

HUNTER RESEARCH

**PHASE II ARCHAEOLOGICAL SURVEY
HENDERSON ROAD/OLD COACH ROAD, NEW
CASTLE COUNTY, DELAWARE
[PARENT AGREEMENT 728, TASKS 728-10, 728-1-5,
728-1-8, 728-1-11, 728-1-12: 92-007-02]**

SUMMARY LETTER REPORT

DELAWARE DEPARTMENT OF TRANSPORTATION

December 11, 1996

**PHASE II ARCHAEOLOGICAL SURVEY
 HENDERSON ROAD/OLD COACH ROAD, NEW CASTLE COUNTY, DELAWARE
 [PARENT AGREEMENT 728, TASKS 728-10, 728-1-5, 728-1-8, 728-1-11,
 728-1-12: 92-007-02]**

SUMMARY LETTER REPORT

A. Introduction

This letter report summarizes work on a series of studies on Henderson Road/Old Coach Road in New Castle County (Figures 1 & 2). While all the work carried out under Task numbers 728-1-8 through 12 will be described together, the task numbers and agreed tasks are summarized in the table below for reference. Background research from the earlier task orders is also incorporated.

Task #	HRI #	Authorization	Tasks	Reports etc.
728-10	95041		Phase I research and testing	10/10/95
728-1-5	96014	2/27/96	Additional historical research	5/6/96
728-1-8	96032	5/21/96	Phase II testing	Evaluation summary 6/30/96. This report
728-1-11	96038	6/24/96	Additional Testing at mill site	This report
728-1-12	96041	7/4/96	Backhoe testing at mill site	This report

This project has involved the investigation and evaluation of significance of several sites within the area of potential effect: the Ward/Little Farmstead Site, the Woodward/Trump/Broadbent/Taylor Textile Mill and Raceway Site, the Taylor/Skelly House Site, and a wheelwright's shop. Other historic sites in the project vicinity were also examined to a lesser degree of detail. The project was undertaken following the completion of a Phase I study which indicated the potential for eligible resources and perhaps a National Register District in the area.

This account is chiefly concerned with the stratigraphic and structural integrity of the sites investigated. Although the artifact catalog from the investigations is complete at this time (and a draft copy attached to this report), no detailed analyses have been undertaken on horizontal and vertical distribution of artifact types or on other research-oriented topics. The large assemblage from different site types clearly has potential to contribute to the study of the sites within their

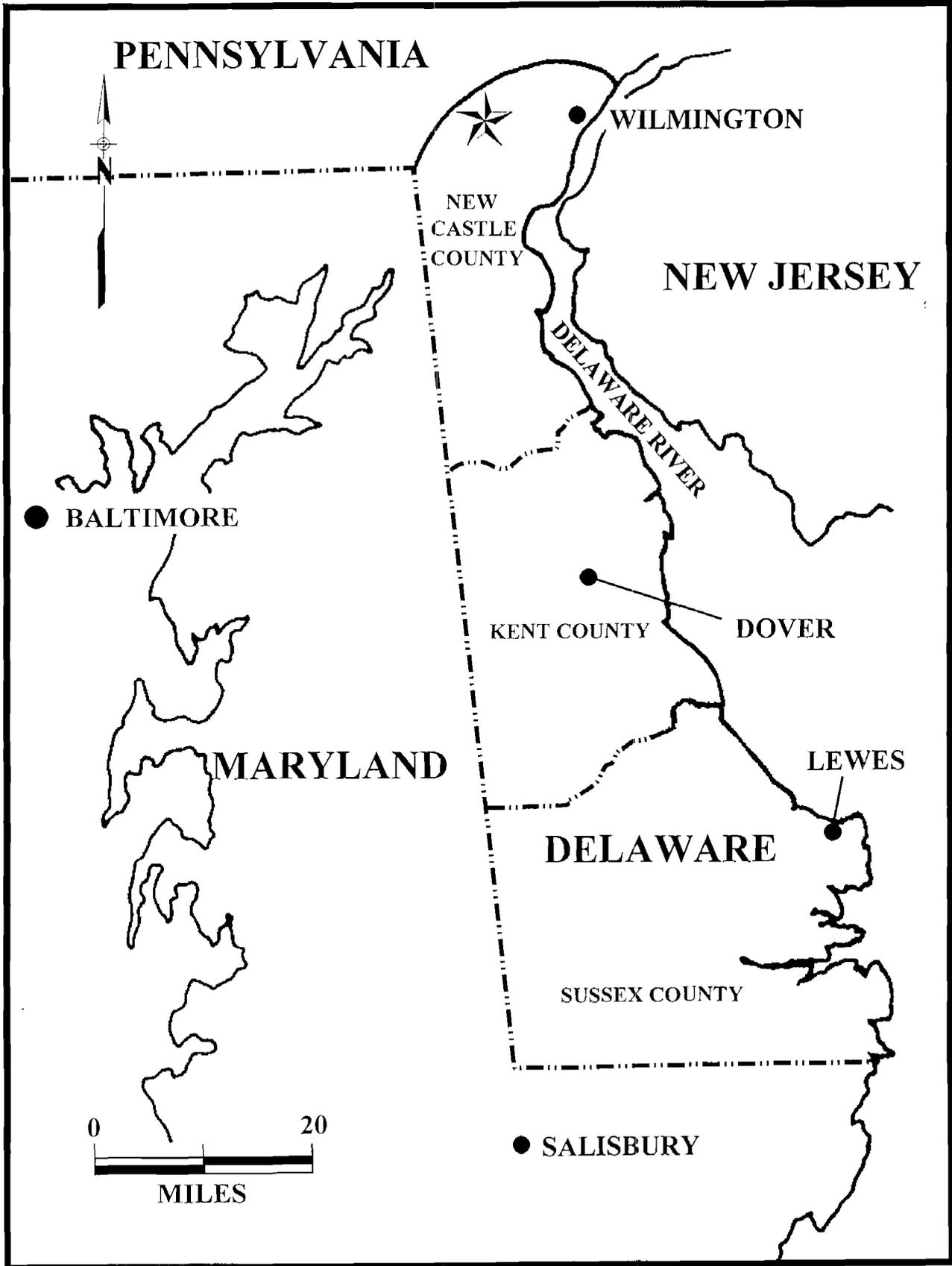


Figure 1. General Location of Project Area (starred).

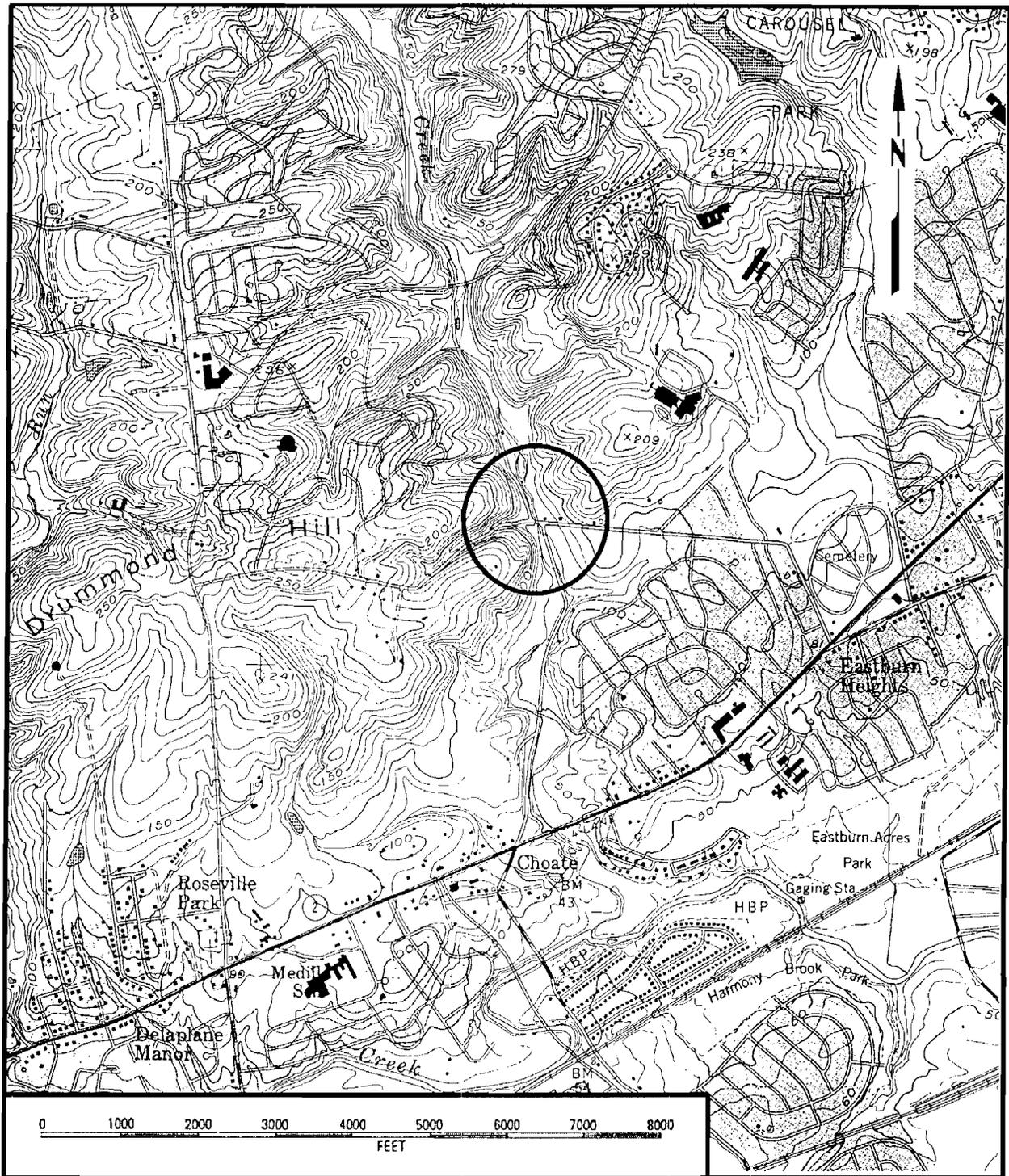


Figure 2. Detailed Location of Project Area (circled). Source: USGS 7.5' Topographic Series, Newark East, Delaware, Quadrangle (1953 [Photorevised 1985]).

historic and geographic context, and are viewed here as an important part of the argument for the significance of the sites.

B. Ward/Little Farmstead Site

1. Historical Summary

The portion of the study area lying along Henderson Road (also known as Old Coach Road) on the west side of Pike Creek was historically part of the Ward/Little Farmstead in Mill Creek Hundred. This property appears to have originated as an 85-acre parcel of land in the early years of the 19th century. In 1814, Jeremiah Springer, who also owned at least one other farm in Mill Creek Hundred, purchased this property from John Ferris for the sum of \$1,518. John Ferris does not appear in the tax assessment of 1804 for Mill Creek Hundred (Scharf 1888:918), so he does not appear to have been residing on this property. The deed of 1814 also makes no mention of any structures on the 85-acre property at the time of this transaction. The tax assessment of 1822 for Mill Creek Hundred lists Jeremiah Springer as owning two properties: the first being a 180-acre farm property with a log house and stone barn; the second being a 65-acre farm with a log house. The second of these properties is believed to be the one located along Pike Creek on Henderson Road. The decennial census data for the period 1800-1840 all list Jeremiah Springer as living in Mill Creek Hundred and as a slave owner. He may have had a tenant living on the property in question. Springer died in 1843 at the age of 80+, leaving his properties as dowry for his three daughters.

By the mid-19th century, the property had come into the hands of Isaac Springer (presumably a close relative of Jeremiah), although there is no evidence that he purchased the farm from any of Jeremiah's daughters. In 1849 Isaac Springer died intestate and the property (now reduced to 25 acres in size) was seized by Lewis C. Justis, Sheriff (New Castle County Orphans Court T-1 524). This document provides the earliest positive evidence of a residence on the property. The farm is listed as being along Old Coach Road and Pike creek in Mill Creek Hundred, and contained 25 acres and a log house. In the following year (1850), the property was sold to Isaac Garret of the City of Philadelphia for the sum of \$525 in partial settlement of the debts of Isaac Springer (New Castle County Deed F-6 112). One year later Garret sold the 25-acre property to Henry Kane, also of Philadelphia, for the sum of \$650 (New Castle County Deed G-6 168).

Henry Kane was the first owner of the property to definitely reside on the property. The tax assessment of 1857 for Mill Creek Hundred lists him as owning a 30-acre farm with a log house, valued at \$750. In 1860 Henry Kane sold the farmstead to James Ward and his wife Eliza for the sum of \$900 (New Castle County Deed K-7 15). The Wards were recent immigrants from Ireland and were listed in the deed as being resident in Philadelphia. The tax assessment of 1862 lists Ward as owning a 25-acre farm with a frame house valued at \$600 (the distinction between "log" and "frame" may, in this instance, be spurious, and may not indicate a rebuilding of the dwelling). In 1868 James Ward sold the 25-acre property to William F. Little for the sum of \$1,800 (New

Castle County Deed T-11 154), but he evidently remained in the area as he is listed in the population census of 1870 as a spoke manufacturer, aged 32. The Beers map of Delaware in 1868 shows the Ward dwelling, while the Baist map of 1893 also shows a spoke mill to the south of the house (then owned by William F. Little). This spoke mill, apparently a water-powered operation, a short distance downstream on the opposite bank of Pike Creek, was most probably the facility owned by Ward.

William F. Little owned the farmstead for 40 years into the early part of the 20th century. In 1888 he also bought a 32-acre tract along the southern border of his property (New Castle County Deed G-14 171). None of the subsequent deeds to this now 58-acre property mention a log or frame house on the original 25-acre property, but do mention a frame house on the second parcel. It should be noted, however, that the 1893 Baist map shows a house on Henderson Road and not further to the south. This frame house was not mentioned when William F. Little purchased the second parcel, suggesting that he may have built a new dwelling on this lot. William Little and his wife, Mary, appear in both the 1870 and 1900 population censuses. He is listed as being a farmer. Three daughters (Maggie, Sarah, and Isabella) and two sons (Washington, and William) are also listed.

The agricultural census of Delaware for 1880 gives the following information about the Little farming operation. William Little was the owner of 21 tilled acres and two acres of meadow. The value of the farm was \$1,500 with equipment being valued at \$800. Livestock comprised four pigs and 23 chickens. The farm had six acres in corn, three acres in wheat, 1/8 of an acre in potatoes, and two acres in apples. Production for the previous year amounted to 150 eggs, 200 bushels of corn, 35 bushels of wheat, and ten bushels of potatoes.

In 1908 Thomas Maclary of Philadelphia purchased the 59-acre property for the sum of \$3,200 (New Castle County Deed C-22 198). The deed mentions the frame house on the second parcel, but makes no mention of the log house or other buildings along Henderson Road. Thomas Maclary sold the entire property to Arthur Maclary and his wife, Martha, in 1912 for the sum of \$4,500 (New Castle County Deed V-23 247). In 1920 they in turn sold the 59 acres to Bernhard Bernhard and his wife, Regina, for the sum of \$5,000. The property remained in the Bernhard family until 1981 when a 21.973-acre parcel containing the nucleus of the original farmstead was sold to the University of Delaware for \$10.

2. Field Investigations (Shovel Tests 116-125, Excavation Units 20-29; Figures 3 and 4)

Investigations at the Ward/Little Farmstead Site were designed to evaluate both the general stratigraphic history of the site and the individual buildings.

Shovel Tests 116 through 125 were placed across the site on a west-east axis (Figure 4). These demonstrated that the B-horizon had been stripped from the barn area, and that the whole area

between the barn and the area north of the house site was covered by a fill level. It seems probable that a phase of cutting and filling preceded the erection of the bank barn and other structures at the western end of the site, and that the material from here was placed to the east. This may reflect a major reorganization of the farm layout.

Excavation Units 23 and 24 were placed in the area north of the house foundation to further investigate this data. These essentially showed a similar sequence to that defined in the tests.

Spring House

Excavation Units 20, 21, and 22 were placed around the northeast corner of the stone foundation of the spring house, which is set into the slope at the eastern side of the site. EU20 uncovered the bedrock on which the springhouse was set, and showed the high water table which enabled the house to function. An active spring was uncovered in the interior, making excavation of EU 21 difficult, although a possible mortar floor laid over brick was identified in the southwest corner of the unit. EU22, on the north exterior, produced similar data to EU20.

House Site

Investigation of the house was confined to detailed mapping of the ruins of the main structure and of the adjacent well. The house foundation appears to be a half-basement structure set into the hillside with a opening to the north (downslope) side. This side may have been frame, as there is not clear sign of a continuous stone wall along this side, and there is insufficient adjacent tumble to indicate its former presence either.

Barn and Outbuilding Complex

Excavation Units 25 through 29 were excavated here in an attempt to elucidate the functions and dates of the complex. Two distinct sets of alignment are apparent on the site plan. The western part of the complex, which appears to include a barn foundation approached from the west by a ramp, is aligned on the former dirt road which ran to the south of the farm. The eastern portion is aligned on the Old Coach Road/Henderson Road. It is tempting to regard these different alignments as indicative of different dates for the two parts of the complex.

Excavation Unit 29, on the south face of the north wall of the bank barn, located a builders' trench for the barn wall cut into the subsoil. The fill of the trench contained only undiagnostic iron fragments, and was sealed by a fill layer containing modern trash.

The four excavation units around the eastern component (EU's 25-28) showed that the foundations were deeply set into a substantial builders' trench, with a change in construction technique to more cosmetically-laid stone at the ground level contemporary with construction (about 30 cm/12 in. below present grade). Artifacts from the trench indicate a date in the late 1800's or later for construction of the building. In Excavation Unit 27, the builders' trench appears to cut through an earlier historic cultural level, perhaps a pit fill.

The evidence from the different portions of the complex may suggest that the bank barn portion is the earlier of the two, subsequently having much of its stratigraphy removed in the cut and fill episode revealed in the shovel testing program. The identification of an earlier feature in EU 27 may support the contention.

3. Evaluation

Overall, the Ward/Little Farmstead Site appears to retain considerable archaeological and even visual integrity, the grouping of spring-house, house, and outbuildings being well contained by the topography of the site. The archaeological data indicates specific and identifiable changes in the site, and at least two phases of layout are suggested by the evidence.

On this basis it is suggested that the Ward/Little Farmstead site is a significant resource eligible under Criterion D.

4. Assessment of Impact

The currently available construction information suggests that most of the barn complex and yard along Henderson road will be adversely affected, and some impact on the spring house area is also anticipated. The House site will not be affected directly. Overall, however, the effect on the integrity of the site as a whole will be severe, and any data recovery operations undertaken to enable a determination of No Adverse Effect to be made should address the whole defined area of the site and not just the immediate impact area.

C. Woodward/Trump/Broadbent/Taylor Textile Mill and Raceway Site

1. Historical Summary

The property along the south side of Henderson Road on the east side of Pike Creek experienced a variety of land uses from the late 18th through the mid-20th centuries: first as undeveloped land, second as the site of a series of mills, and third as part of a farmstead.

The property originated as a 61-acre parcel sold by Samuel Young in 1768 to John Buckingham for 205 pounds (New Castle County Deed Y-1 503). In 1773, Joseph Phillips purchased the property for 295 pounds (New Castle County Deed B-2 22). Phillips is listed as being a blacksmith in the deed, and also appears in the 1800 census as living in Mill Creek Hundred. The location of Phillips' shop is uncertain, but it may correspond to the later blacksmith shop site shown on late 19th-century maps on the south side of Henderson Road, just east of the study area. In 1801, James Thompson bought the property for "100 pounds of gold or silver money and not any other paper money" (New Castle County Deed X-2 197). Thompson is included in the tax list of 1804 for Mill Creek Hundred (Scharf 1888:918), but no record has been found of his subsequently selling the property. In 1815, George Woodward purchased the property from John Phillips (New Castle County Deed W-3 73), perhaps suggesting that it reverted to the Phillips

family because of some irregularity in the conveyance to Thompson or because of Thompson's financial insolvency. None of the deeds for this time period (1768-1815) make any mention of buildings located on the property.

In 1819 Jesse Trump, Jr. bought the 61-acre property for the sum of \$4,350 (New Castle County Deed W-3, pg. 141). The deed is for the land and a merchant mill, indicating that a water-powered industrial facility was probably put into operation by George Woodward sometime late in the second decade of the 19th century. Jesse Trump is referenced as having a gristmill in Marshaltown around this time and also a cotton factory in Mill Creek Hundred in 1824 (Scharf 1888:923, 924). He was also involved in numerous mortgage arrangements, some presumably pertaining to mills, between 1810 and 1824, the year of his death. The mill on Pike Creek is thus thought to be a cotton factory, whose origins conform with the burst of water-powered textile milling activity that occurred along the eastern seaboard late in the first quarter of the 19th century in concert with the emergence of a domestic clothing industry.

In his will, Jesse Trump left whatever property that remained after settling his debts to his wife, Maria K. Trump. Sometime after the death of Jesse Trump, his widow married Samuel Laird. In 1841, their property was seized by Washington Moore, Sheriff to pay debts, perhaps in part incurred by an unsuccessful cotton manufacturing venture that would have been faced with strong competition from large urban textile mills. The 61 acres of land, the merchant mill, factory and dwelling house were sold for the sum of \$3,000 to a Calvin Taggart (New Castle County Deed H-5 487).

The property was next sold in 1843 to Stephen Broadbent for the sum of \$3,500. Three references have been found to Broadbent owning a carpet factory on this property in Mill Creek Hundred. The factory is depicted on the Rea & Price map of New Castle County in 1849. The site is given as being about 1,000 feet east of the intersection of Pike Creek Road and Henderson Road, which would place it near the site of the later Taylor/Welsh house. The other two references relate that Broadbent moved his carpet factory from Brandywine Hundred to Mill Creek Hundred in 1842 and that James Broadbent was operating a carpet factory on the site of the old Jesse Trump cotton factory (Scharf 1888:923, 925). In 1845, Stephen Broadbent also purchased a 1.8-acre property adjoining the 60 acres; from this point on, this smaller property is attached to most later deeds.

In 1853, the two parcels of land containing the merchant mill, factory, and dwelling house were seized by William Lynham to pay for the debts of Stephen Broadbent and were sold to Yeaman Gillingham of Philadelphia. Gillingham paid \$1,500 for the two parcels of land (New Castle County Deed N-6 27). Later in the same year he sold the two parcels of land to James H. Taylor of Mill Creek Hundred for the sum of \$4,500 (New Castle County Deed O-6 72). The Beers map of 1868 shows two houses on the property along Henderson Road belonging to J.H. Taylor, the easternmost of which is located east of (and outside) the study area. The map also shows two

buildings on the south side of Henderson Road which are labeled as a "Woolen Mill." The woolen mill is referenced as being operated on the same site as the Broadbent carpet factory (Scharf 1888:923). In 1869, Taylor sold the land, merchant mill, factory and dwelling house to Wilson Welsh for the sum of \$7,000 (New Castle County Deed A-9 273). The industrial census for the following year lists James H. Taylor as the owner of a large jeans factory in the town of Stanton, which may indicate that he moved his textile business to this latter settlement following the sale of his Pike Creek property to Welsh.

Wilson Welsh, identified as a farmer at the time he purchased the Taylor property, appears in both the population and agricultural censuses for 1870 in Mill Creek Hundred. He and his wife, Sarah, are listed as being 31 years old and having two children. The agricultural census shows them farming a 62-acre farm valued at \$8,000. Livestock are listed as two horses, one mule, five milking cows and one pig valued at \$760. Production from the previous year was given as 100 bushels of wheat, 350 bushels of corn, 300 bushels of oats, 50 bushels of potatoes, 200 pounds of butter and six tons of hay. The census data would appear to confirm that the textile mill went out of operation in the late 1860s.

In 1873, Wilson Welsh sold the farm to his brother, Lewis, and Lewis's wife, Susan L. Welsh for the sum of \$8,000 (New Castle County Deed E-10 388). In 1877, Lewis Welsh died and the distribution of his estate was settled in the county orphan's court (New Castle County Orphans Court O-2 423). The property was divided into two main parcels: a 25-acre property that was given to his widow, Susan, as a dower; and the remainder which was divided amongst the many heirs of Lewis Welsh. The first parcel contained the Taylor/Welsh House, which, based on the Baist map of 1893, appears to be located outside the project area. The second parcel was eventually sold to Wilson Welsh by the various heirs for the sum of \$1,400 (New Castle County Deed V-10 73). The 25-acre Susan Welsh property also contained the blacksmith shop, and possibly the wheelwright shop, shown on the Baist map. The agricultural census of 1880 listed Susan Welsh as running a 25-acre farm valued at \$3,000. Her property remained as a farm throughout the 20th century until being sold in 1986 for a housing development. The Taylor/Welsh house still stands.

In 1879, James Skelly purchased the property of Wilson Welsh along Pike Creek for the sum of \$1,800 (New Castle County Deed H-11 516). The deed references two parcels of land: an 11-acre parcel containing the Taylor/Skelly house (identified on the 1893 Baist map as being the westernmost of two buildings owned by "Jas. Scully"); and a 1.1-acre parcel. James Skelly owned various other properties to the north along Pike Creek and it is possible that he may even have tried to reactivate the old textile mill. In 1899, Skelly sold the two parcels to Joseph H. Mitchell for \$1,000 (New Castle County Deed Y-17 314). Mitchell is listed in the census of 1900 as being a 54-year old blacksmith, with wife Ann age 37 and three children. He may well have worked at the blacksmith shop across the street, just east of the study area.

The Mitchell-owned properties were then sold to Florence N. Little in 1906 for the sum of \$1,200 (New Castle County Deed B-21 140). Florence Little was the widow of Washington Little, son of William F. Little. After her death in 1917, the properties were sold to Thomas Samworth of Philadelphia for the sum of \$1,462.50 (New Castle County Deed C-27 339). In 1919, he sold the two parcels to Luther Cloud and his wife, Elizabeth, for the sum of \$1,500 (New Castle County Deed M-28 530). The properties remained in the Cloud family until being sold for development in 1987.

2. Field Investigations (Shovel Tests 100-115; Excavation Units 1,2, 8-19; Backhoe Test Trenches 1, 2 and 3; Figures 3 and 5)

The sequence of field investigations undertaken along the south side of Henderson road east of Pike Creek Road has been designed to locate and evaluate features relating to the mill phase of c. 1815-1868, and the subsequent farm/wheelwright/blacksmithing phase. The general location of the mill features was indicated by the historic maps and the sluice structure located on the north side of Henderson Road east of the Taylor-Scully house foundation. This latter feature was assumed to be on the alignment of the headrace leading from a millpond to the north, shown in various configurations on the historic maps.

Investigations commenced with the excavation of 16 shovel tests (ST100 - 115) in a line about three meters (10 feet south of an parallel to the south side of Henderson Road. These provided some pointers to the placement of a series of Excavation Units. These commenced with Excavation Units 1 and 2, and was subsequently completed with the excavation of units 8 through 19. Backhoe trenches 1 through 3 were then opened, and in Test Trench 2 four exploratory test units (A-D) were manually excavated to examine exposed features in more detail.

Excavation Unit 1 produced evidence of modern disturbed soils and it was determined that the western part of the area towards Pike Creek Road had limited archaeological potential.

EU2 encountered the interior angle of a substantial stone wall feature aligned WSW-ENE and NNW-SSE, on the north side of which was a trench cut into the subsoil and filled by a sandy clay. The substantial nature of these features suggested that they were related to some part of a waterpower system, and a series of units (8-19) were opened in the same general area. With the exception of EU's 9 and 10, which were close to the road and produced evidence only for the placement of modern utility poles and road-related disturbances, all these units showed evidence for substantial, if still not fully understood, features probably relating to the mill complex.

Excavation Unit 8, immediately north of EU2, located a second stone wall parallel to that in EU 2, and separated from it by a possible channel about one meter wide, filled with a mixed deposit including concrete fragments and stone rubble. The wall may have been free-standing at one time, as a construction cut into the subsoil was found at the base of its southern face. alternatively, the

contexts above this level may have been placed against the wall immediately after its construction.

Similar features, on the same general alignment, were located in the area to the east, examined as EUs 11, 14, 17, and 19, and Test Trench 3. In EU11/14 two stone walls were located, that to the north possibly later than that to the south. The southern wall (EU11, context 4) was characterized by a steeply-battered southern face, possibly the north side of a raceway. The configuration of this wall was confirmed in the machine excavation of Test Trench 3.

Excavation Units 17 and 19 encountered another substantial wall (EU19 context 8) with clayey silt fill on its western side, and possibly forming the southern/southeastern side of a raceway channel, as shown on Figure 5.

To the west of EU's 2 and 8 additional stone wall features were located in the contiguous excavation units 12, 13, 16 and 18. A substantial north-south stone wall (EU13, context 7), with a well-defined construction trench on its eastern side, was abutted by a slightly less-substantial granite wall (EU16 context 9, EU18, context 10) describing a gentle arc westward from EU13 context 17. A short distance to the west the stone masonry was replaced by brick (EU18, Context, tending in the same direction.

Backhoe Test Trench 2 was opened to the west of these units in order to trace the supposed continuation of the raceway or other waterpower and mill features. The trench identified a cut (4), filled with a micaceous clay silt, which extended west for over 20 meters (65 feet), apparently turning south at each end. This feature was investigated through four hand excavations (A through D). Substantial stone foundations were encountered in A, B, and D, and rubble in C.

A tentative interpretation of all these features may be attempted, although it must be acknowledged that the connections between the various structural components have not been confirmed. The possible layout of the complex is indicated on Figure 5, and interprets the features in the order in which they would be encountered travelling down the raceway.

It is assumed that the modified sluice and channel arrangement on the north side of Henderson Road to the east of the Taylor-Skelly House Site represents the raceway channel at at least one stage of the mill complex's history. This clearly runs southwards beneath the road, where the walls encountered in EU17/19 and EU11/14 are here interpreted as the east and west sides of the raceway channel, which is here turning to the southwest and may be widening out into a penstock pond area above the wheel and power-train structures. There is some complexity on the northern side of the raceway, represented by wall 3 in EU11 and the walling in EU2 to the west. These structures may be secondary to the main raceway, and together with the features in EU12/13/16/18 may represent a structure to the east of the main mill building, perhaps related to improvements in the waterpower system. They could also represent the foundations of the eastern of the two buildings marked as "woolen mill" on the 1868 Beers Map. Only one building

is apparently shown on the 1849 Rea and Price Map, and this may support the conclusion from the archaeological evidence. The installation of turbines might be anticipated in the period after the Civil War, and this technology might provide one explanation for these features.

To the west of these foundations, the evidence from Backhoe Test Trench 2 suggests that the north wall of a building about 65 feet long and of an unknown width lay in this area. The disposition of the other features to the east suggests strongly that this is the main mill/factory building.

3. Evaluation

Although baffling in detail, the broad picture from the investigations is reasonably clear. A raceway system drawing water off Pike Creek some distance north of the project area crosses Henderson Road and is contained within massive stone channel walls which turn west-southwest along the south side of the road. At least two phases or systems of channels are present. Two structures, the western probably the main mill building and the eastern perhaps related to the powertrain system, lie downstream from the defined raceway channels. The tailrace continues southwards and appears to have powered a gristmill and spoke mill, both out of the defined project area.

The site appears to show considerable integrity in its waterpower system. It is an example of an early rural textile operation, evidently built shortly after 1815 and ceasing to function after the Civil War. It seems capable of providing significant information on this class of site in northern Delaware and is therefore considered to be significant and to meet National Register eligibility Criterion D.

4. Assessment of Impact

The currently available construction information suggests that the raceway features and northern portion of the hypothesized mill building along Henderson Road will be adversely affected. The extent of the site to the south is unclear and lies on developed property. Data recovery plans to enable a determination of No Adverse Effect to be made can be confined to the immediate impact area.

D. Taylor/Skelly House Site

1. Historical Summary

In 1869, Taylor sold the land, merchant mill, factory and dwelling house to Wilson Welsh for the sum of \$7,000 (New Castle County Deed A-9 273). The industrial census for the following year lists James H. Taylor as the owner of a large jeans factory in the town of Stanton, which may indicate that he moved his textile business to this latter settlement following the sale of his Pike Creek property to Welsh.

Wilson Welsh, identified as a farmer at the time he purchased the Taylor property, appears in both

the population and agricultural censuses for 1870 in Mill Creek Hundred. He and his wife, Sarah, are listed as being 31 years old and having two children. The agricultural census shows them farming a 62-acre farm valued at \$8,000. Livestock are listed as two horses, one mule, five milking cows and one pig valued at \$760. Production from the previous year was given as 100 bushels of wheat, 350 bushels of corn, 300 bushels of oats, 50 bushels of potatoes, 200 pounds of butter and six tons of hay. The census data would appear to confirm that the textile mill went out of operation in the late 1860s.

In 1873, Wilson Welsh sold the farm to his brother, Lewis, and Lewis's wife, Susan L. Welsh for the sum of \$8,000 (New Castle County Deed E-10 388). In 1877, Lewis Welsh died and the distribution of his estate was settled in the county orphan's court (New Castle County Orphans Court O-2 423). The property was divided into two main parcels: a 25-acre property that was given to his widow, Susan, as a dower; and the remainder which was divided amongst the many heirs of Lewis Welsh. The first parcel contained the Taylor/Welsh House, which, based on the Baist map of 1893, appears to be located outside the project area. The second parcel was eventually sold to Wilson Welsh by the various heirs for the sum of \$1,400 (New Castle County Deed V-10 73). The 25-acre Susan Welsh property also contained the blacksmith shop, and possibly the wheelwright shop, shown on the Baist map. The agricultural census of 1880 listed Susan Welsh as running a 25-acre farm valued at \$3,000. Her property remained as a farm throughout the 20th century until being sold in 1986 for a housing development. The Taylor/Welsh house still stands.

In 1879, James Skelly purchased the property of Wilson Welsh along Pike Creek for the sum of \$1,800 (New Castle County Deed H-11 516). The deed references two parcels of land: an 11-acre parcel containing the Taylor/Skelly house (identified on the 1893 Baist map as being the westernmost of two buildings owned by "Jas. Scully"); and a 1.1-acre parcel. James Skelly owned various other properties to the north along Pike Creek and it is possible that he may even have tried to reactivate the old textile mill. In 1899, Skelly sold the two parcels to Joseph H. Mitchell for \$1,000 (New Castle County Deed Y-17 314). Mitchell is listed in the census of 1900 as being a 54-year old blacksmith, with wife Ann age 37 and three children. He may well have worked at the blacksmith shop across the street, just east of the study area.

The Mitchell-owned properties were then sold to Florence N. Little in 1906 for the sum of \$1,200 (New Castle County Deed B-21 140). Florence Little was the widow of Washington Little, son of William F. Little. After her death in 1917, the properties were sold to Thomas Samworth of Philadelphia for the sum of \$1,462.50 (New Castle County Deed C-27 339). In 1919, he sold the two parcels to Luther Cloud and his wife, Elizabeth, for the sum of \$1,500 (New Castle County Deed M-28 530). The properties remained in the Cloud family until being sold for development in 1987.

2. Field Investigations (Excavation Units 3-7)

The five excavation units were spaced between two foundations, the eastern of which had been identified in the Phase I survey as the Taylor-Welsh House and the western as the Taylor-Scully House. It now seems clear that the western structure is a 20th-century garage for the eastern foundation, which is the Taylor-Scully House. A stone-lined well set within a concrete foundation lies immediately southwest of the house foundation, and vegetational changes link the house and garage foundations. The garage foundation is of cinder-block and brick.

Excavation Unit 3, adjacent to the well structure, located a historic post-hole sealed beneath a clay-silt level. Excavation Units 4 and 6 showed simple stratigraphic profiles with colluvial wash. Excavation Unit 5 produced a post-hole similar to that in EU3, suggesting the presence of a fence along the south side of the property. Excavation Unit 7, south of the garage, had shallow stratigraphy and a concrete mass, with a concrete pad on the east side.

3. Evaluation

Although the substantial remains of the foundation of the 19th-century house remain, together with other landscape features, the below-ground stratigraphy in the potential area of effect close to the road does not indicate that significant information is retained here. The presence of a fence can be inferred from the two post-holes, but this is not an exceptional or important feature.

4. Assessment of Impact

Resources along the road frontage may be impacted, but in view of the evaluation above this would not comprise an adverse effect.

E. Wheelwright Shop Site

1. Historical Summary

In 1877, Lewis Welsh died and the distribution of his estate was settled in the county orphan's court (New Castle County Orphans Court O-2 423). The property was divided into two main parcels: a 25-acre property that was given to his widow, Susan, as a dower; and the remainder which was divided amongst the many heirs of Lewis Welsh. The 25-acre Susan Welsh property contained the blacksmith shop, and possibly the wheelwright shop, shown on the 1893 Baist map.

2. Field Investigations (Backhoe Test Trench 1?)

Backhoe Test Trench 1 encountered an area of ash concentration about 20 meters (65 feet) east of the sluice structure probably representing the headrace for the mill. The feature was not examined in detail, but may represent debris from the wheelwright shop area.

3. Evaluation

No definitive evaluation of the wheelwright shop site can be offered at this point. Clearly some evidence relating to the structure may be represented by the ash pit deposit in Backhoe Test Trench 1. It may be considered as part of a District (see below): possibly as a contributing but

not individually significant resource.

4. Assessment of Impact

The identified features lies within the right-of-way and would be impacted by road widening.

F. Other Resources in the Project Vicinity

During the course of the project, limited field inspection and mapping was undertaken to identify resources shown on the historic maps. These resources comprise the probable house foundation of William Little, which he appears to have built after 1888 (see above); a mill ruin, raceway and associated house on the east side of Pike Creek, and the R. Taylor House on Upper Pike Creek Road to the north of the project area. The approximate locations of these features are shown on Figure 6.

1. The William Little House Site

The stone foundations of a house, about 6 meters (20 feet) square were located on the west side of Pike Creek about 750 feet south of the main Ward/Little Farmstead site. A fireplace was observed in the north wall. The location of the building suggests that it may be William Little's House, although the identification of pearlware in the adjacent trash dump to the north-northeast may suggest an earlier occupation here. It should also be noted that the 1893 Baist map shows the Little residence at the same location as the earlier Ward house on Henderson Road. A stone-lined well lies about 4 meters (13 feet) northeast of the house foundation.

2. Mill Ruin and House

A small stone building, now used as a shed, lies close to Pike Creek on the east side of Lower Pike Creek Road. A large iron pipe runs from the building towards the stream. The adjacent house uses a millstone as a step, indicating that gristmilling was taking place nearby. A gristmill is shown close to this location on the Rea and Price Map of 1849, and somewhat to the northeast on the Beers 1868 map. By 1893 the spoke mill, operated by James Ward in the 1870's and owned by William little in 1893, is shown in the area of the earlier grist mill. It is a reasonable hypothesis that the spoke mill succeeded the grist mill at the same location.

3. Raceway

Traces of the headrace north of Henderson road were followed for some distance upstream. This channel does not appear to correspond with the channels indicated on the historic maps. The alignment of the tailrace from the textile mill (which probably served as the headrace for the grist and spoke mill) can be traced in part southwards to the grist and spoke mill site.

4. The Robert Taylor House

This house, about 1200 feet north of the Henderson Road/Pike Creek Road Intersection, lies between Upper Pike Creek Road and Pike Creek. Rapid visual inspection suggests the possibility that this may also have been a mill.

G. Conclusions and Recommendations

The investigations so far undertaken have located two resources which are considered to be individually eligible for the National Register under Criterion D: the Ward/Little Farmstead Site [7NC-D-203] and the Woodward/Trump/Broadbent/Taylor Textile Mill and Raceway Site [7NC-D-202]. These resources both show a considerable degree of subsurface and (in the case of Ward/Little) above-ground integrity. The Ward/Little site appears to be a good example of an Agricultural Complex, and shows changes through time which can be understood through archaeological techniques. The mill complex clearly has substantial and probably multi-phase waterpower systems and structures below ground, and these features may contain important technological information. The Taylor-Skelly House Site [7-NC-D201] is not considered individually eligible because of the degree of 20th-century disturbance and slopewash identified in the survey. Insufficient information is available on the Wheelwright Shop Site to make an assessment of integrity or evaluation of significance. Other resources have been identified in the project vicinity, but these were outside the project limits and have been subjected to very limited inspection, chiefly with the intention of assessing their historical and geographic affinity with the sites under investigation.

The identified resources in the project area can be related to the State of Delaware Historic Context structure as shown on the following table.

SITE COMPONENTS AND THEIR POTENTIAL CONTRIBUTION TO HISTORIC CONTEXTS AND THEMES				
	CHRONOLOGICAL PERIOD AND THEME			COMMENTS
HISTORIC THEME	1770-1830 ± Early industrialization	1830-1880 ± Industrialization & Early Urbanization	1880-1930 ± Early Urbanization and Early Suburbanization	
Agriculture	Ward-Little FSS	Ward-Little FSS Taylor-Skelly HS	Ward-Little FSS	
Manufacturing	Woodward/ Trump/ Broadbent/ Taylor Textile Mill	Woodward/ Trump/ Broadbent/ Taylor Textile Mill		Mill out of use 1860's
Transport and Communication			Wheelwright Shop	Blacksmith shop also: along road
Settlement Patterns/Demographic Changes			Taylor-Skelly HS	House site not agricultural at this time

It can be seen from this presentation that the Ward-Little Site is pertinent to three of the contexts, and the mill complex to two (the mill falling out of use in the third quarter of the 19th century). It could be argued that the Taylor-Skelly site is an example of early suburbanization, as it does not appear to be the center of farming activity at the end of the 19th-century. This argument is not very compelling, given the absence of other similar developments nearby.

During the course of the project the question of whether these resources should be viewed as a Historic District, either on their own or grouped with adjacent or related resources, was raised informally on a number of occasions.

A District is defined as “a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development” (*Guidelines for Architectural and Archaeological Surveys in Delaware*. Delaware State Historic Preservation Office, October 1993:2). In order to assess the case for a historic district including the Henderson Road/Pike Creek road resources it may be helpful to break this definition down into its component parts.

Historical/Aesthetic unity

Although the area has a topographic character and sense of enclosure, particularly on the west,

north and south, created by the steep slopes of Pike Creek and the deeply-incised character of the western part of Henderson Road, these characteristics are not in themselves considered aesthetic values pertinent to the historic landscape. It is probable that the attractive wooded character of the western part of the project area is a development of the 20th century and does not reflect the 19th century period of significance of the individual resources.

Historically, the resources studied during this investigation do show some connection. The Ward /Little Farm Site is linked to the spoke mill south of the project area through the ownership of William Little from 1868 to the early 1900's. The other historic linkage identified through historical research is that between the Taylor-Skelly property and the Woodward/Trump/Broadbent/Taylor Textile Mill. From about 1815 to 1869 the property appears to have been predominantly dedicated to manufacturing, with a dwelling house on the north side of Henderson Road and the mill(s) to the south. The census data suggests that after 1869 the property was agricultural, with no manufacturing taking place, although James Skelly may have attempted to revive the cloth operation in the 1880's. Strong and interdependent industrial/agricultural links of the type noted by Heite (1992) for the Wilson's Run area of northern New Castle County are not apparent here in the research completed to date.

Plan/Physical Development

Consideration should be given to the possibility that the Henderson Road/Pike Creek Road was developing into a small hamlet with its own identity during the 19th century. There is certainly a low-density concentration of residential, agricultural and industrial activity at this location. The process is not, however, incremental. The textile mill complex appears to be replaced by the wheelwright shop and blacksmith shop on the south side of Henderson road, and the grist mill to the south is replaced by the spoke mill. The house site on the Ward/Little farmstead is replaced rather than augmented. There are no community facilities, unless the wheelwright and blacksmithing operations are so regarded, and no recorded name for the community.

The major linking component is clearly the waterpower systems on Pike Creek, which seem from the historic maps and field evidence to be quite complex and to have gone through several changes in layout. Of particular interest is the apparent placement of more than one mill seat on the raceway channel on the east side of Pike Creek, which seems to have powered both the textile operation and the grist mill/spoke mill to the south.

A number of pertinent local studies of mills and waterpower have been undertaken (Bruff 1989; Demars and Richards 1980; Heite 1992), and these may provide a basis for comparison with the Henderson Road complex. At the level of research undertaken for the specific purposes of this study there is insufficient data to make a defensible case for the Henderson road complex as a National Register District showing a "significant concentration, linkage, or continuity of sites". In order to come to a determination of this type, more extensive field survey and background research on the Pike Creek drainage would be required, with comparative analysis of other

drainages to develop a more specific historic context. A methodology for such work could be presented in the full Phase II report for this project.

Summary conclusions are therefore:

1. The Ward Little Farmstead Site [7NC-D-203] is considered to be an eligible agricultural complex, meeting Criterion D and contributing to several defined State Historic Contexts by virtue of its integrity, archaeological complexity, and documented history.
2. The Woodward/Trump/Broadbent/Taylor Textile Mill and Raceway Site [7NC-D-202] is also considered eligible under Criterion D, and possibly under Criterion C. The site clearly contains well-preserved and informative waterpower systems, and these, combined with the historical context of the site as an early example of rural textile mill, provide grounds for the determination. If significant technological detail (eg early turbine systems) is found to survive, then Criterion C eligibility would be justified.
3. The Taylor-Skelly House Site [7-NC-D201] has some integrity as an archaeological site, in that foundations are present, but the areas examined through archaeological testing did not contain potentially significant information. The general character and context of this site indicate that it does not merit consideration for eligibility.
4. Insufficient information is available on the wheelwright shop site.
5. Other Resources have been identified outside the immediate project limits, but their significance has not been assessed.
6. More detailed consideration could be given to the definition of a waterpower-related historic district encompassing these resources, and possible similar entities on Pike Creek. Within the constraints of the current project a detailed case cannot be made for a historic district nomination, although the work needed for such an assessment can be specified.

Ian Burrow
Hunter Research Inc.
December 11, 1996

REFERENCES CONSULTED

- Baist, G. W.
1893 Atlas of New Castle County, Delaware . G. William Baist, Philadelphia, Pennsylvania.
- Beers, D. G.
1868 Atlas of the State of Delaware . Pomeroy & Beers, Philadelphia, Pennsylvania.
- Beers, F. W.
1868 Atlas of New Castle County, Delaware . On file, Delaware State Historic Preservation Office, Dover, Delaware.
- Bruff, G. W.
1989 Management Plan for White Clay Creek Mill Sites 1830-1880. On file, Delaware HAHP, Dover, Delaware.
- De Cunzo, L. A.
1992 Delaware Historic Context: The Archaeology of Agriculture and Farm Life, New Castle and Kent Counties, Delaware, 1830-1940. University of Delaware Center for Archaeological Research, Newark, Delaware.
- Demars, K. R., and R. Richards
1980 Mill on the Christiana: A Historic Engineering Study of the Dayett Mill Complex. On file, Delaware BAHP, Dover, Delaware.
- Heite, Edward F.
1992 Mills on Wilson's Run: Archaeological and Historical Phase I and Phase II Surveys in Connection with Intersection Improvements to Roads 92 and 100, Christiana Hundred, New Castle County, Delaware. 1992 Delaware Department of Transportation Archaeological Series 95 (Dover, Delaware). Delaware Department of Transportation.
- Hopkins, G. M.
1881 Map of New Castle County, Delaware . G.M. Hopkins & Company, Philadelphia, Pennsylvania.
- Jicha, H. F. III
1989 Agricultural Buildings and Complexes in Mill Creek Hundred 1800-1860. National Register of Historic places Registration Form. On file, State Historic

Preservation Office, Dover, Delaware.

- N.d. Barns in Mill Creek Hundred, Delaware. On file, Delaware BAHP, Dover, Delaware.
- Matthews, E. D., and A. L. Lavoie
1970 Soil Survey of New Castle County, Delaware . United States Department of Agriculture, Soil Conservation Service, and the Delaware Agriculture Experiment Station, Washington, D.C.
- Michel, J.
1984 A Typology of Delaware Farms, 1850. Paper presented at the Organization of American Historians Annual Meeting, Los Angeles, California.
- 1985 The Regional Organization of Delaware Agriculture, 1849. On file, University of Delaware Center for Archaeological Research, Newark, Delaware.
- New Castle County Courthouse
N.d. New Castle County Orphans Court Records. New Castle County Courthouse, Wilmington, Delaware.
- N.d New Castle County Wills. New Castle County Courthouse, Wilmington, Delaware.
- N.d. New Castle County Deeds. New Castle County Courthouse, Wilmington, Delaware.
- Rea, S. M. , and J. Price
1849 Map of New Castle County, Delaware . Smith & Wistar, Philadelphia, Pennsylvania.
- Scharf, J. T.
1888 History of Delaware 1609-1888 . R. G. Richards and Co. , Philadelphia, Pennsylvania.
- Scholl, M. D.
1993 Cause and (Adverse) Effect: Landscape Change at the Buchanan-Savin Farmstead Circa 1840-1991. Bulletin of the Archaeological Society of Delaware 30:33-42.

Scholl, M. D., and A. G. D. J. Hoseth

1994 Transportation and Agricultural Changes in Blackbird Hundred: Final Archaeological Investigations at the Buchanan-Savin Farmstead, State Route 1 Corridor, Green Spring, New Castle County, Delaware. In Delaware Department of Transportation Archaeology Series No. 106 . Delaware Department of Transportation, Dover, Delaware.

U.S. Coast and Geodetic Survey

C.1885 Topographic Map of New Castle County, Delaware. On file, Historical Society of Delaware, Wilmington, Delaware.

Varle, P. C.

1801 A Map of the State of Delaware and Eastern Shore of Maryland. On file, Delaware State Historic Preservation Office, Dover, Delaware.