacup rim and hangle fragment, undecorated	Row # 52
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware fragment, undecorated	Row # 3
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Transfer Printed (Blue) [1784-1867], hollow ware body fragment, blue transfer printed floral pattern	Row # 3
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Shell Edge (Blue) [1800-1840], plate rim fragment, Shell Edge, blue, even scalloped with incised straight lines, 1809 - 1831	Row # 4
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], hollow ware fragment, undecorated	Row # 4
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Annular [19th century], shallow dish rim to base fragment, dipped/annular, light blue	Row # 41
1	Fired Clay - Ceramic, Stoneware, Gray Body, Bristol Slip [19th to 20th century], bottle body fragment, Bristol slip both surfaces	Row # 61
1	Fired Clay - Ceramic, Stoneware, Gray Body, Salt Glazed, Albany Slip [early 19th to 20th century], bottle body fragment, Albany slip interior, salt glaze exterior	Row # 72
6	Fired Clay - Ceramic, Stoneware, Gray Body, Bristol Slip, Albany Slip [19th to early 20th century], crock body and base fragment, Albany slip interior, Bristol slip exterior	Row # 70
1	Fired Clay - Ceramic, Stoneware, Gray Body, Albany Slip [early 19th to 20th century], lid fragment, Albany slip both surfaces	Row # 71

Clothing-Related

APPENDIX B (Cont.)
ARTIFACT INVENTORY

2	Composite, Leather, shoe fragment, corroded	Row #	7
1	Composite, Leather, shoe heel fragment, corroded	Row #	6
1	Metal, Copper alloy, button whole, embossed bald eagle with American shield, dome-shaped, one piece cast, corroded, possible military button of South Type 12, common throughout the 18th and 19 centuries (Hume 1970); also likely later reproduction of the style	Row #	20
	Energy		
2	Composite, Indeterminate Metal and Other Materials, battery part fragment, corroded *	Row #	1
1	Glass, Curved, insulator fragment, aqua	Row #	21
	Fauna		
2	Fauna, Bone - remains, mammal, indeterminate type fragment, butchered	Row #	10
1	Fauna, Bone - remains, mammal, indeterminate type fragment	Row #	8
4	Fauna, Bone - remains, mammal, indeterminate type fragment, butchered	Row #	9
1	Fauna, Shell - remains, clam fragment	Row #	11
2	Fauna, Shell - remains, clam fragment	Row #	1
1	Fauna, Shell - remains, conch fragment	Row #	13
3	Fauna, Shell - remains, oyster fragment	Row #	12
	Glass Vessels		
1	Composite, Indeterminate Metal and Milk Glass, mason jar lid whole, white, corroded	Row #	3
39	Glass, Curved, assorted vessel type fragment *	Row #	76
1	Glass, Curved, bottle finish to shoulder fragment, aqua, mold seam, one part stopper finish	Row #	32
1	Glass, Curved, bottle base fragment, dark amber, rectangular with round corners; embossed "[…]gh's", "[…] PATENT OFFICE", "BOTTLE MADE IN U.S.A."	Row #	27
1	Glass, Curved, bottle whole, clear/uncolored, mold seam, L 3.75in, D 1.65 in, threaded finish with corroded metal lid attached, square body with rounded corners, embossed on one inset panel face "W.T. RAWLEIGH Co. FREEPORT, ILL."	Row #	25
1	Glass, Curved, bottle body and base fragment, clear/uncolored, D 2.5 in, decagonal paneled body; embossed "[…]COLA DiCROCE 3424 N. 11TH ST. PHILADA"	Row #	36
1	Glass, Curved, bottle body fragment, clear/uncolored, mold seam, D 2.75 in, cylindrical body; embossed "F.J. CUTTER BURLINGTON N.J."	Row #	35
1	Glass, Curved, bottle base fragment, clear/uncolored, mold seam, D 2.75 in, nine-paneled cylindrical body; embossed "S[…]A] S. 11th ST PHILADA" "11 FLUID OZ THIS BOTTLE NOT TO BE SOLD"	Row #	33
1	Glass, Curved, bottle finish to shoulder fragment, aqua, mold seam, two part crown stopper finish	Row #	31
1	Glass, Curved, bottle finish to shoulder fragment, aqua, mold seam, one part crown stopper finish	Row #	30
1	Glass, Curved, bottle base fragment, aqua, D 2.5 in, cylindrical body; embossed "[…] 'S SONS […]09 SOUTH 11th ST PHILA..PA. REGISTERED"	Row #	29
1	Glass, Curved, bottle body fragment, clear/uncolored, paneled; embossed "[..] W. GOR 6th [..]ITZWATER ST. PHILADA"	Row #	34
1	Glass, Curved, indeterminate curved type body fragment, clear/uncolored, possible lamp chimney base fragment	Row #	38

1	Glass, Curved, indeterminate curved type fragment, clear/uncolored	Row #	5
1	Glass, Curved, jar finish fragment, aqua, threaded finish	Row #	28
1	Glass, Curved, lamp chimney finish fragment, narrow fluted edge decoration, clear/uncolored	Row #	26
1	Glass, Curved, mason jar lid whole, white, embossed "BOYD'S GENUINE PORCELAIN LINED LID" and "4" on reverse	Row #	22
1	Glass, Curved, pharmaceutical bottle whole, amber, mold seam, L 4.75in, D 2 in, threaded finish	Row #	24
1	Glass, Curved, pharmaceutical bottle whole, light aqua, mold seam, L 4.75in, D 1.25 in, one part stopper finish; embossed "GENUINE GARMINATIVE"	Row #	23
1	Glass, Curved, shot glass 80-90% complete, clear/uncolored, mold seam, L 3.5in, D 1.8 in, embossed on base "5 1/2 F"	Row #	37
	Indeterminate Class		
1	Metal, Ferrous metal, indeterminate cap fragment, corroded, possible button face	Row #	19
1	Metal, Ferrous metal, indeterminate strap fragment, corroded and encrusted *	Row #	78
1	Metal, Ferrous metal, indeterminate type fragment, corroded and encrusted, horse stirrup or machine pedal	Row #	16
	Kitchen-Related		
1	Composite, Bone and Metal, utensil handle fragment, carved decoration, corroded	Row #	5
1	Composite, Ferrous Metal and Porcelain, stove part handle fragment, corroded, door fragment with porcelain knob	Row #	4
	Personal Items		
1	Glass, Curved, bead whole, blue, one hole threaded	Row #	5
	Recreation/Activities		
1	Composite, Porcelain and Ferrous Metal, bottle stopper whole, corroded, black and red enameled label "RISING SUN BREWING COMPANY" "E.M."	Row #	2
1	Metal, Ferrous metal, ice skate blade fragment, corroded and encrusted, L 9in	Row #	15
	Tools/Hardware		
1	Metal, Ferrous metal, indeterminate garden tool head fragment, corroded and encrusted, L 12.5in, W 7in, shovel or post-hole digger	Row #	14
4	Metal, Ferrous metal, indeterminate hardware fragment, corroded and encrusted *	Row #	79
2	Metal, Ferrous metal, spike whole, corroded and encrusted, L 6in	Row #	18
1	Metal, Ferrous metal, stake whole, corroded and encrusted, L 9.75in, hooped top	Row #	17

Total Artifacts in Context 0: 160

Total Artifacts in Farm House General Provenience : 308

Borton/Ballinger Farm, Farm House, Surface Collection 101, Surface Collection **Catalog # 19**

Historic

Arms & Armor

1	Composite, Brass, shotgun shell fragment, "REMINGTON UMC NO 12 NITROCLUB", 1911 - 1915	Row #	3

Building Materials

4	Glass, Flat, window fragment, aqua	Row #	42

APPENDIX B (Cont.)
ARTIFACT INVENTORY

	Ceramic Vessels		
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware rim fragment, both surfaces manganese glazed	Row #	4
1	Fired Clay - Ceramic, Earthenware, Terra Cotta, flower pot base fragment	Row #	5
1	Fired Clay - Ceramic, Porcelain, Indeterminate Body, Transfer Printed (Polychrome) [late 19th to early 20th century], bowl rim fragment, exterior overglaze floral, floral pattern, green and pink	Row #	13
1	Fired Clay - Ceramic, Porcelain, Indeterminate Body, Transfer Printed (Blue) [1784-1867], teacup rim fragment, exterior transfer printed decoration, blue	Row #	14
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware rim fragment, undecorated	Row #	11
2	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], mug/tankard rim to base fragment, undecorated	Row #	6
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], mug/tankard handle fragment, undecorated	Row #	7
2	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate rim fragment, undecorated	Row #	9
3	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate rim to footring fragment, undecorated	Row #	10
6	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate body fragment, undecorated	Row #	8
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], teapot spout fragment, undecorated	Row #	12
1	Fired Clay - Ceramic, Stoneware, Gray Body, Satl Glazed, Albany Slip [early 19th to 20th century], hollow ware body fragment, salt glazed, interior Albany slip	Row #	15
1	Fired Clay - Ceramic, Stoneware, Gray Body, Satl Glazed, Albany Slip [early 19th to 20th century], jug rim and body fragment, salt glazed, interior Albany slip	Row #	16
	Clothing-Related		
8	Composite, Leather, shoe fragment	Row #	1
	Glass Vessels		
6	Glass, Curved, bottle body fragment, aqua	Row #	29
1	Glass, Curved, bottle base fragment, light aqua	Row #	40
1	Glass, Curved, bottle base fragment, light aqua	Row #	39
1	Glass, Curved, bottle base fragment, faceted, clear/uncolored	Row #	32
1	Glass, Curved, bottle base fragment, light aqua	Row #	38
2	Glass, Curved, bottle body fragment, embossed, light blue, "NS NT"	Row #	30
1	Glass, Curved, bottle base fragment, violet, solarized	Row #	41
1	Glass, Curved, bottle base fragment, faceted, clear/uncolored	Row #	34
1	Glass, Curved, bottle base fragment, clear/uncolored	Row #	35
1	Glass, Curved, bottle base fragment, clear/uncolored	Row #	36
1	Glass, Curved, bottle base fragment, clear/uncolored	Row #	37

1	Glass, Curved, bottle base fragment, faceted, clear/uncolored	Row #	31
9	Glass, Curved, bottle body fragment, clear/uncolored	Row #	23
1	Glass, Curved, bottle finish to shoulder fragment, brown	Row #	17
1	Glass, Curved, bottle finish fragment, clear/uncolored	Row #	19
1	Glass, Curved, bottle finish fragment, clear/uncolored	Row #	20
1	Glass, Curved, bottle finish to shoulder fragment, clear/uncolored	Row #	21
3	Glass, Curved, bottle body fragment, light aqua	Row #	28
1	Glass, Curved, bottle body fragment, embossed, light aqua, "ARRANTEED FLASK"	Row #	27
1	Glass, Curved, jar base fragment, clear/uncolored	Row #	33
1	Glass, Curved, jug finish fragment with handle, clear/uncolored	Row #	18
1	Glass, Curved, stemware rim fragment, pressed hexagonal design, clear/uncolored	Row #	24
1	Glass, Curved, stemware rim fragment, pressed bubble design, clear/uncolored	Row #	26
1	Glass, Curved, stemware body fragment, pressed hexagonal design, clear/uncolored	Row #	25
1	Glass, Curved, tumbler rim fragment, rouletted along rim, clear/uncolored	Row #	22
	Kitchen-Related		
1	Metal, Ferrous metal, stove part fragment, corroded, stove top burner element	Row #	45
	Recreation/Activities		
1	Composite, Porcelain and Ferrous Metal, bottle stopper fragment, "R. D'ABRUZZO 10TH. & BAINBRIDGE STS. PHILA. PA."	Row #	2
1	Metal, Ferrous metal, lid fragment, corroded	Row #	44
	Tools/Hardware		
1	Metal, Ferrous metal, handle fragment, corroded	Row #	43

Total Artifacts in Context 0: 80

Total Artifacts in Farm House Surface Collection 101 : 80

Borton/Ballinger Farm, Farm House, Trench Excavation Unit, General Provenience 103, Surface Collection **Catalog # 31**

Historic

Ceramic Vessels

2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware fragment, manganese glazed, exterior surface missing	Row #	2
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, milk pan base fragment, interior lead and manganese glazed	Row #	1
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Hand Painted (Blue) [1780-1810], hollow ware fragment, blue handpainted floral exterior	Row #	4
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], hollow ware fragment, undecorated	Row #	5

Glass Vessels

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Glass, Curved, bottle fragment, amber	Row #	6

Tools/Hardware

1	Fired Clay - Ceramic, Porcelain, Industrial, Undecorated, indeterminate type fragment, undecorated	Row #	3

Total Artifacts in Context 0: 7

Total Artifacts in Farm House General Provenience 103 : 7

Borton/Ballinger Farm, Farm House, Trench Excavation Unit, General Provenience 107, Surface Collection **Catalog # 42**

Historic

Agriculture

1	Fired Clay - Non-ceramic, Earthenware, Terra Cotta, drainage fragment	Row #	20

Building Materials

1	Fired Clay - Non-ceramic, Earthenware, Brick, structural fragment, glazed	Row #	21
2	Glass, Flat, window fragment, light aqua	Row #	27
2	Glass, Flat, window fragment, clear/uncolored	Row #	26
1	Metal, Ferrous metal, nail whole, wire, corroded	Row #	28

Ceramic Vessels

1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware rim fragment, both surfaces Staffordshire glazed	Row #	3
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed, lead glazed, burned	Row #	5
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed, lead glazed	Row #	4
2	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], hollow ware body fragment, interior white slip trailed, copper oxide glazed	Row #	6
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, interior white slip trailed, piecrust rim	Row #	7
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior manganese glazed	Row #	14
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row #	9
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware rim fragment, both surfaces manganese glazed	Row #	13
2	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, both surfaces lead and manganese glazed, molded design	Row #	10
2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior surface manganese glazed	Row #	11
2	Fired Clay - Ceramic, Earthenware, Redware, Indeterminate, hollow ware body fragment, both surfaces missing	Row #	12
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, milk pan base fragment, interior mottled lead and manganese glazed	Row #	8

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware body fragment, undecorated, surface missing	Row #	16
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated, surface missing	Row #	18
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Indeterminate Decoration (Red), plate rim fragment, interior red stripe	Row #	17
1	Fired Clay - Ceramic, Stoneware, Tan Body, Manganese Glazed, hollow ware base fragment, both surfaces dark brown glaze	Row #	19
	Fauna		
1	Fauna, Shell - remains, clam whole	Row #	1
1	Fauna, Shell - remains, oyster fragment	Row #	2
	Glass Vessels		
1	Glass, Curved, bottle body fragment, light aqua	Row #	24
1	Glass, Curved, bottle base fragment, olive green	Row #	22
1	Glass, Curved, bottle body fragment, clear/uncolored	Row #	25
1	Glass, Curved, canning lid fragment, milk glass, white	Row #	23
	Recreation/Activities		
1	Fired Clay - Ceramic, Porcelain, Industrial, bottle stopper whole, "…ESPOSITO 912 WASHINGTON AVE PHILA."	Row #	15
	Tools/Hardware		
2	Metal, Ferrous metal, wire fragment, corroded	Row #	29

Total Artifacts in Context 0: 36

Total Artifacts in Farm House General Provenience 107 : 36

Borton/Ballinger Farm, Farm House, Open Area Context 95 **Catalog # 4**

Historic

Ceramic Vessels

25	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware rim to base fragment, interior lead and manganese glazed, incised linear decoration on unglazed exterior, 14.5" diameter, 6" deep; two lug handles; large storage crock/pot (intentionally installed into the floor of the SE basement chamber)	Row #	1

Total Artifacts in Context 95: 25

Total Artifacts in Farm House Open Area : 25

Borton/Ballinger Farm, Farm House, Transect 101, Shovel Test 1001, Context 11 **Catalog # 5**

Historic

Building Materials

1	Glass, Flat, window fragment, aqua	Row #	6
	Ceramic Vessels		
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row #	1

1	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, hollow ware body fragment, undecorated, interior surface missing	Row #	2
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, undecorated, surface missing	Row #	3

Glass Vessels

1	Glass, Curved, bottle body fragment, molded, clear/uncolored	Row #	5
1	Glass, Curved, bottle body fragment, clear/uncolored	Row #	4

Total Artifacts in Context 11: 6

Total Artifacts in Farm House Shovel Test 1001 : 6

Borton/Ballinger Farm, Farm House, Transect 101, Shovel Test 1002, Context 4 **Catalog # 6**

Historic

Glass Vessels

1	Glass, Curved, ointment jar base fragment, milk glass, white	Row #	1

Total Artifacts in Context 4: 1

Total Artifacts in Farm House Shovel Test 1002 : 1

Borton/Ballinger Farm, Farm House, Transect 101, Shovel Test 1004, Context 1 **Catalog # 7**

Historic

Ceramic Vessels

1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated, surface missing	Row #	1

Total Artifacts in Context 1: 1

Total Artifacts in Farm House Shovel Test 1004 : 1

Borton/Ballinger Farm, Farm House, Transect 101, Shovel Test 1005, Context 1 **Catalog # 8**

Historic

Building Materials

1	Glass, Flat, window fragment, light aqua	Row #	17
1	Metal, Ferrous metal, nail whole, wire, corroded	Row #	19
2	Metal, Ferrous metal, nail fragment, cut/wrought, corroded	Row #	18
1	Metal, Ferrous metal, nail whole, wire, corroded	Row #	20

Ceramic Vessels

1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Slip Trailed, hollow ware body fragment, interior slip trailed	Row #	4
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, both surfaces lead glazed	Row #	3
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware handle fragment, both surfaces manganese glazed, burned	Row #	5
1	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, hollow ware body fragment, undecorated, surface missing	Row #	1

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware rim fragment, both surfaces lead glazed	Row #	2
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], plate body fragment, undecorated, surface missing	Row #	9
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], plate rim fragment, Royal rim	Row #	7
4	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], plate base fragment, undecorated	Row #	6
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], plate rim fragment, undecorated	Row #	8
2	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Transfer Printed (Blue) [1784-1867], hollow ware handle fragment, blue floral transfer printed design	Row #	10
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated, surface missing	Row #	13
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Indeterminate Decoration (Blue), hollow ware body fragment, interior blue decoration	Row #	14
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], plate base fragment, undecorated	Row #	11
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Annular [19th century], plate rim fragment, brown stripe on rim, polychrome decoration	Row #	12
1	Fired Clay - Ceramic, Stoneware, Gray Body, Salt Glazed, handle fragment, salt glazed	Row #	15
	Clothing-Related		
1	Metal, Ferrous metal, buckle fragment, corroded	Row #	21
	Glass Vessels		
2	Glass, Curved, bottle body fragment, olive green, patination	Row #	16

Total Artifacts in Context 1: 27

Borton/Ballinger Farm, Farm House, Transect 101, Shovel Test 1005, Context 13 **Catalog # 9**

Historic

Building Materials

1	Metal, Ferrous metal, nail fragment, cut/wrought, corroded	Row #	1
1	Metal, Ferrous metal, roofing nail whole, wire, corroded	Row #	2

Total Artifacts in Context 13: 2

Borton/Ballinger Farm, Farm House, Transect 101, Shovel Test 1005, Context 20 **Catalog # 10**

Historic

Ceramic Vessels

1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, undecorated	Row #	1
	Glass Vessels		
5	Glass, Curved, lamp chimney body fragment, clear/uncolored	Row #	2

Total Artifacts in Context 20: 6

Total Artifacts in Farm House Shovel Test 1005 : 35

APPENDIX B (Cont.)
ARTIFACT INVENTORY

Borton/Ballinger Farm, Farm House, Transect 106, Shovel Test 1012, Context 5 **Catalog # 11**

Historic

Building Materials

4	Glass, Flat, window fragment, aqua	Row #	16

Ceramic Vessels

1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Slip Trailed, hollow ware rim fragment, interior slip trails, exterior surface missing	Row #	6
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed, molded design	Row #	3
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, interior surface lead glazed	Row #	2
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware rim fragment, exterior surface lead glazed, interior surface missing	Row #	5
2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, exterior surface manganese glazed	Row #	7
4	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row #	1
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row #	4
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Annular [19th century], hollow ware body fragment, brown wash on exterior surface	Row #	9
2	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated, interior surface missing	Row #	10
1	Fired Clay - Ceramic, Refined Earthenware, Redware, Jackfield-type [19th century], hollow ware rim fragment, Jackfield-type glaze	Row #	8

Glass Vessels

1	Glass, Curved, bottle body fragment, light aqua	Row #	12
1	Glass, Curved, bottle body fragment, aqua	Row #	15
1	Glass, Curved, lamp chimney body fragment, clear/uncolored	Row #	13
1	Glass, Curved, lamp chimney rim fragment, clear/uncolored	Row #	14

Personal Items

1	Fired Clay - Non-ceramic, White Clay, smoking pipe, stem fragment, D 5/64"	Row #	11

Total Artifacts in Context 5: 24

Borton/Ballinger Farm, Farm House, Transect 106, Shovel Test 1012, Context 62 **Catalog # 12**

Historic

Ceramic Vessels

1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior manganese glazed	Row #	1

Total Artifacts in Context 62: 1

Total Artifacts in Farm House Shovel Test 1012 : 25

APPENDIX B (Cont.)
ARTIFACT INVENTORY

Borton/Ballinger Farm, Farm House, Transect 106, Shovel Test 1013, Context 62 **Catalog # 13**

Historic

Building Materials

8	Glass, Flat, window fragment, light aqua	Row #	10
2	Glass, Flat, window fragment, clear/uncolored	Row #	9
1	Metal, Ferrous metal, nail whole, wire	Row #	13
1	Metal, Ferrous metal, nail fragment, cut/wrought	Row #	12
1	Metal, Ferrous metal, nail fragment, wire	Row #	11
1	Metal, Ferrous metal, roofing nail whole, wire	Row #	14

Ceramic Vessels

2	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, exterior manganese glazed, interior mottled	Row #	4
2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row #	2
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, exterior surface lead glazed, molded design	Row #	3
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Transfer Printed (Blue) [1784-1867], teacup rim fragment, both surfaces blue transfer printed floral design	Row #	5
1	Fired Clay - Ceramic, Stoneware, White salt-glazed, Scratch Blue [1745-1780], hollow ware body fragment, orange peel interior, incised cobalt blue decoration	Row #	6

Fauna

8	Fauna, Bone - remains, large mammal, indeterminate type fragment	Row #	1

Glass Vessels

2	Glass, Curved, bottle body fragment, molded design, aqua	Row #	7
1	Glass, Curved, bottle base fragment, olive green, patination	Row #	8

Total Artifacts in Context 62: 32

Total Artifacts in Farm House Shovel Test 1013 : 32

Borton/Ballinger Farm, Farm House, Transect 106, Shovel Test 1014, Context 62 **Catalog # 14**

Historic

Ceramic Vessels

1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, interior lead glazed, exterior surface missing	Row #	1
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Transfer Printed (Blue) [1784-1867], bowl rim fragment, interior blue transfer printed floral decoration	Row #	2
2	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Transfer Printed (Pink) [1829-1880], hollow ware body fragment, exterior pink overglaze floral decoration, interior surface missing	Row #	5
4	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], hollow ware body fragment, undecorated, surface missing	Row #	4

2 Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], hollow ware rim fragment, undecorated — Row # 3

Total Artifacts in Context 62: 10

Total Artifacts in Farm House Shovel Test 1014 : 10

Borton/Ballinger Farm, Farm House, Shovel Test 1015, Context 11 — **Catalog # 15**

Historic

Building Materials

5 Glass, Flat, window fragment, aqua — Row # 6

Ceramic Vessels

1 Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganses glazed — Row # 2

1 Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, undecorated — Row # 3

1 Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, undecorated, surface missing — Row # 4

1 Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated, interior surface missing — Row # 5

Fauna

1 Fauna, Shell - remains, oyster fragment — Row # 1

Total Artifacts in Context 11: 10

Borton/Ballinger Farm, Farm House, Shovel Test 1015, Context 55 — **Catalog # 16**

Historic

Ceramic Vessels

1 Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed, molded design — Row # 3

3 Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, both surfaces lead glazed — Row # 1

1 Fired Clay - Ceramic, Earthenware, Redware, Engine-Turned [late 18th to late 19th century], hollow ware body fragment, both surfaces lead glazed, engine-turned — Row # 2

1 Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, undecorated — Row # 4

1 Fired Clay - Ceramic, Refined Earthenware, Pearlware, Transfer Printed (Blue) [1784-1867], hollow ware body fragment, exterior transfer printed decoration — Row # 5

Glass Vessels

1 Glass, Curved, bottle body fragment, clear/uncolored — Row # 7

1 Glass, Curved, bottle body fragment, olive green — Row # 6

Total Artifacts in Context 55: 9

Total Artifacts in Farm House Shovel Test 1015 : 19

APPENDIX B (Cont.)
ARTIFACT INVENTORY

Borton/Ballinger Farm, Farm House, Shovel Test 1016, Context 11 **Catalog # 17**

Historic

Agriculture

1	Fired Clay - Non-ceramic, Earthenware, Terra Cotta, drainage fragment	Row #	12

Building Materials

1	Glass, Flat, window fragment, clear/uncolored	Row #	10
1	Glass, Flat, window fragment, light aqua	Row #	9
1	Metal, Ferrous metal, nail fragment, cut/wrought	Row #	11

Ceramic Vessels

1	Fired Clay - Ceramic, Porcelain, Indeterminate Body, Undecorated, cup rim and body fragment, undecorated	Row #	2
4	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, undecorated, surface missing	Row #	3
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated	Row #	5
2	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Annular [19th century], plate rim fragment, blue and brown striped rim	Row #	4
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], plate rim fragment, undecorated	Row #	6

Fauna

3	Fauna, Shell - remains, clam fragment	Row #	1

Glass Vessels

1	Glass, Curved, bottle body fragment, light violet, solarized	Row #	8
1	Glass, Curved, bottle body fragment, clear/uncolored	Row #	7

Total Artifacts in Context 11: 18

Total Artifacts in Farm House Shovel Test 1016 : 18

Borton/Ballinger Farm, Farm House, Shovel Test 1017, Context 11 **Catalog # 18**

Historic

Ceramic Vessels

1	Fired Clay - Ceramic, Earthenware, Redware, Indeterminate, hollow ware body fragment, interior surface missing	Row #	2
1	Fired Clay - Ceramic, Earthenware, Redware, Indeterminate, hollow ware body fragment, both surfaces missing	Row #	1
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Indeterminate Decoration (Blue), hollow ware body fragment, interior blue decoration	Row #	4

Recreation/Activities

1	Fired Clay - Non-ceramic, Porcelain, Marked, bottle stopper whole, "GIUSEPPE TAVANI 313 SIMPSON ST PHILADA."	Row #	3

Tools/Hardware

1	Composite, Rubber, gasket whole, black	Row #	5

Total Artifacts in Context 11: 5

APPENDIX B (Cont.)
ARTIFACT INVENTORY

Total Artifacts in Farm House Shovel Test 1017 : 5

Borton/Ballinger Farm, Farm House, Trench 109, Backfilled Old Unit General Provenience Surface Collection **Catalog # 30**

Modern

Indeterminate Class

1 Composite, Plastic, indeterminate type fragment, clear/uncolored — Row # 10

Historic

Building Materials

1 Metal, Ferrous metal, nail fragment, cut/wrought, corroded — Row # 9

1 Metal, Ferrous metal, nail whole, cut/wrought, corroded — Row # 8

Ceramic Vessels

2 Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], bowl rim to base fragment, undecorated — Row # 3

1 Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], shallow dish rim fragment, undecorated — Row # 4

Clothing-Related

1 Composite, Leather, shoe fragment — Row # 2

Glass Vessels

1 Composite, Glass and Ferrous Metal, bottle finish and stopper fragment, clear/uncolored, corroded — Row # 1

3 Glass, Curved, bottle body fragment, clear/uncolored — Row # 5

1 Glass, Curved, bottle body fragment, olive green — Row # 7

1 Glass, Curved, bottle body fragment, embossed, clear/uncolored, "…occo Di…Philada Registered" — Row # 6

Total Artifacts in Context 0: 13

Total Artifacts in Farm House Backfilled Old Unit General Provenience : 13

Borton/Ballinger Farm, Farm House, Excavation Unit 101, Context 1 **Catalog # 20**

Modern

Tools/Hardware

1 Composite, Ferrous Metal and Porcelain, sparkplug fragment — Row # 1

Historic

Agriculture

1 Fired Clay - Ceramic, Stoneware, Indeterminate Body, sewer pipe fragment * — Row # 38

1 Metal, Ferrous metal, pipe elbow fragment, corroded and encrusted, possible stove part — Row # 75

Arms & Armor

1 Metal, Brass, shotgun shell fragment, corroded — Row # 67

Building Materials

12 Glass, Flat, window fragment, aqua — Row # 39

87 Glass, Flat, window fragment, mixed * — Row # 40

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Metal, Ferrous metal, nail fragment, wire, corroded and encrusted	Row #	70
6	Metal, Ferrous metal, nail fragment, cut, corroded and encrusted	Row #	69
2	Metal, Ferrous metal, nail fragment, corroded and encrusted	Row #	68
	Ceramic Vessels		
1	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, flower pot rim fragment, undecorated	Row #	7
1	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, flower pot body fragment, undecorated	Row #	8
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware handle fragment, both surfaces manganese glazed	Row #	9
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware base fragment, interior lead and manganese glazed	Row #	11
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware rim fragment, both surfaces manganese glazed	Row #	10
1	Fired Clay - Ceramic, Porcelain, Hard Paste, Undecorated, hollow ware handle fragment, undecorated	Row #	32
2	Fired Clay - Ceramic, Porcelain, Hard Paste, Undecorated, hollow ware body fragment, undecorated	Row #	31
1	Fired Clay - Ceramic, Porcelain, Hard Paste, Molded (Scalloped), hollow ware rim fragment, scalloped	Row #	33
1	Fired Clay - Ceramic, Porcelain, Hard Paste, Undecorated, teacup base fragment, undecorated	Row #	36
1	Fired Clay - Ceramic, Porcelain, Hard Paste, Transfer Printed (Polychrome) [late 19th to early 20th century], teacup base fragment, overglaze enameled, floral pattern, polychrome	Row #	35
1	Fired Clay - Ceramic, Porcelain, Hard Paste, Transfer Printed (Polychrome) [late 19th to early 20th century], teacup rim fragment, overglaze enameled, floral pattern, polychrome	Row #	34
2	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], cup base fragment, molded design	Row #	14
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], dish rim to base fragment, undecorated	Row #	26
38	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware body fragment, undecorated	Row #	23
46	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware rim to base fragment, undecorated, burned	Row #	22
5	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware rim fragment, molded design	Row #	19
5	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Gilt Enameled [1850-1920], hollow ware rim fragment, gilded floral pattern	Row #	18
4	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Transfer Printed (Black) [1840-1864], hollow ware body fragment, black transfer printed	Row #	16
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware foot fragment, undecorated, worn	Row #	24
7	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], mug/tankard rim fragment, undecorated	Row #	20
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate base fragment, undecorated, Maker's Mark, partially legible green mark "POTTERY"	Row #	30

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate base fragment, undecorated, Maker's Mark, partially legible green mark with anchor symbol	Row #	28
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate base fragment, undecorated, Maker's Mark, partially legible green mark "GHOR POT"	Row #	27
9	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate rim fragment, undecorated	Row #	21
10	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Gilt Enameled [1850-1920], plate rim fragment, gilded linear border	Row #	17
4	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Transfer Printed (Polychrome) [late 19th to early 20th century], plate rim to base fragment, overglaze polychrome transfer printed, floral pattern	Row #	15
15	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate base fragment, undecorated	Row #	13
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate base fragment, undecorated, Maker's Mark, partially legible green mark "H"	Row #	29
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], teacup rim to base fragment, undecorated	Row #	25
4	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], teacup base fragment,	Row #	12
1	Fired Clay - Ceramic, Stoneware, Gray Body, Satl Glazed, Albany Slip [early 19th to 20th century], hollow ware rim fragment, salt glaze exterior, light brown slip interior	Row #	37
	Clothing-Related		
5	Composite, Leather, shoe fragment	Row #	2
1	Metal, Ferrous metal, buckle fragment, corroded and encrusted	Row #	74
	Energy		
1	Mineral, Charcoal, briquette whole	Row #	77
	Fauna		
4	Fauna, Bone - remains, mammal, indeterminate type fragment	Row #	4
1	Fauna, Bone - remains, mammal, rib fragment, butchered	Row #	3
4	Fauna, Shell - remains, clam fragment	Row #	5
1	Fauna, Shell - remains, oyster fragment	Row #	6
	Glass Vessels		
465	Glass, Curved, assorted vessel type fragment, mixed *	Row #	43
1	Glass, Curved, bottle base fragment, purplish tint, solarized	Row #	58
1	Glass, Curved, bottle finish fragment, clear/uncolored, threaded	Row #	61
1	Glass, Curved, bottle finish fragment, one-part finish, clear/uncolored	Row #	66
1	Glass, Curved, bottle finish fragment, down-tooled finish, clear/uncolored	Row #	65
1	Glass, Curved, bottle finish fragment, two-part finish, clear/uncolored	Row #	64
1	Glass, Curved, bottle finish fragment, crown finish, aqua	Row #	63
1	Glass, Curved, bottle body fragment, aqua, mold seam	Row #	47

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Glass, Curved, bottle base fragment, clear/uncolored, D 2.5", "REGISTERED" embossed on round base	Row #	53
1	Glass, Curved, bottle body fragment, green, mold seam	Row #	49
1	Glass, Curved, bottle finish fragment, one-part finish, clear/uncolored	Row #	62
1	Glass, Curved, bottle base fragment, aqua, D 2", square base	Row #	54
1	Glass, Curved, bottle base fragment, light green, mold seam, round base	Row #	56
1	Glass, Curved, bottle body fragment, clear/uncolored, partially legible embossed label "FLAS[K] [O]UNCES"	Row #	48
1	Glass, Curved, bottle body fragment, clear/uncolored, partially legible embossed label "& ARCH [STREET] PHIA PA"	Row #	46
1	Glass, Curved, bottle base fragment, clear/uncolored, hexagonal base with "76" embossed on it	Row #	57
1	Glass, Curved, bottle base fragment, clear/uncolored, ovoid base	Row #	55
1	Glass, Curved, jar rim fragment, clear/uncolored	Row #	59
1	Glass, Curved, lamp chimney body fragment, clear/uncolored	Row #	44
1	Glass, Curved, lamp chimney shoulder fragment, clear/uncolored	Row #	60
9	Glass, Curved, mason jar lid fragment, white *	Row #	42
1	Glass, Curved, mason jar lid whole, white	Row #	41
1	Glass, Curved, storage vessel body fragment, molded design, purplish tint, solarized	Row #	45
1	Glass, Curved, storage vessel body fragment, etched, clear/uncolored	Row #	50
1	Glass, Curved, storage vessel body fragment, light blue	Row #	51
1	Glass, Curved, tube body fragment, aqua	Row #	52
	Kitchen-Related		
1	Metal, Ferrous metal, fork fragment, wrought, corroded and encrusted, tonged	Row #	76
	Tools/Hardware		
1	Metal, Ferrous metal, decorative hardware fragment, corroded and encrusted	Row #	72
1	Metal, Ferrous metal, grommet fragment, corroded and encrusted	Row #	73
1	Metal, Ferrous metal, turnkey whole, threaded, corroded and encrusted	Row #	71

Total Artifacts in Context 1: 800

Borton/Ballinger Farm, Farm House, Excavation Unit 101, Context 11 **Catalog # 21**

Modern

Recreation/Activities

1	Composite, Plastic, wine bottle seal fragment	Row #	23

Historic

Arms & Armor

1	Stone, Flint, gunflint whole, brown, probable French gunflint	Row #	22

Building Materials

3	Glass, Flat, window fragment, clear/uncolored	Row #	18

22	Glass, Flat, window fragment, light aqua	Row #	17
1	Metal, Ferrous metal, nail fragment, corroded	Row #	21
	Ceramic Vessels		
3	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, interior lead glazed, exterior surface missing	Row #	1
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], dish footring fragment, undecorated, interior surface missing	Row #	2
2	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware body fragment, undecorated	Row #	5
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], mug/tankard rim fragment, undecorated	Row #	3
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate base fragment, undecorated	Row #	4
3	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated, surface missing	Row #	6
3	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], hollow ware body fragment, undecorated, surface missing	Row #	7
	Glass Vessels		
5	Glass, Curved, bottle base fragment, aqua	Row #	12
2	Glass, Curved, bottle body fragment, brown	Row #	15
1	Glass, Curved, bottle finish and neck fragment, blue	Row #	14
11	Glass, Curved, bottle body fragment, aqua	Row #	13
1	Glass, Curved, bottle body fragment, molded design, red	Row #	16
19	Glass, Curved, bottle body fragment, clear/uncolored	Row #	10
1	Glass, Curved, bottle finish fragment, clear/uncolored	Row #	9
2	Glass, Curved, canning lid fragment, milk glass, white	Row #	11
5	Glass, Curved, lamp chimney body fragment, clear/uncolored	Row #	8
	Indeterminate Class		
1	Metal, Ferrous metal, indeterminate type fragment, corroded	Row #	20
	Tools/Hardware		
1	Metal, Ferrous metal, spike whole, cut/wrought, corroded	Row #	19
	Total Artifacts in Context 11: 91		

Borton/Ballinger Farm, Farm House, Excavation Unit 101, Context 44 **Catalog # 22**

Historic

	Building Materials		
3	Fired Clay - Non-ceramic, Earthenware, Brick, structural fragment	Row #	10
2	Glass, Flat, window fragment, clear/uncolored	Row #	17
6	Glass, Flat, window fragment, light aqua	Row #	16

1	Metal, Ferrous metal, nail fragment, cut/wrought, corroded	Row #	19
1	Metal, Ferrous metal, nail whole, wire, corroded	Row #	20
11	Metal, Ferrous metal, nail fragment, corroded	Row #	21
	Ceramic Vessels		
3	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior surface manganese glazed	Row #	2
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, both surfaces lead glazed	Row #	1
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, undecorated	Row #	3
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate rim fragment, molded design	Row #	4
2	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate body fragment, undecorated	Row #	5
5	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated, surface missing	Row #	6
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Hand Painted (Blue) [1780-1810], hollow ware body fragment, exterior blue hand painted decoration	Row #	7
4	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated	Row #	8
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Annular [19th century], hollow ware body fragment, dipped/annular, gray and brown	Row #	9
	Clothing-Related		
1	Metal, Copper alloy, zipper pull whole, corroded	Row #	23
	Glass Vessels		
1	Glass, Curved, bottle body fragment, aqua	Row #	14
1	Glass, Curved, bottle body fragment, brown	Row #	15
2	Glass, Curved, bottle body fragment, clear/uncolored	Row #	12
1	Glass, Curved, indeterminate curved type fragment, clear/uncolored	Row #	11
	Indeterminate Class		
1	Metal, Copper alloy, indeterminate type fragment, corroded	Row #	22
1	Metal, Ferrous metal, indeterminate type fragment, corroded	Row #	18
	Personal Items		
5	Glass, Curved, bead whole, white	Row #	13

Total Artifacts in Context 44: 56

Borton/Ballinger Farm, Farm House, Excavation Unit 101, Context 45 **Catalog # 23**

Historic

Building Materials

8	Glass, Flat, window fragment, aqua	Row #	23
5	Glass, Flat, window fragment, light aqua	Row #	24

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Metal, Ferrous metal, nail whole, cut/wrought, corroded	Row #	27
2	Metal, Ferrous metal, nail fragment, corroded	Row #	26
	Ceramic Vessels		
2	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware rim fragment, exterior mottled lead and manganese glazed, folded rim	Row #	7
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware rim fragment, both surfaces manganese glazed	Row #	3
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware rim fragment, both surfaces mottled lead and manganese glazed	Row #	6
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, interior lead glazed	Row #	5
2	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, exterior mottled lead and manganese glazed	Row #	4
4	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior manganese glazed	Row #	2
2	Fired Clay - Ceramic, Porcelain, Indeterminate Body, Undecorated, bowl body fragment, undecorated	Row #	8
1	Fired Clay - Ceramic, Porcelain, Indeterminate Body, Undecorated, bowl rim fragment, undecorated	Row #	9
2	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate body fragment, undecorated	Row #	10
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Transfer Printed (Blue) [1784-1867], dish rim fragment, interior blue transfer printed floral decoration	Row #	12
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Transfer Printed (Blue) [1784-1867], dish body fragment, interior blue transfer printed floral decoration	Row #	11
2	Fired Clay - Ceramic, Stoneware, Gray Body, Satl Glazed, Albany Slip [early 19th to 20th century], hollow ware rim fragment, exterior salt glazed, interior albany slip	Row #	13
	Fauna		
1	Fauna, Shell - remains, clam fragment	Row #	1
	Glass Vessels		
1	Glass, Curved, bottle body fragment, embossed, clear/uncolored, "ISTER"	Row #	16
1	Glass, Curved, bottle finish fragment, clear/uncolored	Row #	18
1	Glass, Curved, bottle body fragment, embossed, aqua, "ON" or "NO"	Row #	19
2	Glass, Curved, bottle body fragment, aqua	Row #	20
2	Glass, Curved, bottle body fragment, light aqua	Row #	21
12	Glass, Curved, bottle body fragment, clear/uncolored	Row #	14
1	Glass, Curved, canning lid fragment, milk glass, white	Row #	22
1	Glass, Curved, indeterminate curved type body fragment, molded design, clear/uncolored	Row #	15
2	Glass, Curved, lamp chimney body fragment, clear/uncolored	Row #	17
	Indeterminate Class		
1	Metal, Copper alloy, indeterminate type whole, corroded	Row #	28

APPENDIX B (Cont.)
ARTIFACT INVENTORY

10	Metal, Ferrous metal, indeterminate type fragment, corroded	Row #	25
	Tools/Hardware		
1	Metal, Copper alloy, eyelet whole, corroded	Row #	29
	Total Artifacts in Context 45: 72		

Borton/Ballinger Farm, Farm House, Excavation Unit 101, Context 47 **Catalog # 24**

Historic

	Arms & Armor		
1	Metal, Brass, shotgun shell fragment, corroded, centerfire, "WINCHESTER REPEATER No. 12"	Row #	43
	Building Materials		
5	Glass, Flat, window fragment, light aqua	Row #	38
6	Metal, Ferrous metal, nail fragment, cut, corroded and encrusted	Row #	40
4	Metal, Ferrous metal, nail fragment, wire, corroded and encrusted	Row #	39
14	Metal, Ferrous metal, nail fragment, corroded and encrusted *	Row #	47
	Ceramic Vessels		
2	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], plate rim fragment, interior slip trailed with copper oxide decoration, piecrust rim	Row #	4
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, interior lead and manganese glazed	Row #	3
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware base fragment, interior manganese glazed	Row #	2
2	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, hollow ware body fragment, undecorated	Row #	5
1	Fired Clay - Ceramic, Porcelain, Soft Paste, Undecorated, teacup rim and handle fragment, undecorated	Row #	8
3	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], cup rim fragment, undecorated	Row #	10
13	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware body fragment, undecorated	Row #	11
8	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate base fragment, undecorated	Row #	12
3	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Transfer Printed (Polychrome) [late 19th to early 20th century], plate rim fragment, polychrome transfer printed, floral and gilded border pattern	Row #	14
2	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate rim fragment, undecorated	Row #	13
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], teacup handle fragment, undecorated	Row #	15
2	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], teacup base fragment,	Row #	9
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Hand Painted (Blue) [1780-1810], hollow ware body fragment, blue hand painted	Row #	7
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated	Row #	6
1	Fired Clay - Ceramic, Stoneware, Brown Body, Salt Glazed, hollow ware body fragment, salt glaze both surfaces, probable drainpipe fragment	Row #	16

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Stoneware, Brown Body, Lead Glazed, hollow ware body fragment, lead glaze interior	Row #	19
1	Fired Clay - Ceramic, Stoneware, Gray Body, Satl Glazed, Albany Slip [early 19th to 20th century], hollow ware body fragment, salt glaze exterior, Albany slip interior	Row #	17
1	Fired Clay - Ceramic, Stoneware, Gray Body, Bristol Slip, Albany Slip [19th to early 20th century], hollow ware body fragment, Bristol slip exterior, Albany slip interior	Row #	18
	Clothing-Related		
1	Composite, Leather, shoe fragment, corroded	Row #	1
	Energy		
1	Composite, Indeterminate Metal and Other Materials, battery part fragment *	Row #	44
	Fauna		
3	Fauna, Shell - remains, clam fragment *	Row #	45
	Glass Vessels		
1	Glass, Curved, bottle body fragment, light aqua, mold seam	Row #	34
1	Glass, Curved, bottle base fragment, brown, mold seam, square base with rounded corners and an embossed diamond symbol	Row #	20
1	Glass, Curved, bottle base fragment, light aqua, mold seam, round base with embossed "33SC"	Row #	21
1	Glass, Curved, bottle body fragment, clear/uncolored, mold seam	Row #	35
1	Glass, Curved, bottle body fragment, clear/uncolored, partial embossed label "[…]TRONG SH[…]"	Row #	37
1	Glass, Curved, bottle base fragment, clear/uncolored, paneled body, round base, and embossed diamond symbol on the base	Row #	24
2	Glass, Curved, bottle base fragment, clear/uncolored, paneled body, round base, and embossed "8888"	Row #	23
2	Glass, Curved, bottle finish fragment, crown finish, brown	Row #	29
1	Glass, Curved, bottle finish and neck fragment, crown finish, clear/uncolored, mold seam	Row #	28
1	Glass, Curved, drinking vessel rim and body fragment, incised border pattern, clear/uncolored	Row #	30
1	Glass, Curved, indeterminate curved type body fragment, milk glass, white	Row #	32
2	Glass, Curved, jar rim fragment, aqua	Row #	27
1	Glass, Curved, lamp chimney body fragment, clear/uncolored	Row #	36
2	Glass, Curved, mason jar lid fragment, white	Row #	33
2	Glass, Curved, pharmaceutical bottle finish fragment, cobalt blue, mold seam	Row #	26
1	Glass, Curved, pharmaceutical bottle finish fragment, stopper finish, clear/uncolored	Row #	25
1	Glass, Curved, storage vessel rim fragment, clear/uncolored	Row #	31
1	Glass, Curved, tumbler base fragment, frosted, hexagonal base	Row #	22
	Indeterminate Class		
4	Metal, Ferrous metal, indeterminate type fragment, corroded and encrusted *	Row #	46
	Tools/Hardware		
1	Metal, Ferrous metal, door hinge fragment, corroded and encrusted	Row #	42

1	Metal, Ferrous metal, door hinge whole, corroded and encrusted	Row #	41

Total Artifacts in Context 47: 109

Total Artifacts in Farm House Excavation Unit 101 : 1128

Borton/Ballinger Farm, Farm House, Excavation Unit 102, Context 1 **Catalog # 25**

Historic

Building Materials

2	Glass, Flat, window fragment, aqua	Row #	15

Ceramic Vessels

1	Fired Clay - Ceramic, Porcelain, Hard Paste, Molded, plate rim fragment, molded design	Row #	1
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], cup rim and body fragment, undecorated	Row #	3
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate base fragment, undecorated	Row #	2
3	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], shallow dish rim to base fragment, undecorated	Row #	5
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], teacup handle fragment, undecorated	Row #	4
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Transfer Printed (Polychrome) [late 19th to early 20th century], hollow ware body fragment, polychrome transfer printed, floral pattern	Row #	6
2	Fired Clay - Ceramic, Stoneware, Gray Body, Lead Glazed, storage vessel base fragment, lead glaze both surfaces	Row #	7

Glass Vessels

1	Glass, Curved, bottle base fragment, light aqua, mold seam, embossed "CANTRELL COCHRANE"	Row #	9
1	Glass, Curved, bottle base fragment, aqua, mold seam	Row #	10
1	Glass, Curved, bottle finish to shoulder fragment, cap seat, clear/uncolored, mold blown	Row #	13
1	Glass, Curved, bottle body fragment, bright green	Row #	11
1	Glass, Curved, bottle finish fragment, two-part finish, clear/uncolored, mold blown	Row #	12
1	Glass, Curved, lamp chimney finish fragment, narrow fluted edge decoration, clear/uncolored	Row #	14
1	Glass, Curved, mason jar lid whole, white, embossed "GENUINE BOYD CAP MASON JAR"	Row #	8

Recreation/Activities

1	Metal, Ferrous metal, wheel fragment, corroded and encrusted, D 2", probable toy automobile part	Row #	17

Tools/Hardware

1	Metal, Ferrous metal, wall hook whole, corroded and encrusted	Row #	16

Total Artifacts in Context 1: 21

Borton/Ballinger Farm, Farm House, Excavation Unit 102, Context 47 **Catalog # 26**

Modern

Clothing-Related

1	Composite, Plastic, button whole, grey, four hole	Row #	21

APPENDIX B (Cont.)
ARTIFACT INVENTORY

	Personal Items		
1	Composite, Plastic, comb fragment	Row #	23
	Tools/Hardware		
2	Composite, Ferrous Metal and Porcelain, sparkplug fragment, corroded and encrusted	Row #	24
Historic			
	Agriculture		
5	Fired Clay - Non-ceramic, Earthenware, Terra Cotta, drainage fragment *	Row #	3
	Arms & Armor		
5	Metal, Brass, shotgun shell fragment, corroded and encrusted	Row #	32
	Building Materials		
5	Fired Clay - Non-ceramic, Earthenware, Brick, structural fragment *	Row #	4
132	Glass, Flat, window fragment *	Row #	5
14	Glass, Flat, window fragment, light aqua	Row #	136
70	Metal, Ferrous metal, nail fragment, corroded and encrusted *	Row #	14
33	Metal, Ferrous metal, nail fragment, cut, corroded and encrusted *	Row #	15
75	Metal, Ferrous metal, nail fragment, wire, corroded and encrusted *	Row #	16
5	Metal, Ferrous metal, nail fragment, cut, corroded and encrusted	Row #	29
5	Metal, Ferrous metal, nail fragment, wire, corroded and encrusted	Row #	28
2	Metal, Ferrous metal, roofing nail fragment, corroded and encrusted	Row #	30
1	Stone, Marble, interior fabrication fragment, counter or shelf	Row #	81
	Ceramic Vessels		
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], hollow ware rim fragment, exterior lead glaze with copper oxide decoration	Row #	101
4	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, white slip trail decoration interior	Row #	102
2	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, flower pot base fragment, undecorated	Row #	94
2	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, flower pot rim fragment, undecorated	Row #	93
7	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, flower pot body fragment, undecorated	Row #	92
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, lead glazed	Row #	103
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, interior lead and manganese glazed	Row #	99
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, exterior lead glazed, interior mottled glazed	Row #	98
2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior manganese glazed	Row #	97
2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row #	96

APPENDIX B (Cont.)
ARTIFACT INVENTORY

2	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, interior lead and manganese glazed	Row #	100
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, milk pan rim fragment, interior manganese glazed	Row #	95
3	Fired Clay - Ceramic, Earthenware, Redware, Indeterminate, planter rim fragment, molded design	Row #	91
2	Fired Clay - Ceramic, Porcelain, Hard Paste, Transfer Printed (Purple) [late 19th to early 20th century], cup base fragment, overglaze purple wash decoration on interior	Row #	107
2	Fired Clay - Ceramic, Porcelain, Hard Paste, Undecorated, hollow ware body fragment, undecorated	Row #	106
4	Fired Clay - Ceramic, Porcelain, Hard Paste, Transfer Printed (Polychrome) [late 19th to early 20th century], hollow ware rim to base fragment, overglaze polychrome floral pattern, molded design	Row #	39
2	Fired Clay - Ceramic, Porcelain, Hard Paste, Molded, hollow ware rim fragment, molded design	Row #	38
2	Fired Clay - Ceramic, Porcelain, Hard Paste, Undecorated, teacup rim fragment, undecorated	Row #	105
1	Fired Clay - Ceramic, Porcelain, Hard Paste, Undecorated, teacup handle fragment, undecorated	Row #	41
1	Fired Clay - Ceramic, Porcelain, Hard Paste, Undecorated, teacup rim fragment, undecorated	Row #	40
1	Fired Clay - Ceramic, Porcelain, Soft Paste, Transfer Printed (Blue) [1784-1867], cup body fragment, underglaze blue scenic pattern	Row #	108
3	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Gilt Enameled [1850-1920], bowl rim fragment, overglazed gilded decoration, molded design with underglaze blue geometric décor	Row #	111
3	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], bowl rim fragment, molded geometric design	Row #	55
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], bowl rim fragment, molded floral and geometric design	Row #	57
13	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], cup rim fragment, undecorated	Row #	54
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], flower pot body fragment, molded floral design	Row #	58
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware base fragment, undecorated, Maker's Mark, green print maker's mark "M.T.& K. S----Y CHINA"	Row #	45
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware base fragment, undecorated, Maker's Mark, black printed mark "ANCHOR POTTERY TRENTON NJ SEMI-PORCELAIN"	Row #	44
8	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware fragment, undecorated, burned	Row #	46
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Transfer Printed (Polychrome) [late 19th to early 20th century], hollow ware rim to body fragment, overglaze polychrome transfer printed floral	Row #	62
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Transfer Printed (Polychrome) [late 19th to early 20th century], hollow ware body fragment, overglaze polychrome transfer printed floral, gilded linear pattern	Row #	64
77	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware fragment, undecorated	Row #	51
22	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware base fragment, undecorated	Row #	52
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware base fragment, molded geometric pattern	Row #	60

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], hollow ware body and handle fragment, molded design	Row #	59
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], mug/tankard handle fragment, undecorated, burned	Row #	47
4	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate rim fragment, gilded ivy pattern and slightly scalloped rim	Row #	67
8	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], plate rim fragment, molded floral design	Row #	56
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], saucer 40-50% complete, undecorated	Row #	50
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], shallow dish rim fragment, gilded floral pattern	Row #	68
26	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], shallow dish rim fragment, undecorated	Row #	53
14	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Transfer Printed (Polychrome) [late 19th to early 20th century], shallow dish rim to base fragment, overglaze polychrome transfer printed floral, gilded border	Row #	61
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Transfer Printed (Polychrome) [late 19th to early 20th century], shallow dish rim to body fragment, overglaze polychrome transfer printed floral, molded design	Row #	63
2	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], teacup rim to base fragment, undecorated	Row #	48
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Transfer Printed (Polychrome) [late 19th to early 20th century], teacup rim fragment, overglaze polychrome transfer printed floral, various shades of blue	Row #	65
1	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], teacup rim fragment, gilded geometric pattern	Row #	66
2	Fired Clay - Ceramic, Refined Earthenware, Ironstone, Undecorated [1840 to present], teapot body and base fragment, undecorated	Row #	49
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Hand Painted (Blue) [1780-1810], hollow ware handle fragment, blue hand painted	Row #	43
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Transfer Printed (Blue) [1784-1867], indeterminate type fragment, blue transfer printed scenic pattern	Row #	110
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Transfer Printed (Green) [1829-1859], saucer fragment, green transfer printed scenic pattern, 1818 - 1859	Row #	109
1	Fired Clay - Ceramic, Refined Earthenware, Redware, Lead Glazed, hollow ware lid fragment, lead glazed	Row #	104
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Shell Edge (Blue) [1800-1840], bowl rim to base fragment, Shell Edge, blue, uneven scallop;impressed straight lines, early to mid 19th century	Row #	112
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Transfer Printed (Green) [1829-1859], indeterminate type fragment, green transfer printed	Row #	42
15	Fired Clay - Ceramic, Stoneware, Gray Body, Bristol Slip, Albany Slip [19th to early 20th century], jug body to base fragment, Albany slip interior, Bristol and Albany slip exterior	Row #	113
5	Fired Clay - Ceramic, Stoneware, Gray Body, Albany Slip [early 19th to 20th century], jug finish to shoulder fragment, Albany slip both surfaces	Row #	114

Clothing-Related

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Composite, Cloth, indeterminate cloth type fragment, green *	Row #	2
16	Composite, Leather, shoe fragment	Row #	33
1	Composite, Leather and Brass, clasp fragment	Row #	22
2	Fauna, Shell - artifact, button whole, decayed, two hole	Row #	20
	Energy		
8	Composite, Indeterminate Metal and Other Materials, battery part fragment, corroded *	Row #	1
1	Glass, Curved, insulator fragment, aqua	Row #	137
1	Mineral, Charcoal, briquette fragment	Row #	36
	Fauna		
1	Fauna, Bone - remains, avian, long bone whole	Row #	80
1	Fauna, Bone - remains, large mammal, long bone fragment, butchered	Row #	17
9	Fauna, Bone - remains, mammal, indeterminate type fragment	Row #	76
1	Fauna, Bone - remains, mammal, indeterminate type fragment, butchered	Row #	77
1	Fauna, Bone - remains, mammal, long bone fragment	Row #	78
6	Fauna, Bone - remains, mammal, long bone fragment, butchered	Row #	73
1	Fauna, Bone - remains, mammal, long bone fragment, butchered	Row #	75
3	Fauna, Bone - remains, mammal, rib fragment	Row #	74
1	Fauna, Bone - remains, mammal, tarsal fragment	Row #	79
8	Fauna, Shell - remains, clam fragment	Row #	19
4	Fauna, Shell - remains, oyster fragment	Row #	18
	Glass Vessels		
55	Glass, Curved, assorted vessel type fragment, milk glass, white *	Row #	6
1138	Glass, Curved, assorted vessel type fragment *	Row #	7
1	Glass, Curved, bottle finish and neck fragment, severely melted, one part stopper finish	Row #	89
1	Glass, Curved, bottle finish and neck fragment, clear/uncolored, mold blown, one part stopper finish	Row #	174
1	Glass, Curved, bottle base fragment, clear/uncolored, ovoid body	Row #	166
1	Glass, Curved, bottle base fragment, clear/uncolored, mold seam, ovoid body, embossed diamond	Row #	167
1	Glass, Curved, bottle finish fragment, threaded, clear/uncolored, mold seam	Row #	170
3	Glass, Curved, bottle finish fragment, clear/uncolored, mold seam, crown finish	Row #	171
1	Glass, Curved, bottle base fragment, clear/uncolored, mold seam, ovoid body	Row #	165
1	Glass, Curved, bottle finish and neck fragment, clear/uncolored, mold seam, two part stopper finish	Row #	173
1	Glass, Curved, bottle whole, clear/uncolored, mold seam, L 8in, one part stopper finish, cylindrical body, embossed "CAMDEN BOTTLING CO. CAMDEN, NJ"	Row #	144

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Glass, Curved, bottle finish and neck fragment, clear/uncolored, mold seam, two part threaded finish	Row # 175
1	Glass, Curved, bottle neck to shoulder fragment, olive green, mold blown	Row # 142
1	Glass, Curved, bottle body fragment, brown, mold seam, embossed "RIEGER & SPE[…]"	Row # 141
1	Glass, Curved, bottle base fragment, olive green, mold blown	Row # 143
1	Glass, Curved, bottle base fragment, clear/uncolored, ovoid body	Row # 164
2	Glass, Curved, bottle base fragment, clear/uncolored, cylindrical body	Row # 162
1	Glass, Curved, bottle whole, clear/uncolored, mold seam, L 8in, crown finish, cylindrical body, embossed "CAPACITY 9 OZ BELL BOTTLING CO 1711 S ORIANNA ST PHILADA PA"	Row # 145
1	Glass, Curved, bottle base fragment, clear/uncolored, cylindrical body, embossed diamond, off center pontil mark	Row # 159
1	Glass, Curved, bottle base fragment, clear/uncolored, mold seam, cylindrical body	Row # 158
1	Glass, Curved, bottle base fragment, clear/uncolored, octagonal body	Row # 157
1	Glass, Curved, bottle base fragment, clear/uncolored, cylindrical body	Row # 156
1	Glass, Curved, bottle base fragment, clear/uncolored, D 2", cylindrical body	Row # 155
1	Glass, Curved, bottle base fragment, clear/uncolored, D 3", cylindrical body	Row # 154
1	Glass, Curved, bottle 80-90% complete, clear/uncolored, mold seam, decagonal body, embossed "ROCCO DiNUBILE PHILADA PA THIS BOTTLE NOT TO BE RESOLD"	Row # 146
1	Glass, Curved, bottle 40-50% complete, clear/uncolored, mold seam, decagonal body, embossed "FRANK PALAIA N.W.C. or 6TH & FITZWATER ST PHILADELPHIA"	Row # 147
1	Glass, Curved, bottle base fragment, clear/uncolored, mold seam, embossed "CMC Co""	Row # 151
1	Glass, Curved, bottle base fragment, clear/uncolored, mold seam, D 2.5", cylindrical body	Row # 163
1	Glass, Curved, bottle finish fragment, aqua, one part stopper finish	Row # 131
1	Glass, Curved, bottle base fragment, aqua, D 3.75", embossed "1 G" on base	Row # 118
1	Glass, Curved, bottle base fragment, aqua, D 3.75", embossed "2" on base	Row # 119
1	Glass, Curved, bottle base fragment, aqua, patination, D 3.5", embossed "PUTNAM 472" on base	Row # 120
1	Glass, Curved, bottle base fragment, aqua, D 2.5"	Row # 121
1	Glass, Curved, bottle base fragment, aqua, D 2.5", embossed "44" on base	Row # 122
1	Glass, Curved, bottle base fragment, light aqua, mold seam, D 1.25", embossed "W" on base	Row # 123
1	Glass, Curved, bottle 20-30% complete, light aqua, mold seam, D 2.5", embossed "[…]ICKINSON PHILADA. PA 11 FL OZ THIS BOTTLE NOT TO BE RESOLD" on face	Row # 124
1	Glass, Curved, bottle 20-30% complete, aqua, rectangular base with rounded corners, paneled body, embossed "NY USA", shallow pontil scar	Row # 125
1	Glass, Curved, bottle body fragment, aqua, embossed "[…]OCKERSON […]805"	Row # 126
3	Glass, Curved, bottle body fragment, light aqua, mold seam, embossed "JACOB […] 803=805 DICKINSON ST PHILADA. PA"	Row # 127
2	Glass, Curved, bottle body fragment, aqua, mold seam, embossed "D.A. TURCHI'S SONS 807-09 SOUTH 11th ST"	Row # 128

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Glass, Curved, bottle finish and neck fragment, brown, one part stopper finish	Row # 140
1	Glass, Curved, bottle body fragment, aqua, embossed "[…]ERFE[…] MAS[…]"	Row # 130
1	Glass, Curved, bottle whole, brown, L 3.75in, rectangular body with rounded corners	Row # 139
1	Glass, Curved, bottle finish fragment, light aqua, mold seam, applied lip	Row # 132
1	Glass, Curved, bottle finish and neck fragment, aqua, mold seam, one part stopper finish	Row # 134
1	Glass, Curved, bottle body and base fragment, clear/uncolored, mold seam, cylindrical body; partial lettering embossed on face; embossed on base "JOHN BLAUFUSS RIVERSIDE NJ" with a large "B" in center	Row # 188
1	Glass, Curved, bottle finish and neck fragment, aqua, mold seam, two part stopper finish	Row # 135
1	Glass, Curved, bottle body fragment, clear/uncolored, mold seam, embossed "[…] HAAS {…] AVE"	Row # 184
1	Glass, Curved, bottle base fragment, clear/uncolored, embossed "T MFG. CO 20"	Row # 150
1	Glass, Curved, bottle body fragment, aqua, embossed " GERM[…]"	Row # 129
1	Glass, Curved, condiment jar base fragment, clear/uncolored, square body, embossed "1"	Row # 169
1	Glass, Curved, condiment jar body and base fragment, clear/uncolored, mold seam	Row # 187
3	Glass, Curved, drinking vessel rim to base fragment, partially fluted along base, clear/uncolored	Row # 185
2	Glass, Curved, drinking vessel rim fragment, etched/white floral pattern on exterior, clear/uncolored	Row # 183
1	Glass, Curved, drinking vessel rim fragment, clear/uncolored	Row # 182
1	Glass, Curved, flask 40-50% complete, clear/uncolored, mold seam, ovoid body	Row # 168
3	Glass, Curved, indeterminate curved type rim fragment, clear/uncolored, D 12", large round bowl; possible punch or sink bowl	Row # 90
1	Glass, Curved, indeterminate curved type base fragment, clear/uncolored	Row # 149
3	Glass, Curved, jar rim fragment, threaded, clear/uncolored	Row # 178
2	Glass, Curved, jar finish fragment, aqua, threaded	Row # 133
2	Glass, Curved, jar 40-50% complete, cap seat, clear/uncolored, mold seam	Row # 180
1	Glass, Curved, jar rim fragment, cap seat, clear/uncolored, embossed "DIETZ"	Row # 179
2	Glass, Curved, jug finish to shoulder fragment, clear/uncolored, wide lip, no neck, tiny nub handle	Row # 176
6	Glass, Curved, lamp chimney rim fragment, fluted/ribbed edge, clear/uncolored	Row # 177
1	Glass, Curved, milk bottle finish and neck fragment, clear/uncolored, embossed flower on neck	Row # 172
1	Glass, Curved, milk bottle rim to body fragment, clear/uncolored, embossed "STATE DAIR[Y}"	Row # 181
1	Glass, Curved, ointment bottle 80-90% complete, clear/uncolored, mold blown, patination, ovoid, hexagonal body; embossed "SEXTETTE AFTER SHAVING"	Row # 186
1	Glass, Curved, ointment jar 50-60% complete, milk glass, molded design, white, L 2.25in, W 1.5in, square shaped with rounded corners	Row # 117
1	Glass, Curved, ointment jar rim and body, milk glass, molded design, white	Row # 115

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Glass, Curved, ointment jar 30-40% complete, milk glass, molded design, white, L 2.75in, W 2in, square shaped with rounded corners	Row #	116
1	Glass, Curved, ointment jar 80-90% complete, brown, L 2in, D 2.25"	Row #	138
1	Glass, Curved, punch bowl base fragment, impressed geometric pattern, clear/uncolored	Row #	148
1	Glass, Curved, stopper whole	Row #	25
1	Glass, Curved, tumbler base fragment, clear/uncolored, D 2.75", decagonal body	Row #	161
1	Glass, Curved, tumbler base fragment, clear/uncolored, decagonal body	Row #	160
1	Glass, Curved, tumbler base fragment, clear/uncolored, D 2", octagonal body, deep pontil	Row #	153
	Indeterminate Class		
1	Metal, Copper alloy, indeterminate type fragment, corroded, tusk-shaped hollow tube	Row #	82
	Kitchen-Related		
1	Metal, Copper alloy, salt shaker cap fragment, corroded	Row #	83
1	Metal, Ferrous metal, fork fragment, corroded and encrusted	Row #	26
2	Metal, Ferrous metal and Tin, mug/tankard fragment, corroded and encrusted *	Row #	9
1	Metal, Tin, can fragment, corroded and encrusted *	Row #	10
	Recreation/Activities		
1	Glass, Curved, ashtray fragment, impressed geometric pattern, clear/uncolored	Row #	152
2	Metal, Ferrous metal, bicycle wheel rim fragment, corroded and encrusted *	Row #	12
17	Metal, Tin, bucket fragment, corroded and encrusted *	Row #	11
	Tools/Hardware		
1	Fired Clay - Non-ceramic, Porcelain, decorative knob fragment	Row #	35
1	Fired Clay - Non-ceramic, Porcelain, electrical hardware fragment	Row #	34
1	Metal, Brass, wall hook fragment, corroded	Row #	84
1	Metal, Copper alloy, chain fragment, corroded	Row #	87
1	Metal, Copper alloy, gear fragment, corroded, watch part	Row #	88
1	Metal, Ferrous metal, drawer pull/handle fragment, corroded and encrusted	Row #	27
2	Metal, Ferrous metal, drawer pull/knob fragment, corroded	Row #	86
21	Metal, Ferrous metal, indeterminate hardware fragment, corroded and encrusted *	Row #	8
1	Metal, Ferrous metal, knob fragment, threaded, corroded, small machine part	Row #	85
1	Metal, Ferrous metal, machine part fragment, corroded and encrusted *	Row #	13
1	Metal, Ferrous metal, machine part fragment, corroded and encrusted, possible tractor grill plate	Row #	69
1	Metal, Ferrous metal, machine part fragment, corroded and encrusted, possible tractor part	Row #	71
1	Metal, Ferrous metal, machine part fragment, corroded and encrusted, possible tractor blade fragment	Row #	72

6	Metal, Ferrous metal, spike fragment, corroded and encrusted	Row #	31
1	Metal, Ferrous metal, spring fragment, corroded and encrusted	Row #	37
1	Metal, Ferrous metal, wheel hub whole, corroded and encrusted, possible tractor part	Row #	70

Total Artifacts in Context 47: 2044

Total Artifacts in Farm House Excavation Unit 102 : 2065

Borton/Ballinger Farm, Farm House, Excavation Unit 103, Context 33 **Catalog # 32**

Historic

Building Materials

1	Fired Clay - Non-ceramic, Earthenware, Brick, structural fragment, red	Row #	4
1	Metal, Ferrous metal, nail fragment, wire, corroded and encrusted	Row #	5

Ceramic Vessels

1	Fired Clay - Ceramic, Earthenware, Delftware, [17th to early 18th century], hollow ware fragment, undecorated, surface missing	Row #	2
4	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware fragment, manganese glazed, surface missing	Row #	1
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware rim fragment, undecorated	Row #	3

Total Artifacts in Context 33: 8

Total Artifacts in Farm House Excavation Unit 103 : 8

Borton/Ballinger Farm, Farm House, Excavation Unit 104, Context 5 **Catalog # 34**

Historic

Building Materials

1	Composite, Mortar, tile fragment, white and blue painted exterior, molded design	Row #	78
2	Fired Clay - Non-ceramic, Earthenware, Brick, structural fragment	Row #	73
11	Glass, Flat, window fragment, aqua	Row #	84
1	Metal, Ferrous metal, nail whole, cut/wrought, corroded	Row #	87
7	Metal, Ferrous metal, nail fragment, corroded	Row #	85
1	Metal, Ferrous metal, nail whole, cut/wrought, corroded	Row #	88
4	Metal, Ferrous metal, nail fragment, cut/wrought, corroded	Row #	89
2	Metal, Ferrous metal, nail fragment, cut/wrought, corroded	Row #	90

Ceramic Vessels

1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, hollow ware body fragment, both surfaces lead glazed, burned	Row #	63
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, hollow ware body fragment, both surfaces dark brown glaze	Row #	62
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, Staffordshire glazed both surfaces, exterior dark brown glaze	Row #	61

APPENDIX B (Cont.)
ARTIFACT INVENTORY

3	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, Staffordshire glazed both surfaces	Row #	60
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware base fragment, Staffordhsire glazed	Row #	59
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, hollow ware rim fragment, burned	Row #	64
1	Fired Clay - Ceramic, Earthenware, Delftware, [17th to early 18th century], hollow ware body fragment, undecorated	Row #	58
4	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], hollow ware body fragment, interior copper oxide decoration	Row #	15
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Slip Trailed, hollow ware rim fragment, interior slip trailed	Row #	25
6	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], hollow ware body fragment, interior copper oxide decoration	Row #	16
6	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed	Row #	20
5	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed	Row #	32
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed	Row #	24
4	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed	Row #	31
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed	Row #	23
9	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed, exterior surface missing	Row #	27
2	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed	Row #	29
3	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip and lead glaze marbling	Row #	22
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, interior white slip trailed, piecrust rim	Row #	26
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, interior white slip and lead glaze marbling, piecrust rim	Row #	28
4	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], plate rim and body fragment, interior copper oxide decoration, repair hole	Row #	17
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], plate rim fragment, interior copper oxide decoration, piecrust rim, repair hole	Row #	12
27	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], plate body fragment, interior copper oxide decoration	Row #	11
3	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, interior white slip trailed, piecrust rim, exterior surface missing	Row #	21
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], plate rim fragment, interior copper oxide decoration	Row #	18

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], plate rim fragment, interior copper oxide decoration, piecrust rim	Row # 14
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], plate rim fragment, interior copper oxide decoration, piecrust rim	Row # 13
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], plate body fragment, interior copper oxide decoration	Row # 19
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware base fragment, interior manganese glazed	Row # 49
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware rim fragment, both surfaces manganese glazed	Row # 48
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware handle fragment, both surfaces manganese glazed	Row # 53
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware handle fragment, both surfaces manganese glazed	Row # 47
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware handle fragment, both surfaces mottled lead and manganese glaze	Row # 44
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware base fragment, interior manganese glazed	Row # 46
3	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed, molded design	Row # 50
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware rim fragment, both surfaces lead and manganese mottled glaze	Row # 51
34	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, both surfaces mottled lead and manganese glaze	Row # 57
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row # 52
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, exterior lead glazed with manganese mottling, interior lead and manganese glazed swirl	Row # 30
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware base fragment, both surfaces manganese glazed	Row # 42
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware base fragment, both surfaces manganese glazed	Row # 40
36	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior manganese glazed	Row # 38
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, exterior manganese glazed	Row # 55
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware base fragment, both surfaces lead glazed, molded design	Row # 33
4	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, interior lead glazed	Row # 34
4	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, interior lead glazed, burned	Row # 45
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware rim fragment, both surfaces lead glazed	Row # 35
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware base fragment, interior surface lead glazed	Row # 36
12	Fired Clay - Ceramic, Earthenware, Redware, Indeterminate, hollow ware body fragment, surface missing	Row # 37

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior manganese glazed, molded design	Row #	54
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware base fragment, exterior mottled lead and manganese glazed, interior surface missing	Row #	39
5	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, milk pan rim fragment, interior mottled lead and manganese glazed	Row #	43
3	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, undecorated, surface missing	Row #	65
2	Fired Clay - Ceramic, Refined Earthenware, Jackfield, Jackfield [1740-1770], hollow ware body fragment, Jackfield glaze, molded design	Row #	56
2	Fired Clay - Ceramic, Refined Earthenware, Jackfield, Jackfield [1740-1770], hollow ware rim fragment, Jackfield glaze	Row #	9
1	Fired Clay - Ceramic, Refined Earthenware, Jackfield, Jackfield [1740-1770], hollow ware rim fragment, Jackfield glaze	Row #	8
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Feather Edge (Green) [1820-1840], dish rim fragment, feather edge, impressed lines, green	Row #	68
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated	Row #	67
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Transfer Printed (Blue) [1784-1867], hollow ware body fragment, exterior blue transfer printed floral decoration	Row #	69
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Annular [19th century], hollow ware body fragment, dipped/annular, brown	Row #	66
5	Fired Clay - Ceramic, Refined Earthenware, Redware, Jackfield-type [19th century], hollow ware body fragment, Jackfield style glaze	Row #	41
2	Fired Clay - Ceramic, Refined Earthenware, Redware, Jackfield-type [19th century], hollow ware body fragment, Jackfield-type glaze	Row #	10
13	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Annular [19th century], hollow ware body fragment, dipped/annular, brown	Row #	70
1	Fired Clay - Ceramic, Stoneware, White salt-glazed, Undecorated [1685-1785], hollow ware footring fragment, undecorated	Row #	71
1	Fired Clay - Ceramic, Stoneware, White salt-glazed, Undecorated [1685-1785], hollow ware body fragment, undecorated	Row #	72
	Fauna		
1	Fauna, Bone - remains, cow, tooth fragment	Row #	1
1	Fauna, Bone - remains, cow, tooth fragment	Row #	2
6	Fauna, Bone - remains, large mammal, indeterminate type fragment	Row #	3
8	Fauna, Bone - remains, large mammal, long bone fragment	Row #	4
1	Fauna, Bone - remains, mammal, rib fragment	Row #	5
31	Fauna, Shell - remains, clam fragment	Row #	6
17	Fauna, Shell - remains, oyster fragment	Row #	7
	Glass Vessels		
1	Glass, Curved, bottle body fragment, green	Row #	80

1	Glass, Curved, bottle body fragment, olive green, patination	Row #	79
1	Glass, Curved, bottle body fragment, clear/uncolored	Row #	82
4	Glass, Curved, bottle body fragment, aqua	Row #	83
1	Glass, Curved, bottle finish fragment, olive green	Row #	81
	Indeterminate Class		
1	Metal, Ferrous metal, indeterminate type fragment, corroded	Row #	86
1	Metal, White Metal, indeterminate type fragment, corroded	Row #	91
	Personal Items		
1	Fired Clay - Non-ceramic, White Clay, smoking pipe, stem fragment, D 1/16"	Row #	76
1	Fired Clay - Non-ceramic, White Clay, smoking pipe, stem fragment, D 1/16"	Row #	77
1	Fired Clay - Non-ceramic, White Clay, smoking pipe, stem and bowl fragment, D 5/64"	Row #	74
1	Fired Clay - Non-ceramic, White Clay, smoking pipe, stem and bowl fragment, D 1/16"	Row #	75

Total Artifacts in Context 5: 349

Total Artifacts in Farm House Excavation Unit 104 : 349

Borton/Ballinger Farm, Farm House, Excavation Unit 105, Context 5 **Catalog # 35**

Historic

Building Materials

1	Fired Clay - Non-ceramic, Earthenware, Brick, structural fragment, burned	Row #	63
1	Fired Clay - Non-ceramic, Earthenware, Terra Cotta, structural fragment	Row #	64
61	Glass, Flat, window fragment, aqua	Row #	71
10	Glass, Flat, window fragment, olive green	Row #	72
12	Glass, Flat, window fragment, light aqua	Row #	73
24	Metal, Ferrous metal, nail fragment, cut, corroded/encrusted	Row #	74
11	Metal, Ferrous metal, nail fragment, corroded/encrusted	Row #	76

Ceramic Vessels

1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, interior Staffordshire glazed, exterior surface missing	Row #	47
2	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, interior Staffordshire glazed	Row #	51
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, interior Staffordshire glazed, exterior surface missing	Row #	45
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, Staffordshire glazed, exterior dark brown glazed	Row #	44
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, interior Staffordshire glazed, exterior surface missing	Row #	52

APPENDIX B (Cont.)
ARTIFACT INVENTORY

2	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, interior Staffordshire glazed	Row # 50
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, interior Staffordshire glazed	Row # 49
2	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, Staffordshire glazed	Row # 48
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, hollow ware body fragment, exterior Staffordshire glazed	Row # 46
2	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, hollow ware body fragment, both surfaces lead glazed	Row # 53
1	Fired Clay - Ceramic, Earthenware, Indeterminate Body, hollow ware body fragment, molded design, burned	Row # 55
29	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed	Row # 10
4	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed	Row # 17
2	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed	Row # 13
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Slip Trailed, hollow ware body fragment, interior reverse slip trailed	Row # 16
2	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed	Row # 15
3	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Indeterminate, hollow ware body fragment, incised, surface missing	Row # 18
2	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], hollow ware body fragment, interior slip trailed, copper oxide decoration	Row # 14
11	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], hollow ware body fragment, interior white slip trailed, cooper oxide glazed	Row # 7
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware base fragment, interior white slip trailed	Row # 9
4	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed, surface missing	Row # 11
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed	Row # 20
4	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], hollow ware rim fragment, interior white slip trailed, cooper oxide glazed	Row # 8
2	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, interior white slip trailed, piecrust rim	Row # 12
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, interior white slip trailed, piecrust rim	Row # 19
2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, bowl base fragment, interior manganese glazed	Row # 27
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, bowl base fragment, both surfaces manganese glazed	Row # 25
26	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior manganese glazed, exterior unglazed	Row # 36

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Earthenware, Redware, Indeterminate, hollow ware body fragment, burned	Row # 39
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row # 34
33	Fired Clay - Ceramic, Earthenware, Redware, Indeterminate, hollow ware body fragment, surface missing	Row # 40
3	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware base fragment, both surfaces mottled lead and manganese glazed	Row # 21
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware rim fragment, interior mottled lead and manganese glazed	Row # 38
2	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware handle fragment, both surfaces mottled lead and manganese glazed	Row # 37
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware rim fragment, both surfaces manganese glazed	Row # 35
5	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, interior mottled lead and manganese glazed	Row # 33
12	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, both surfaces mottled lead and manganese glazed	Row # 32
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware base fragment, both surfaces mottled lead and manganese glazed	Row # 30
2	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, interior mottled lead and manganese glazed	Row # 29
7	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware rim fragment, both surfaces manganese glazed	Row # 28
5	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed, molded design	Row # 24
42	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row # 23
1	Fired Clay - Ceramic, Earthenware, Redware, Lead and Manganese Glazed, hollow ware base fragment, exterior lead glazed, interior manganese glazed	Row # 31
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, milk pan rim fragment, interior manganese glazed	Row # 26
2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, milk pan base fragment, interior manganese glazed	Row # 22
1	Fired Clay - Ceramic, Porcelain, Indeterminate Body, Hand Painted (Blue) [1775-1810], hollow ware rim fragment, interior hand blue painted linear decoration	Row # 54
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Annular [19th century], hollow ware body fragment, dipped/annular, brown	Row # 59
38	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, undecorated	Row # 58
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Annular [19th century], dish rim fragment, both surfaces brown stripe, exterior green floral design	Row # 60
15	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated	Row # 61

9	Fired Clay - Ceramic, Refined Earthenware, Redware, Jackfield-type [19th century], hollow ware body fragment, Jackfield-type glaze	Row #	41
3	Fired Clay - Ceramic, Refined Earthenware, Redware, Jackfield-type [19th century], hollow ware rim fragment, Jackfield-type glaze	Row #	43
2	Fired Clay - Ceramic, Refined Earthenware, Redware, Jackfield-type [19th century], hollow ware handle fragment, Jackfield-type glaze	Row #	42
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Annular [19th century], hollow ware body fragment, dipped/annular, brown	Row #	62
1	Fired Clay - Ceramic, Stoneware, White salt-glazed, Scratch Blue [1745-1780], bowl base fragment, Scratch Blue, linear decoration	Row #	56
1	Fired Clay - Ceramic, Stoneware, White salt-glazed, Undecorated [1685-1785], hollow ware body fragment, undecorated	Row #	57
	Clothing-Related		
1	Metal, Copper alloy, button fragment, corroded, eye missing	Row #	77
	Fauna		
1	Fauna, Bone - remains, cow, tooth fragment	Row #	3
1	Fauna, Bone - remains, large mammal, indeterminate type fragment	Row #	2
2	Fauna, Bone - remains, large mammal, long bone fragment	Row #	1
1	Fauna, Bone - remains, pig, tooth whole	Row #	4
1	Fauna, Shell - remains, clam fragment	Row #	5
1	Fauna, Shell - remains, oyster fragment	Row #	6
	Glass Vessels		
1	Glass, Curved, bottle body fragment, faceted, green	Row #	70
13	Glass, Curved, bottle body fragment, clear/uncolored	Row #	66
3	Glass, Curved, bottle body fragment, frosted	Row #	67
4	Glass, Curved, bottle body fragment, green	Row #	68
5	Glass, Curved, bottle body fragment, olive green	Row #	69
	Kitchen-Related		
1	Metal, Ferrous metal, kettle fragment, corroded/encrusted	Row #	75
	Personal Items		
2	Fired Clay - Non-ceramic, White Clay, smoking pipe, stem fragment, D 5/64"	Row #	65

Total Artifacts in Context 5: 461

Borton/Ballinger Farm, Farm House, Excavation Unit 105, Context 55 **Catalog # 36**

Historic

Building Materials

2	Fired Clay - Non-ceramic, Earthenware, Brick, structural fragment	Row #	9
2	Glass, Flat, window fragment, aqua	Row #	11
3	Metal, Ferrous metal, nail fragment, corroded	Row #	12

1	Stone, Flint, construction chip fragment	Row #	13
	Ceramic Vessels		
2	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, interior lead glazed	Row #	6
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, both surfaces mottled lead and manganese glazed	Row #	7
1	Fired Clay - Ceramic, Earthenware, Redware, Indeterminate, hollow ware rim fragment, interior surface missing	Row #	8
	Fauna		
11	Fauna, Bone - remains, large mammal, indeterminate type fragment	Row #	3
1	Fauna, Bone - remains, large mammal, indeterminate type fragment	Row #	4
1	Fauna, Bone - remains, large mammal, long bone fragment, butchered	Row #	1
1	Fauna, Bone - remains, large mammal, scapula fragment, butchered	Row #	2
1	Fauna, Shell - remains, oyster fragment	Row #	5
	Personal Items		
1	Fired Clay - Non-ceramic, White Clay, smoking pipe, stem fragment, D 5/64"	Row #	10

Total Artifacts in Context 55: 28

Borton/Ballinger Farm, Farm House, Excavation Unit 105, Context 56 **Catalog # 37**

Modern

Indeterminate Class

1	Composite, Plastic, indeterminate type fragment, tan	Row #	46

Historic

Building Materials

1	Fired Clay - Non-ceramic, Earthenware, Brick, structural fragment, glazed	Row #	34
1	Glass, Flat, window fragment, clear/uncolored	Row #	42
7	Glass, Flat, window fragment, light aqua	Row #	43
5	Metal, Ferrous metal, nail whole, cut/wrought	Row #	44
3	Metal, Ferrous metal, nail fragment	Row #	45
	Ceramic Vessels		
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware fragment, Staffordshire glazed	Row #	2
2	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed, exterior surface missing	Row #	4
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed, exterior lead glazed	Row #	5
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], hollow ware body fragment, interior white slip trailed, copper oxide glazed	Row #	8
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware rim fragment, interior white slip trailed, exterior lead glazed	Row #	6

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, interior white slip trailed, piecrust rim	Row # 7
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, both surfaces lead and iron oxide glazed	Row # 14
12	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row # 9
3	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row # 12
3	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware rim fragment, both surfaces manganese glazed	Row # 13
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior manganese glazed	Row # 10
1	Fired Clay - Ceramic, Earthenware, Redware, Engine-Turned [late 18th to late 19th century], hollow ware body fragment, both surfaces lead glazed, engine-turned	Row # 15
1	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, interior mottled lead and manganese glazed	Row # 16
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware rim fragment, lead glazed	Row # 17
10	Fired Clay - Ceramic, Earthenware, Redware, Indeterminate, hollow ware body fragment, surface missing	Row # 19
7	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior manganese glazed	Row # 11
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, interior lead glazed, burned	Row # 20
3	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, both surfaces lead glazed	Row # 18
1	Fired Clay - Ceramic, Porcelain, Indeterminate Body, Undecorated, hollow ware body fragment, undecorated	Row # 31
1	Fired Clay - Ceramic, Porcelain, Indeterminate Body, Undecorated, hollow ware body fragment, undecorated, burned	Row # 32
2	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, undecorated	Row # 25
4	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, undecorated, surface missing	Row # 21
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, molded design	Row # 24
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware rim fragment, undecorated, surface missing	Row # 23
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], plate footring fragment, undecorated, surface missing	Row # 22
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware body fragment, undecorated	Row # 28
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Undecorated [1780-1890], hollow ware rim fragment, undecorated	Row # 26
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Hand Painted (Polychrome) [1795-1830], plate rim fragment, interior brown stripe and dot design, exterior surface missing	Row # 27
1	Fired Clay - Ceramic, Refined Earthenware, Redware, Jackfield-type [19th century], hollow ware rim fragment, Jackfield-type glaze	Row # 3

1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], hollow ware footring fragment, undecorated	Row #	29
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], hollow ware body fragment, undecorated	Row #	30
1	Fired Clay - Ceramic, Stoneware, White salt-glazed, Scratch Blue (Floral) [1745-1780], hollow ware body fragment, Scratch Blue, floral decoration	Row #	33
	Fauna		
1	Fauna, Shell - remains, clam fragment	Row #	1
	Glass Vessels		
17	Glass, Curved, bottle body fragment, clear/uncolored	Row #	37
2	Glass, Curved, bottle body fragment, green	Row #	38
3	Glass, Curved, bottle body fragment, olive green	Row #	39
3	Glass, Curved, bottle body fragment, aqua	Row #	40
2	Glass, Curved, bottle body fragment, aqua	Row #	36
1	Glass, Curved, lamp chimney body fragment, clear/uncolored	Row #	41
	Personal Items		
1	Fired Clay - Non-ceramic, White Clay, smoking pipe, stem fragment, D 5/64"	Row #	35
	Total Artifacts in Context 56: 117		

Borton/Ballinger Farm, Farm House, Excavation Unit 105, Context 62 **Catalog # 38**

Prehistoric

Lithics

1	Stone, Jasper, projectile point whole	Row #	72
1	Stone, Sandstone, thermally-altered rock fragment, burned	Row #	73

Historic

Arms & Armor

1	Stone, Flint, gunflint fragment, gray and black, probable English gunflint	Row #	74
	Building Materials		
1	Fired Clay - Non-ceramic, Earthenware, Brick, structural fragment	Row #	56
42	Glass, Flat, window fragment, aqua	Row #	64
6	Metal, Ferrous metal, nail fragment, corroded	Row #	69
22	Metal, Ferrous metal, nail fragment, cut/wrought, corroded	Row #	68
4	Metal, Ferrous metal, nail whole, cut/wrought, corroded	Row #	70
4	Stone, Flint, construction chip fragment	Row #	71
	Ceramic Vessels		
5	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, Staffordshire glazed both surfaces	Row #	10

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, hollow ware body fragment, interior surface brown mottled glazed	Row # 13
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, North Devon [17th to early 18th century], hollow ware rim fragment, North Devon lead glaze	Row # 41
2	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware rim fragment, Staffordshire glazed both surfaces	Row # 11
1	Fired Clay - Ceramic, Earthenware, Buff bodied slipware, Staffordshire [1670-1775], hollow ware body fragment, interior Staffordshire glazed	Row # 12
1	Fired Clay - Ceramic, Earthenware, Delftware, [17th to early 18th century], hollow ware body fragment, bluish tint, interior surface missing	Row # 14
2	Fired Clay - Ceramic, Earthenware, Delftware, [17th to early 18th century], hollow ware body fragment, pinkish tint, exterior surface missing	Row # 15
1	Fired Clay - Ceramic, Earthenware, Delftware, [17th to early 18th century], hollow ware body fragment, both surfaces missing	Row # 16
1	Fired Clay - Ceramic, Earthenware, Indeterminate Body, hollow ware rim fragment, interior white slip trailed, burned	Row # 49
3	Fired Clay - Ceramic, Earthenware, Red bodied slipware, Copper Oxide [late 18th century], hollow ware body fragment, white slip trailed with copper oxide glaze, exterior surface missing	Row # 19
13	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, hollow ware body fragment, interior white slip trailed, lead glazed, exterior surface missing	Row # 20
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, interior white slip trailed, piecrust rim, repair hole	Row # 23
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, interior white slip trailed, piecrust rim	Row # 22
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, interior white slip trailed, exterior lead glazed	Row # 21
1	Fired Clay - Ceramic, Earthenware, Red bodied slipware, White Slip Trailed, plate rim fragment, white slip trailed, piecrust rim, exterior surface missing	Row # 18
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, bowl base fragment, both surfaces manganese glazed	Row # 26
2	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, bowl base fragment, both surfaces manganese glazed	Row # 27
5	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed, molded design	Row # 25
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware rim fragment, exterior manganese glazed, interior surface missing	Row # 24
37	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed	Row # 29
20	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, interior surface manganese glazed	Row # 30
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware rim fragment, exterior lead glazed, interior surface missing	Row # 36
2	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware rim fragment, interior lead glazed	Row # 35
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware base fragment, interior lead glazed	Row # 34

APPENDIX B (Cont.)
ARTIFACT INVENTORY

36	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, lead glazed	Row # 33
1	Fired Clay - Ceramic, Earthenware, Redware, Lead and Manganese Glazed, hollow ware body fragment, interior manganese glazed, exterior lead glazed	Row # 32
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware handle fragment, manganese glazed	Row # 31
2	Fired Clay - Ceramic, Earthenware, Redware, Mottled Lead and Manganese Glazed, hollow ware body fragment, both surfaces mottled lead and manganese glazed	Row # 28
16	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, both surfaces lead glazed	Row # 40
4	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware body fragment, exterior surface lead glazed, burned	Row # 52
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware handle fragment, manganese glazed, slightly burned	Row # 48
1	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware handle fragment, both surfaces manganese glazed, burned and blackened	Row # 51
5	Fired Clay - Ceramic, Earthenware, Redware, Manganese Glazed, hollow ware body fragment, both surfaces manganese glazed, burned and blackened	Row # 50
6	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware rim fragment, interior lead glazed	Row # 37
1	Fired Clay - Ceramic, Earthenware, Redware, Lead Glazed, hollow ware handle fragment, lead glazed	Row # 38
8	Fired Clay - Ceramic, Earthenware, Redware, Undecorated, hollow ware body fragment, undecorated, surface missing	Row # 39
4	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware body fragment, undecorated, surface missing	Row # 42
1	Fired Clay - Ceramic, Refined Earthenware, Creamware, Undecorated [1762-1820], hollow ware footring fragment, undecorated	Row # 43
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Hand Painted (Red) [1830-1860], dish rim fragment, interior hand painted red decoration	Row # 44
1	Fired Clay - Ceramic, Refined Earthenware, Pearlware, Shell Edge (Green) [1800-1840], hollow ware body fragment, Shell Edge, green, exterior surface missing, impressed curved lines, 1802 - 1832	Row # 45
3	Fired Clay - Ceramic, Refined Earthenware, Redware, Jackfield-type [19th century], hollow ware rim fragment, Jackfield-type glaze	Row # 17
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Undecorated [1815 to present], hollow ware body fragment, undecorated	Row # 46
1	Fired Clay - Ceramic, Refined Earthenware, Whiteware, Transfer Printed (Black) [1815-1864], hollow ware body fragment, interior black transfer printed floral decoration, 1785 - 1864	Row # 47
1	Fired Clay - Ceramic, Stoneware, Gray Body, Salt Glazed, hollow ware handle fragment, salt glaze	Row # 54
1	Fired Clay - Ceramic, Stoneware, Gray Body, Albany Slip [early 19th to 20th century], hollow ware body fragment, both surfaces Albany slip	Row # 75
1	Fired Clay - Ceramic, Stoneware, Gray Body, Salt Glazed, hollow ware body fragment, salt glaze	Row # 55
1	Fired Clay - Ceramic, Stoneware, White salt-glazed, Scratch Blue [1745-1780], hollow ware base fragment, Scratch Blue, floral decoration	Row # 53

Commerce

Appendix C

NEW JERSEY STATE MUSEUM
SITE REGISTRATION FORM

NEW JERSEY STATE MUSEUM
ARCHAEOLOGICAL SITE REGISTRATION PROGRAM
BUREAU OF ARCHAEOLOGY AND ETHNOLOGY
P.O. BOX 530, TRENTON, N.J. 08625-0530
Phone (609) 292-8594; Fax (609) 292-7636

Site Name: Borton/Ballinger Farmstead
☒ Check this box if you prefer to have this site information restricted to professional archaeologists, academics and environmental researchers conducting project background research. If so, this form will be considered donated information according to New Jersey State Law.

STS #: 28-Bu-949
Project #:
Date: 5-22-2018

USGS 7.5 Minute Series Quad.: Moorestown, N.J.

NJ Atlas Sheet Coordinates:
State Plane Coordinates: E N
UTM Coordinates (required): E 18 05 08 893 N 44 24 578

County: Burlington **Township:** Mt. Laurel Township

Location (descriptive): On the edge of the Rowan College at Burlington Campus just west of a small unnamed brook

Survey Methodology Phase IA ☐ Phase IB ☒ Phase II ☒ Phase III ☒

Period of Site: 18th through 20th century, small prehistoric component

Cultural Affiliation(s) (if known):

Owner's (Tenant's) Name: Rowan College at Burlington
Address 900 College Circle, Mt. Laurel, NJ 08054
Phone: (856) 222-9311
Attitude Toward Preservation: Majority of site was destroyed, elements of historic site may remain

Surface Features: None

Prominent Landmarks: Large osage orange tree

Vegetation Cover: Paved over with road, parts of site may survive to west under low brush

Nearest Water Source: Unnamed tributary of Parkers Creek **Distance:** 75 feet
Watershed Management Area
Water Region

Soil Type: Freehold loamy sand (FrfB) **Erosion:** None observed

Stratified (if known): 18th-, 19th- and 20th-c. components are stratified, prehistorics mixed with historic period deposits

Threat of Destruction (if known): Majority of site was destroyed, elements of historic site may remain

References and Previous Work (If available, list current / in-progress report 1st):

	Name	Date	Reference
1.	R.A. Mounier	1993	Stage I/II Cultural Resources Study of Proposed Burlington County College Mount Laurel Campus, Mount Laurel, Burlington Co., New Jersey. On file, New Jersey Historic Preservation Office (NJDEP), Trenton, New Jersey.

2.	R.A. Mounier	1995	Stage II Cultural Resources Study of Selected Locations on Burlington County College Mount Laurel Campus, Mount Laurel, Burlington Co., New Jersey. On file, New Jersey Historic Preservation Office (NJDEP), Trenton, New Jersey.
3.	Hunter Research, Inc.	2018	Phase II Archaeological Field Assessment, Phase III Archaeological Data Recovery and Monitoring, Borton/Ballinger Farm Site, Rowan College at Burlington Campus Expansion Project, Mount Laurel Township, Burlington County, New Jersey

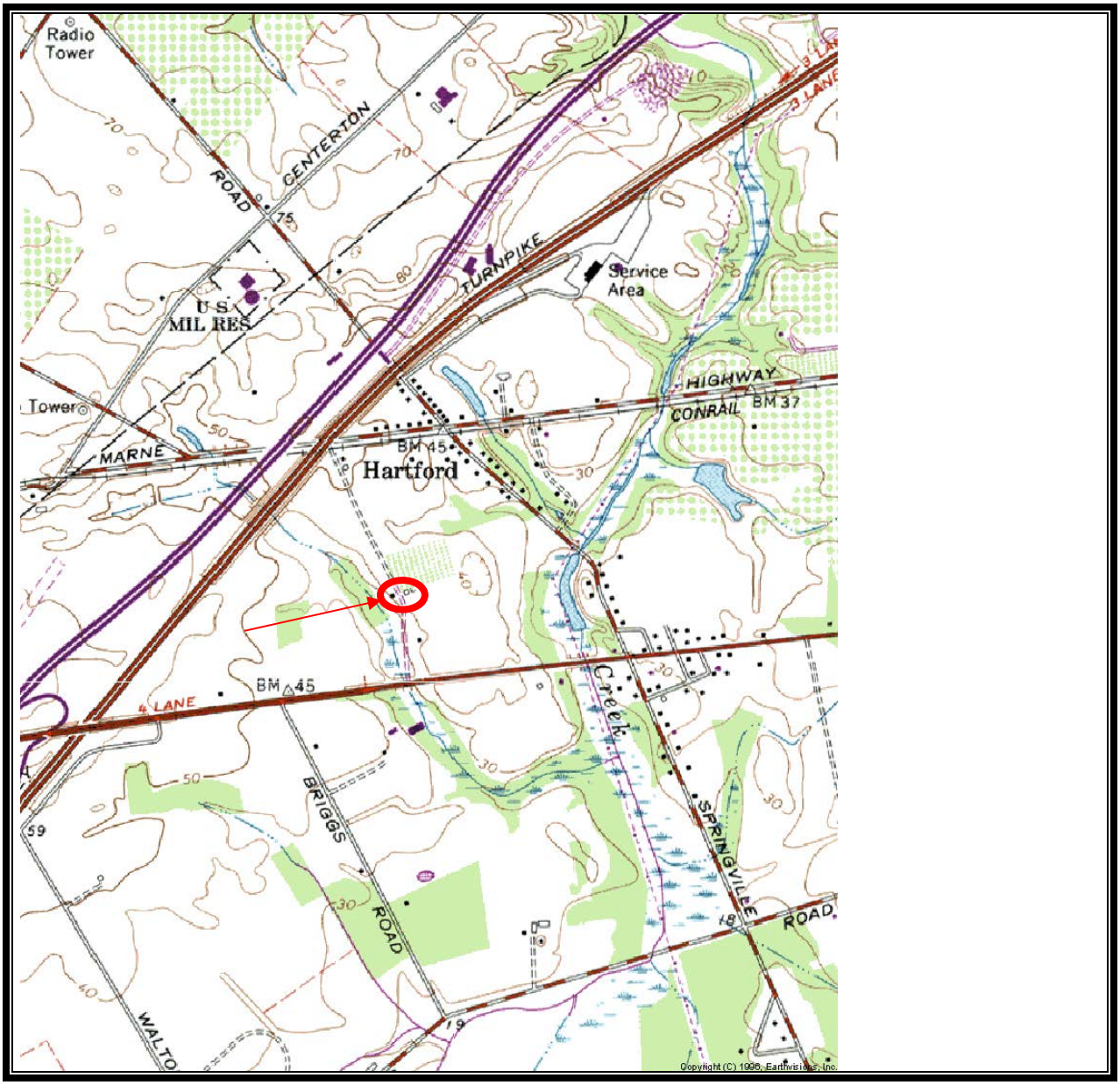
Collections:

	Name	Date	Collection Stored	Previous Designation
1.	Borton/Ballinger Farmstead		Hunter Research, Inc., Trenton, NJ	

Small Scale Map Showing Site Location:

Using either a USGS map, or an online mapping program, Indicate the location of the site, in relation to the neighboring towns, roads, and rivers. Scale should be approximately 1":1,600'

North

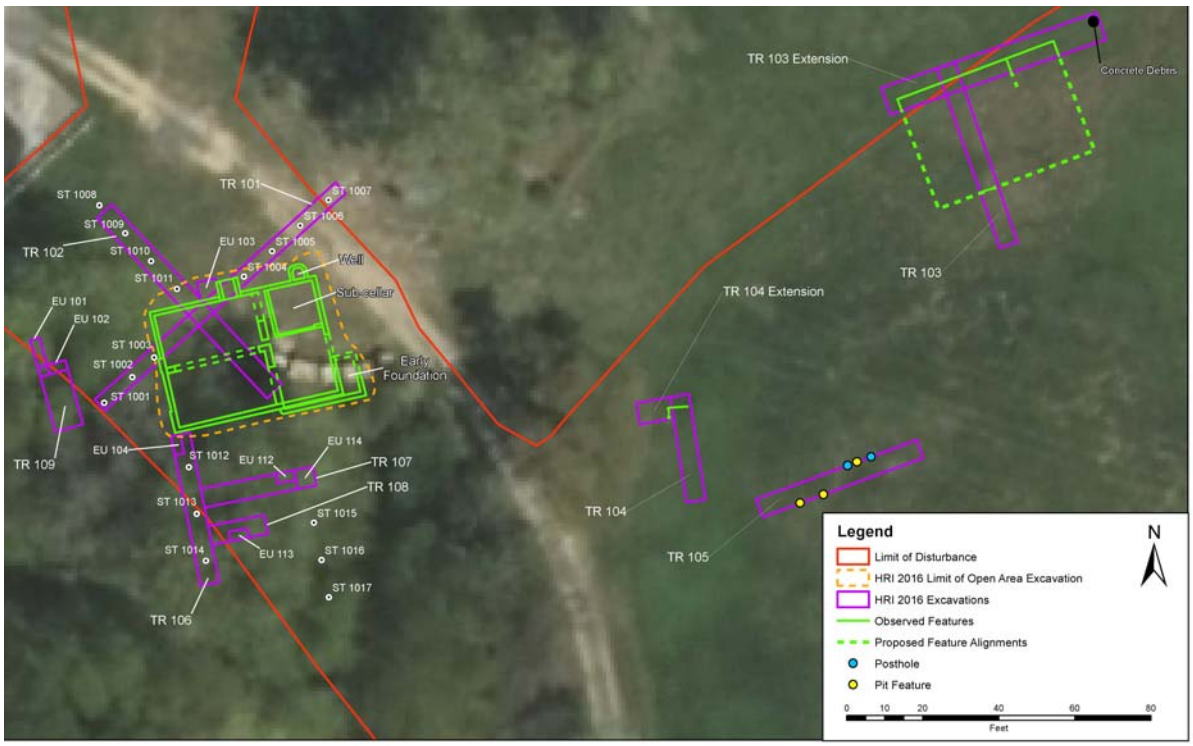


Scale:

Large Scale Map Showing Site Details: (Can be submitted as an attachment)

Indicate the location of shovel test probes, excavation units, and structural features, in relation to the chief topological features, such as streams, buildings and roads. Indicate the site location by enclosing the site area with a dotted line. Include a scale to indicate distance and dimensions.

North



Scale:

Observations, Remarks, or Recommendations:

The Borton/Ballinger Farmstead site is composed of the sites of an 18th- through 20th-c. farmhouse and associated outbuildings and archaeological features such as trash middens, driveways and ornamental plantings. The foundation of the house is of particular interest because of how it illustrates the development of the farm over the course of two centuries. There is a sunken celler in the northeast quarter along with a well that is accessible through the cellar. An earlier foundation is incorporated into the southeast corner of the building. A significant number of 18th- through 20th-c. artifacts were also recovered around the foundation.

Several prehistoric artifacts were also identified in the historic fill material, including an argillite Lackawaxen-type biface, suggesting that human occupation of this location might extend as far back as the end of the Late Archaic period, *circa* 1,000 B.C.

Recorder's Name (Company): James Lee (Hunter Research, Inc.)
Address: 120 W. State St., Trenton, NJ 08608
Phone: (609) 695-0122

Date Recorder at Site: September-October 2016 *Revised 2017*

Appendix D

RESUMES

ERYN C. BOYCE
Architectural Historian/Historian, MS

EDUCATION

M.S., Historic Preservation, University of Pennsylvania, 2015
B.A., History, Hamilton College, 2013

EXPERIENCE

June 2016-present — Architectural Historian/Historian
Hunter Research, Inc., Trenton, New Jersey

Execution of research in support of historic, historic architectural and archaeological studies including:

- review of primary and secondary source materials
- title research
- genealogical investigation
- review of historic cartographic materials
- selected contributions to reports

December 2015-June 2016 — Program Associate
New Jersey Historic Preservation Office, Trenton, New Jersey

- performed Section 106 reviews on above-ground projects.
- determined eligibility of resources
- studied buildings' historic contexts
- evaluated project effects

December 2015-June 2016 — Intern
Heritage Consulting, Inc., Philadelphia, Pennsylvania

- conducted background research
- compiled written reports
- edited grants and strategic plans
- assisted principal during stakeholder meetings.

September 2013-June 2016 — Site Assistant/Interpreter
Fonthill Castle, Doylestown, Pennsylvania

- developed, implemented, and evaluated tours, programs and special events
- led the planning and execution of annual Old-Fashioned Fourth of July event
- assisted with interviewing, training and supervision of volunteers

December 2014-March 2015 — Research Assistant/Teaching Assistant
University of Pennsylvania, Philadelphia, Pennsylvania

- researched literature on identity
- teaching assistant for American Architecture class

May 2014-August 2014 — Property Care Intern
Historic New England, Boston, Massachusetts

- compiled background information Eustis Estate in Milton, MA
- wrote conditions assessment report for Eustis Estate

May 2013-August 2013 — Museum Education/Marketing Intern
Erie Canal Museum, Syracuse, New York

- planned, developed and implemented series of eight family programs
- designed and implemented marketing campaign for family programs

June 2012-August 2012 — Museum Education Intern
Strawberry Banke Museum, Portsmouth, New Hampshire
- developed lesson plans for summer camp activities
- worked at four summer camps and led camp activities

May-Aug 2011
May-Aug 2010 — Intern
Fonthill Castle, Doylestown, Pennsylvania
- gave tours
- developed activities for summer camps and birthday parties

SPECIAL SKILLS
Proficient with Microsoft Office Suite, Adobe Creative Suite and ArcGIS

Richard W. Hunter
PRESIDENT

Patrick Harshbarger
VICE PRESIDENT

James S. Lee
VICE PRESIDENT

Patricia A. Madrigal
VICE PRESIDENT

JOSHUA J. BUTCHKO
Principal Investigator/Laboratory Supervisor, M.A., RPA

EDUCATION

M.A. Public History, Rutgers-The State University of New Jersey, Camden, NJ, 2012

B.A. Anthropology and Classics, Drew University, Madison, NJ, 2003

EXPERIENCE

2012-present Principal Investigator and Laboratory Supervisor
Hunter Research, Inc., Trenton, NJ

Technical and managerial responsibilities for survey, evaluation and mitigation of selected archaeological projects. Technical and managerial responsibility for archaeological collections including laboratory, curatorial, and transport components of all archaeological projects. Responsible for company safety policy, training and development as Company Safety Officer. Participation in:

- overall site direction and day-to-day management of Archaeological Monitoring Programs and Phase I, II and III Archaeological Investigations
- coordination and management of public archaeology programs
- development and implementation of research, excavation and analysis strategies for prehistoric and historic archaeological sites
- report writing and proposal preparation
- management of laboratory operations and supervision of personnel
- preparation and computerization of artifact inventories, data and analysis
- assistance in artifact display assembly

2008-2012 Laboratory Supervisor and Senior Archaeologist
Hunter Research, Inc., Trenton, NJ

Technical and managerial responsibilities for laboratory components of archaeological projects. Participation in:

- management of laboratory operations
- supervision of personnel
- management of field equipment and site logistics
- computerization of artifact data
- historic ceramic analysis
- preparation of artifact inventories
- writing artifact section of reports

2006-2008 Senior Archaeologist
Hunter Research, Inc., Trenton, NJ

Technical and supervisory responsibilities for selected field, laboratory, drafting operations and report preparation. Participation in:

- on-site project management
- survey and excavation
- stratigraphic and artifact analysis
- supervision of personnel
- field photography
- report preparation
- supervision of mechanically assisted excavation
- guidance and instruction at on-site public archaeology service days

2003-2006 Field Assistant
Hunter Research, Inc., Trenton, NJ

Worked on various archaeological field projects in New Jersey, Delaware, New York, Pennsylvania, and Washington, DC. Participation in:

- excavation and survey
- field recording
- laboratory processing of artifacts

2003 Volunteer
Monmouth University Archaeological Field School

Technical and supervisory responsibilities for selected field operations at the Abraham Staats House in Bound Brook, NJ. Participation in:

- survey and excavation
- stratigraphic and artifact analysis

2002 Field Assistant
Drew University Archaeological Field School in Ecuador

Worked at multiple sites in the Los Congrejitos area. Participation in:

- survey and excavation
- stratigraphic and artifact analysis
- field photography
- artifact processing and analysis

SAMPLE OF PRESENTATIONS/PAPERS

Eastern States Archaeological Federation, 81st Annual Conference, Solomons MD, October 2014
Commodore Stockton's Morven Greenhouse: Form and Function c. 1852 to c.1890

Society for Historical Archaeology, 49th Annual Conference, Washington D.C. January 2016
Examining Cemetery Investigations at the First Presbyterian Church of Elizabeth and First Reformed Dutch Church of New Brunswick, New Jersey: A Discussion of Remembrance and Regulation

CERTIFICATIONS

HAZWOPER 40 Hour Certification
HAZWOPER 8 Hour Supervisor Training
HAZWOPER 8 Hour Confined Space Entrant Certification
NJ DEP SHPO 7 Hour CRM Essentials Training Program

AFFILIATIONS

Registered Professional Archaeologist (RPA)
National Council on Public History (NCPH)
Society for Historical Archaeology (SHA)
Archaeological Society of New Jersey (ASNJ)

JAMES S. LEE, III
Principal Investigator, M.A., RPA

EDUCATION

M.A., Archaeology, University of Durham, Durham, United Kingdom, 1996

B.A., Anthropology and History, Rutgers University, New Brunswick, New Jersey, 1995

EXPERIENCE

2001-present Principal Investigator/Report Manager
Hunter Research, Inc., Trenton, NJ

Technical and managerial responsibilities for survey, evaluation and mitigation of selected archaeological projects. Technical and managerial responsibility for report production. Participation in:

- overall site direction and day-to-day management
- development and implementation of research, excavation and analysis strategies for prehistoric and historic archaeological sites
- report and proposal preparation
- supervision of cartographic and GIS product, graphic design and report layout
- hiring and supervision of personnel

2001 Crew Chief
Kittatinny Archaeological Research, Stroudsburg, Pennsylvania

- survey and excavation
- supervision of field personnel
- stratigraphic and artifact analysis

1997-2001 Principal Investigator/Project Manager
Cultural Resource Consulting Group, Highland Park, New Jersey

- overall site direction and day-to-day management
- development and implementation of research, excavation and analysis strategies for prehistoric and historic archaeological sites
- report and proposal preparation
- hiring and supervision of personnel

1997-2000 Laboratory Supervisor
Cultural Resource Consulting Group, Highland Park, New Jersey

Technical and managerial responsibilities for laboratory components of archaeological projects. Participation in:

- management of laboratory operations
- supervision of laboratory personnel
- computerization of artifact data
- prehistoric and historic ceramic analysis
- preparation of artifact inventories and writing of artifact sections of reports

1996-1997 Field Technician
Cultural Resource Consulting Group, Highland Park, New Jersey

SPECIAL SKILLS AND INTERESTS

- canals and associated water control structures
- waterpowered mill sites
- iron manufacture
- prehistory of the northeastern United States
- prehistoric lithic technology
- historic sites interpretation and public outreach

CERTIFICATIONS

OSHA 40-hour Initial Training, 2002
OSHA 8-hour Refresher Course, 2012
OSHA 8-hour Confined Space Entrant Training 2007
Register of Professional Archaeologists

PROFESSIONAL AFFILIATIONS

Society for Industrial Archaeology
Archaeological Society of New Jersey, Recording Secretary
Society for Pennsylvania Archaeology
New York State Archaeological Association
Canal Society of New Jersey
Warren County Morris Canal Committee
Society for Industrial Archeology
Eastern States Archaeological Federation

SELECTED PRESENTATIONS

"Archaeological Investigations at the Tulpehacken Nature Center, Abbott Marshlands, Mercer County, New Jersey." Paper presented to the Archaeological Society of New Jersey, March 21, 2015.

"The Last 100 Years at Morris Canal Plane 9 West." Paper presented to the Canal Society of New Jersey, November 21, 2014 (with James Lee Jr.).

"Ephrata Tract Archaeological Assessment." Paper presented to the Moravian Historical Society, October 20, 2014.

"Archaeological Investigations in the Shadow of the Gap, I-80 Weigh Station Site (28Wa290)." Paper presented to the Society for Pennsylvania Archaeology, Forks of the Delaware Chapter 14. April 3, 2013.

"Exploring the Industrial Archaeological Resources of Waterloo Village." Paper presented to the Canal Society of New Jersey, March 15, 2013 (with Richard W. Hunter).

“Archaeological Investigations at Morris Canal Lock 2 East, Wharton, New Jersey.” Paper presented to the Canal Society of New Jersey, March 16, 2012.

“Delaware and Raritan Canal Lock #1, Hamilton Township, Mercer County, New Jersey.” Paper presented to the Canal Society of New Jersey, December 1, 2010 (with Richard W. Hunter).

“The Archaeological Potential of the Morris Canal.” Paper presented to the Archaeological Society of New Jersey, March 19, 2007.

“Planes and Plans: The Morris Canal in Warren County.” Paper presented to the New Jersey Historic Preservation Conference, April 23, 2004.

Appendix E

NEW JERSEY HISTORIC PRESERVATION OFFICE BIBLIOGRAPHIC ABSTRACT

APPENDIX E

New Jersey Historic Preservation Office
Bibliographic Abstract

HUNTER RESEARCH, INC.

Location:	Rowan College at Burlington, Mount Laurel, Burlington County, NJ
Drainage Basin:	Rancocas Creek
U.S.G.S. Quadrangle:	Moorestown, N.J.
Project:	Phase II Archaeological Field Assessment, Phase III Archaeological Data Recovery and Monitoring, Borton/Ballinger Farm Site, Rowan College at Burlington Campus Expansion Project, Mount Laurel Township, Burlington County, New Jersey
Level of Survey:	II and III
Cultural Resources:	Borton/Ballinger Farmstead site [28-Bu-949]

Appendix F

PROJECT ADMINISTRATIVE DATA

APPENDIX F

Project Administrative Data

HUNTER RESEARCH, INC.
PROJECT SUMMARY

Project Name:	Phase II Archaeological Field Assessment, Phase III Archaeological Data Recovery and Monitoring, Borton/Ballinger Farm Site, Rowan College at Burlington Campus Expansion Project, Mount Laurel Township, Burlington County, New Jersey
Level of Survey:	II and III
HRI Project Reference:	16034
Date of Report:	July 2018
Client:	Taylor Wiseman & Taylor
Prime:	Rowan College
Review Agency:	New Jersey Historic Preservation Office
Agency Reference:	HPO Project No. 16-1567
Artifacts/Records Deposited:	Currently at Hunter Research, Inc., Trenton, NJ. Seeking permanent facility.

PROJECT CHRONOLOGY

Date of Contract Award:	8/8/2016
Notice to Proceed:	8/8/2016
Background Research:	September -December 2016
Fieldwork:	September-October 2016
Analysis:	November 2016 - April 2018
Report Written:	September 2017 - May 2018

PROJECT PERSONNEL

Principal Investigator(s):	Richard Hunter, James Lee, Joshua Butchko
Background Researcher(s):	Eryn Boyce
Field Supervisor(s):	Dorothy Both
Field Assistant(s):	Jordan Price, Evan Mydlowski
Analyst(s):	Joshua Butchko, Dorothy Both
Draftperson(s):	Evan Mydlowski
Report Author(s):	Eryn Boyce, Joshua Butchko, James Lee