

### 3.0 CULTURAL HISTORY AND ARCHAEOLOGICAL SITE CONTEXT

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This section presents the culture historical background for the Phase I investigation. Attention is given to the precontact and historical periods relevant to the project area. A discussion of proximal archaeological sites and investigation results concludes this section.

#### **3.1 Regional Precontact Era Context**

There are currently five generally accepted periods regarding the chronological sequencing of Native American cultures of the Delmarva Peninsula: Paleoindian (13,000 to 6500 B.C.), Archaic (6500 to 3000 B.C.), Woodland I (3000 B.C. to A.D. 1000), Woodland II (A.D. 1000 to 1600), and the Contact Period (A.D. 1600 to 1750). Sites surrounding the APE date to the Paleoindian, Late Archaic, Woodland I, and Woodland II periods.

##### *3.1.1 Paleoindian Period (13,000 to 6500 B.C.)*

The question of human entry in the New World is one of the most fascinating and hotly debated topics in American archaeology today. Although no firm consensus exists concerning the date of initial human settlement of the New World, commonly known as the Paleoindian period, Paleoindian occupation of the southeastern United States is generally recognized to have commenced by ca. 12,000 B.C. (Dent 1995:102; Dincauze 1993; Haynes et al. 1984).

Researchers identified a cluster of Paleoindian fluted point finds designated as the Hughes Early Man Complex of sites in central Kent County, Delaware (7K-E-10; -24; -33). The complex includes six Paleoindian artifact concentrations/surface finds located on well-drained knolls adjacent to a large freshwater swamp and several poorly drained areas (Custer 1989:105). These ecological settings are present north and east of the APE. The majority of the remaining Paleoindian sites in central Delaware and the Mid-Drainage Zone have taken the form of isolated point and tool finds on the surface (Custer 1984, 1989). A single Paleoindian period site (7K-F-125) is located within 2 mi of the APE.

A detailed discussion of Paleoindian mobility and subsistence strategies is not appropriate for this report. It will suffice to remark that competing and sometimes complementary theories about

Paleoindian mobility and subsistence economies are available in many late-twentieth-century works (see Custer 1996; Custer and Stewart 1990; Gardner 1989; Kelly and Todd 1988; McNett 1986; Meltzer 1993; Moeller 1989).

### *3.1.2 Archaic Period (6500 to 3000 B.C.)*

Environmentally, the Archaic period is marked by the gradual emergence of a fully Holocene environment. Warmer and wetter climatic conditions prevailed with the disappearance of grasslands and the expansion of mesic forests of oak and hemlock. Mast foods were provided by the mesic forest, which also attracted small game animals, especially deer and turkey. A marked rise in sea level during the early Holocene had a profound effect on the Delmarva Peninsula. This rise caused lowland flooding and the inundation of river systems, which sped the development of complex estuary systems. Numerous interior swamps were also created. These changes caused a net increase in floral and faunal resources associated with new wetland areas. As the climate grew warmer and plant and animal resources began to inhabit much wider areas, human occupation spread into new settings, and as a result, Archaic period sites are found in a much broader range of topographic settings. A single Late Archaic site (7K-F-147A/B) is located within 2 mi of the APE.

Overall, Archaic period sites within the Mid-Drainage Zone are few in number. One Archaic floodplain site, 7K-C-9, was documented in the St. Jones drainage. Two other Archaic sites, 7K-C-7 and 7K-F-17, represent Archaic sites associated with bay/basin features in the Murderkill drainage. These bay/basin sites represent short-lived hunting and processing occupations (Custer 1989:135). Bay/basin features are present in the APE; thus, there existed the potential for finding Archaic sites during the Phase I investigation.

### *3.1.3 Woodland I (3000 B.C. to A.D. 1000)*

In North American archaeology, the Woodland period is traditionally defined (in neoevolutionary terms) as a “stage” of precontact socio-cultural development marked by the appearance of two horizon markers in the archaeological record: 1) ceramic manufacturing and 2) use of domesticated plants (Willey and Sabloff 1980). These two technological innovations have been deemed significant in that they presuppose greater sedentism with population growth

and increased socioeconomic complexity. (Note: “complexity” might be best understood here as socioeconomic intensification and *not* as “complexity,” which is perhaps more applicable to discussions of political systems).

The Woodland period in the Mid-Atlantic region is frequently characterized as a period of presumed increased sedentism and a gradual shift toward the exploitation of domesticated cultigens (maize, beans, and squash) together with wild grasses such as amaranth and chenopodium. Note, however, that evidence for domesticated plants is sparse on the Delmarva Peninsula and that evidence for increased sedentism is at best tenuous. The Woodland I period data do suggest a greater use of aquatic resources. It is during the Woodland I period that very large macroband base campsites were presumably occupied on year-round basis (Custer 1989). Storage pits and evidence of house structures are first found during this period. Microband base camp sites are the predominant site type identified along river floodplains and estuarine marshes. Seven microband base camps with presumably Barker’s Landing Complex components (7K-F-12, -45, -46, -49, -52, -53, and -55) and one Barker’s Landing Complex macroband site, the Coverdale Site (7K-F-38; located within 2 mi of the APE), were identified along the Murderkill River.

Groups inhabiting the Middle Atlantic region during the Woodland I period appear to have expanded their use of lithic raw materials to include quartz, quartzite, argillite, and rhyolite (Custer 1992; Kinsey 1977; Stewart 1984). Custer (1992:42) suggested that the use of more varied materials reflects a decrease in band territory size. The wide distribution of non-local lithic materials, such as South Mountain rhyolite from south-central Pennsylvania, also suggests the development of long-distance exchange networks. (Note: or perhaps broader local interaction among the groups residing on the Delmarva Peninsula who had access to these sources or to groups with direct access these sources).

Increased social “complexity” is argued to be evident during the Woodland I period. Some researchers believe that the development of a sedentary lifestyle and the control of surplus food resources may have led to the development of ranked societies at this time (Custer 1989). Evidence for this change presumably comes in the form of non-local grave goods that may

indicate mortuary ceremonies, which were being practiced in central Delaware beginning around 500 B.C. and ending around 0 B.C. Known as the Delmarva Adena, this culture period is hallmarked by raw materials and finished items similar to those used by Ohio Valley Adena groups (Custer 1984). The settlement and subsistence patterns 2000 to 1000 years ago (in the later Woodland I period) are reported to have followed those of the earlier Woodland I times.

Altogether, Woodland I artifact assemblages are purported to reflect the intensification of food production concomitant with the development of a more sedentary settlement strategy focused on riverine and estuarine resources (Custer 1984). Mortuary practices incorporating various grave goods, such as carved platform pipes, bone and antler tools, and a variety of projectile points, celts, and pestles are in place during Woodland I as well (Custer 1989:293). Microband base camps of the later Woodland I period were identified in many areas. Locus A (7K-F-163A) of the Soulie Gray Farm, located northeast of Frederica and on the north bank of the Murderkill River, produced a site with possible subsoil pit features (Liebeknecht et al. 1996). Seven microband base camps (7K-F-45, -46, -47, -53, -54, -55, and -56) and one procurement site, 7K-F-48, were identified along the Murderkill River in proximity to Frederica. Components of the later Woodland I period were also excavated at the nearby St. Jones Neck and farther north at the Lums Pond Site (7NC-F-18) (Custer and Hsiao-Silber 1995; Petraglia et al. 1998).

#### *3.1.4 Woodland II (A.D. 1000 to 1600)*

The Woodland II period is associated with the first appearance of the “three sisters” (i.e., maize, beans, and squash) in the Mid-Atlantic region. *Zea mays* (maize) is first dated on the central Delaware River ca. A.D. 900 to 1000 (Stewart 1998:9). Other changes that purportedly mark the Late Woodland period in the greater Delaware Valley include:

- A change in lithic technology with the disappearance of a formal biface industry and use of cobbles for tool manufacture;
- Changes in ceramic production and decoration;
- Changes in settlement pattern; and
- Changes in environmental exploitation.

The horizon markers for the Woodland II period are not found uniformly throughout the Delaware Valley. Although the presence of cultigens is documented in the Delaware River drainage by the end of the first millennium of the common era, the impact of these food sources is unclear. Evidence suggests that food production and village life was not universally adopted in all sections of the river, and in some areas it may not have even been adopted prior to European arrival (Becker 1986). Although there is no consensus among archaeologists, it appears that there was a gradient from south to north of increasing importance of food production among Late Woodland/“village farming” Native American societies in the Delaware River drainage.

In the lower Delaware River drainage, the emergence of sedentary (or semi-sedentary) villages and food production began to appear by A.D. 1000, but cultigens appear to have supplemented rather than supplanted wild plant gathering and hunting, and “few, if any, Woodland II groups ever became fulltime farmers” along the lower Delaware River and Delaware Bay (Custer 1984:147). Some of the largest sites (macroband base camps such as Indian Field and Indian Landing) produced extensive evidence of wild plant gathering rather than domesticates (Custer 1984:163-166). Custer (1984:169-170) believed that food production most likely occurred along tributary rivers to the Delaware Bay south of the Mispillion River. He hypothesized that food production began here because of environmental constraints on maintaining a hunter-gatherer economy in the face of a rising population. The Hughes-Willis Site (7K-D-21), a later Woodland II macroband base camp site located in central Kent County, Delaware, contains floral and faunal remains from the site that suggest an autumn through mid-winter occupation (Thomas et al. 1975). Microband base camps are found more frequently, with site locations corresponding to Woodland I period microband base camp sites. Sites 7K-D-45 and 7K-D-48, identified on St. Jones Neck in Kent County, and the Island Field Site (7K-F-17), contain archaeological deposits associated with temporary hunting sites (Custer 1989:323). Procurement sites are poorly understood but are found, in general, on small ridges adjacent to poorly drained woodland and adjacent to floodplain areas along major drainages. This type of setting is present in the APE.

### *3.1.5 Contact Period (A.D. 1600 to 1750)*

There exists the potential to encounter Contact period sites in the project area (Fithian 2006). The Contact period in Delaware was marked by the establishment of European settlements, initially

along the Delaware River and then later more generally in the hinterland of the Delmarva Peninsula. This precipitated a major disruption in the lives of the Native Americans already living on the peninsula. The European demand for furs affected the indigenous economy; metal and other European goods displaced stone and other traditional materials. The introduction of European diseases and the conflict over control of the fur trade caused catastrophic social and political disruptions to indigenous groups. By the end of the period, traditional lifeways were all but abandoned, and few Native American groups remained in residence on the Delmarva Peninsula. Native American descendants (Lenape and Nanticoke) continue to reside in Delaware.

In the early colonial period, the Refugee Complex became a new period in the experience of Native Americans in Delaware, and it is characterized by the migration west of indigenous people out of areas of European settlement toward areas that remain under Native American influence today (Custer 1984, 1996:315; Kent 1989). Sites of this period/complex are virtually non-existent in Delaware. One possible Refugee Complex site, the Parkway Gravel Site (7NC-G-100), was identified in New Castle County as part of the Route 1 Corridor study (Kellogg et al. 1994). By the mid-1700s, widespread indigenous settlement of the Delmarva Peninsula had almost vanished. The APE and the vicinity contain no known Contact-era or Refugee Complex sites.

### **3.2 Regional Historic Context**

In general, the history of Delaware is divided into five time periods, beginning with exploration of the area and concluding with modern urbanization (DeCunzo and Catts 1990). Specific attention is paid to then historical contexts as they apply to Kent County and particularly to the local area surrounding and including Frederica and the Murderkill River, which are respectively the closest town and most prominent natural feature in the project area. The following discussion has been abstracted from several relevant historical publications, specifically those of DeCunzo and Catts (1990), Hoffecker (1988), Kellogg (1993), Lemon (1972), Munroe (1979), Scharf (1888), and Weslager (1961).

### 3.2.1 *Exploration and Frontier Settlement (1630 to 1730)*

In 1682, settlers residing along the St. Jones Creek obtained the incorporation of St. Jones County, which they soon after renamed as Kent County. The population was spreading rapidly by the mid-1680s, but the Lower Counties (and Kent in particular) received only modest population growth, possessing only 99 tithables in the center county (Scharf 1888:1030). Settlement patterns in Delaware shifted from the closely spaced Dutch and Swedish villages along the Delaware River to scattered farmsteads along internal drainages and along emerging roads. Two major drainages near the project area are the St. Jones and Murderkill creeks. Both the St. Jones and Murderkill were navigable for 30 mi and 20 mi, respectively, from their mouths at the Delaware Bay (Conrad 1908:661).

The word Murderkill first appears on Linstrom's map dating to 1654-5, as *Mordare Kijhlem*, or Murderer Creek. According to Conrad, the first tract of land settled in the area was "Whitewell's Delight," located between the St. Jones and Murderkill creeks at present-day Bowers' Beach (Conrad 1908:661). Francis Whitwell located and settled the tract under a grant from Governor Edmond Andros in 1676. The land was subsequently patented to William Frampton in 1686, as "Dover Peere." These large plantations were typically comprised of a dwelling house and outbuildings, with a surrounding patchwork of farmed fields. Structures present at these plantations included small dwellings built of wood, or, less frequently, brick. The occupant likely maintained large portions of the property in marsh or woodland for livestock forage. Another large tract in the area was that of "Caroone Manor." This actually consisted of two tracts: "Caroone," a 1,200-ac parcel; and "Caroone Manor," which consisted of 800 ac. Joshua Barkstead received a grant for this land between 1683 and 1689 (Conrad 1908). The manor tract contained two villages: Magnolia and Barker's Landing (often referred to as Florence). These communities remain today and are located only 1 to 1.5 mi northwest and northeast of the project area.

Natural waterways often dictated transportation routes in the late seventeenth to early eighteenth centuries in Delaware, as existing roads were few and in poor condition. Water transportation provided a cheaper, more efficient method to transport goods from the remote hinterland to urban markets along the Delaware River. Landings appeared along the banks of the Murderkill

Creek almost immediately following the movement of the first European settlers into the area. One of the earliest established communities in the project area is the town of Frederica. It was originally known as “Johnny Cake Landing” and “Indian Point” (Conrad 1908:664-5). Johnny Cake Landing was but one of many spots along the Murderkill where shipping occurred. The last will and testament of John Curtis, dated April 22, 1698, strongly suggests that “Cedar Landing” was once located at a point along the Murderkill River close to the project area, which lies to the south. No occupations dating to this period are known to exist in the APE.

### *3.2.2 Intensified and Durable Occupation (1730 to 1770)*

Delaware witnessed an increase in population and commercial expansion by the middle of the eighteenth century. Small hamlets located along riverine settings and at crossroads underwent rapid growth. Changing farmstead patterns reflected the development of commercial agriculture. Farming remained the most important economic activity in Delaware during the eighteenth century. This activity accounted for 80 to 90 percent of colonial Delaware’s population (Egnal 1975:201). Wheat constituted the primary crop, followed by rye, corn, barley, oats, and garden vegetables. Many farms also maintained at least one fruit orchard, with apples and peaches predominating.

Land use patterns increased relative to the tillage of a farm’s total acreage. Farmers now cleared lands once reserved as forest or marsh and incorporated these lands into the crop cycle. Farm produce continued to be shipped out to market on the Murderkill. The small ship landing at present-day Frederica gradually grew into a shipbuilding center and homeport for vessels engaged in both coastal and international trade. John Emerson first surveyed the town of Frederica and laid it out in lots during 1772. The town has retained the name Frederica since 1796 and the legislature formally incorporated the community in 1826 (Valle 1984:3). The construction of Schooner-style ships at Frederica began in the mid-eighteenth century (Scharf 1888:1160). No occupations dating to this period are known to exist in the APE.

### *3.2.3 Transformation from Colony to State (1770 to 1830)*

The American Revolution brought much disarray to the region at the beginning of this time period. British activities on the Delaware River and Bay disrupted the maritime economy of the

area, impacting trade. Social and political unrest in the colony during this period further heightened an already tense atmosphere. After the Revolutionary War, the population of Delaware grew rapidly, while its agricultural productivity decreased. The population of Kent County is estimated at 18,920 in 1790 (Munroe 1979). A decrease in soil fertility coupled with competition for good farming land and a decline in wheat prices forced many farmers with small operations to sell off their holdings to larger, wealthier farms. A discernable shift in rural settlement patterns occurred as farms began to move from the older coastal settlements to the upland areas in the middle of the state. Factors such as an improvement in agricultural technology and crop rotation allowed for greater crop yields in these upland fields.

Throughout the eighteenth and early nineteenth centuries, African-Americans were the primary ethnic minority in central Delaware. Most of these individuals served as slaves or were under some form of long-term bonded servitude (Williams 1996). The end of the war brought a major movement to free Delaware's slave population. In 1790, more than one-half of the state's African-American population were in servitude; by 1810, less than one-quarter remained in bondage. The changing status of African-Americans from slaves to free men created an underclass of farm labor that neither owned nor rented farms. Instead, they earned a livelihood by toiling on the farms of others (Zebooker 1996). As agricultural production shifted to industrialization in northern Delaware, the makeup of farm labor also shifted. Free black laborers played an increasing role in farm work. A strong abolitionist sentiment and legislation prohibiting the importation and exportation of slaves, especially in New Castle and Kent counties, encouraged free blacks to settle in Delaware (Kellogg et al. 1994:13).

Many dispossessed farmers left Delaware during the 1820s and 1830s, or sought occupation in the numerous urban and industrial centers where employment was readily available. Manufacturing and commerce prospered under the influence of an increased labor force. In 1825, Lewis and Thomas Lockwood manufactured fur and silk hats in Frederica, providing jobs and income for residents in the vicinity (Coverdale 1976:13). During this period, shipments from the landings along the Murderkill intensified during this period: "Wheat, flour, corn, beef, bacon, staves, cedar shingles, cheese and butter, tar, pitch, boards of walnuts and oak all went North [to Philadelphia]. The lumbering and bark business flourished until about 1857" (Miller 1970:122).

No occupations dating to this period are known to exist in the APE. However, nineteenth-century historic maps (the Byles 1859 and Beers 1868 atlas maps) do show that the APE was occupied at least after the middle of the century. It is possible that a few of these occupations were present later during the late eighteenth and early nineteenth centuries.

### *3.2.4 Industrialization and Capitalization (1830 to 1880)*

The effects of the Industrial Revolution led to advances in transportation, urbanization, and industrialization in northern Delaware. By the early 1830s, a number of transportation improvements were underway. The Chesapeake and Delaware Canal, finished in 1829, opened a direct route from the head of the Chesapeake Bay to the Delaware River, eliminating the long water journey around the Delmarva Peninsula. Realizing that the potential of the state would not be realized without extending a rail line to the south, in 1836 Senator John M. Clayton urged that a company be formed to build a rail line down the center of the state (Hoffecker 1977:46). The venture was ill-timed, and a depression forestalled any construction attempts into the 1840s. The Philadelphia, Wilmington & Baltimore railroad provided the northern terminus of the southern spur named the Delaware Railroad. In 1850, the Delaware Railroad built a north-south rail link from Wilmington through Middletown and Dover.

The port of Frederica continued to expand as a shipbuilding center during the mid- to late nineteenth century, utilizing local white oak and pine. The construction of the Delaware Railroad created an efficient means of overland transportation through the inland portion of the state and also served to divert shipping away from coastal routes, beginning with lumber and bark shipments. Improved highways also began to appear during the mid-nineteenth century, which proved to be more of an advantage to the railroad than to port cities like Frederica. Fiercely protective of its riverine commerce, the Town of Frederica

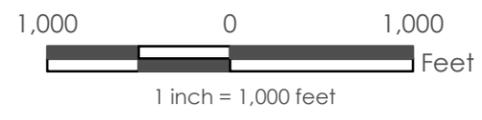
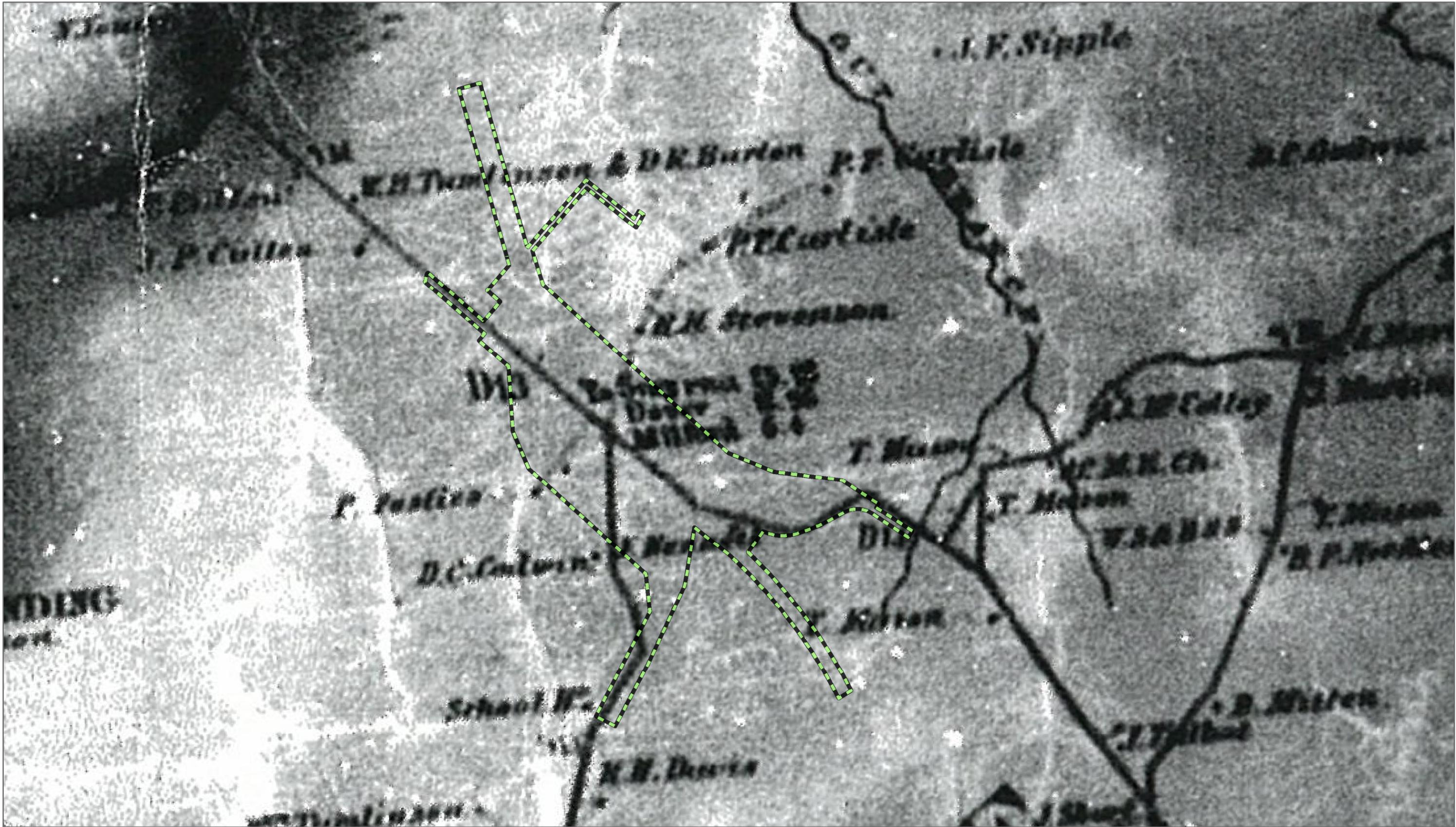
...fought hard to prevent the Delaware Railroad from passing near the town, with the result that growth was halted and the community became even more isolated from neighboring towns. Once they realized their mistake, the citizens of Frederica launched a major campaign to get a railroad connection [but] ...This never came to pass. (Institute for Public Administration 2004:2-3)

The arrival of railroads in the central part of Delaware complemented the transportation network of waterways and offered quick transportation of local peaches to the major urban markets of Philadelphia, Baltimore, and New York. The proximity of the Murderkill River and St. Jones Creek offered the farming community easy access of their produce and other goods to the markets in Philadelphia and Wilmington. The Philadelphia, Wilmington, and Baltimore Railroad opened in 1839 and provided local transportation for farmers who shipped their produce to markets in the eastern urban areas.

From the 1830s to the 1870s, peach production represented a significant percentage of the agricultural economy in Delaware. A combination of rich soil tempered with favorable rainfall and climate provided optimum growing conditions for peach orchards. The lucrative industry helped not only peach growers but also supported industries such as basket factories, canneries, and peach tree nurseries. Railroad and steamboat companies essential to fruit shipment depended on the revenue generated from the annual peach harvests (Delaware Agricultural Museum website, accessed 10 November 2003). Between 1840 and 1890, huge orchards, ranging from a few hundred to 40,000 trees, spread from Delaware City to Kent County. Frederica was an important canning center for the surrounding area, in addition to being a convenient waterway distribution center for the canned goods as well as for rye, oats, corn, bark, and wood. A virus known as the peach “yellows” finally led to the collapse of the peach industry in Delaware in the 1870s. By the early 1900s, many farmers faced bankruptcy. Some peach growers burned their orchards and turned them back into pastures and wheat fields. Others began raising such fruits as apples, grapes, melons, and strawberries. None of the peach barons is known to have resided within the APE. Although the peach industry suffered, the inhabitants in the project area maintained an agricultural economy and appear to have thrived throughout the mid- to late nineteenth century. Historic atlas maps confirm occupations (presumably farmsteads) in the APE during the mid-nineteenth century (Figures 4 and 5).

### *3.2.5 Suburbanization (1880 to 1940)*

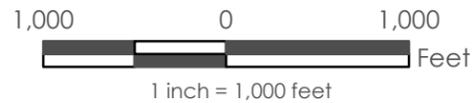
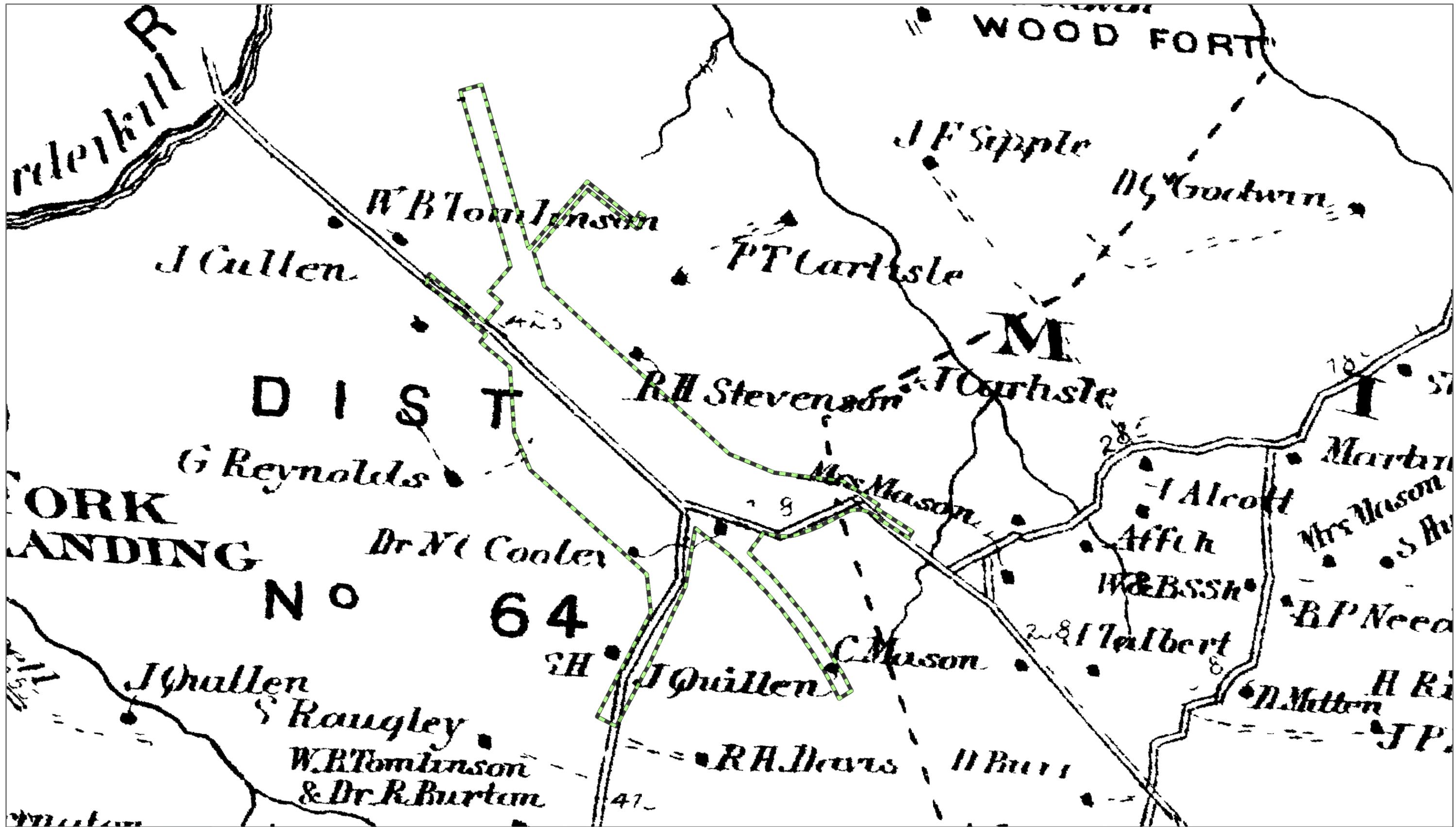
Throughout the late nineteenth century and into the twentieth century, an increase in Delaware’s population led to urban expansion. Agriculture in the southern portions of the state continued to focus on the production of perishable goods with a decrease in staple crops (Reed 1947).



Source: Byles 1859.

Approximate Location of APE

Figure 4  
 1859 Byles Map of the Project Area  
 SR 1 South Frederica Grade Separated Intersection  
 Kent County, Delaware



Source: Beers 1868.

Approximate Location of APE\*

Figure 5  
1868 Beers Map of the Project Area

SR 1 South Frederica Grade Separated Intersection  
Kent County, Delaware

Transportation improvements, encouraged by the significance of truck crops, opened new sections of highways for Delawareans. Many new towns were formed as farmers planted peach orchards and the railroad pushed south.

The canning industry arrived in Frederica during the 1880s when Reynolds and Postles opened the largest tomato canning factory in the country. C.P. Rodgers commenced canning peaches, pears, berries, and tomatoes during the same time period, employing 100 local residents (Miller 1970). S.W. Hall opened yet another canning plant, hiring 300 workers from the Frederica area to package corn and other farm produce. During 1887, Reik and Carlisle began canning operations and joined the smaller canning factory of Hydorn and McKnitt. In addition to these canning operations, Grier and Company operated a fruit and vegetable drying plant. Other industrial concerns in the Frederica area included a fertilizer factory; a husk factory, which produced mattresses; and a foundry that cast plows. All of these businesses provided waterborne shipments for the vessels sailing the Murderkill (Miller 1970).

During May 1893, a group of Frederica residents obtained a legislative incorporation of the Frederica & Philadelphia Navigation Company and had the steel-hulled steamer FREDERICA built in Philadelphia in 1894 (Institute for Public Administration 2004:2-3; United States Treasury Department 1902:239). This three-deck steamer "...provided transport at a price and speed competitive with the railroad, allowing the town to hold unto its Philadelphia markets well into the twentieth century" (Institute for Public Administration 2004:2-3). The *United States Coast Pilot* for 1904 indicates that the Murderkill River could be navigated for 7.75 mi to the town of Frederica by vessels of 5-ft draft, but the sand bar at the mouth of the waterway could only be crossed at high tide. The text in the *Coast Pilot* warns, "Local knowledge is necessary for the navigation of the creek" (United States Department of Commerce 1904:60). The 1916 *Coast Pilot* states that a channel had now been dredged over the entrance bar and that "the deepest draft ordinarily going to Frederica is about 7 ft. The river is extensively used by steamers and schooners to Frederica, and by fishing and oystering at the entrance. A passenger steamer runs to Philadelphia" (United States Department of Commerce 1916:79).

By the early twentieth century, the pattern and density of settlement in Delaware had spread from localized urban centers to interlocked suburban communities across the state. Commercial and industrial “strip” development along major roads replaced small communities. The introduction of the automobile gave people a means to travel beyond the confines of a train or boat in a short period of time. Improvements to the state road system expanded manufacture, commerce, and agriculture throughout the state. The Dupont Highway (SR 13/113) opened in 1924 and connected northern and southern Delaware, shifting the state’s agricultural production permanently toward non-local markets. Named for T. Colman Dupont, who personally financed the project, the DuPont Highway was the first modern, paved road to run the entire length of Delaware (Dupont Highway website, accessed 12 November 2003). This highway traverses the APE, and the stretch of road in this location remained sparsely residential and primarily for agricultural use.

### *3.2.6 Recent History (1940 to Present)*

Agriculture continued to play a major role in the Frederica area. Farm mechanization provided limited means to decrease the need for day labor, but migrant laborers, many coming from the South and Puerto Rico, supplied workers for both farm fields and the canning factories still operating in and around Frederica. These workers resided in housing at the factories and on the farms. Draper and Company took over one of the canneries in 1941, and the plant still remained in operation in 1970. The firm continued canning such vegetables as asparagus, string beans, and lima beans. Local farms raised 90 percent of the asparagus and the entire stock of string beans canned at the Draper factory. However, the rise of the frozen food industry began to make serious inroads into the canning business, and many of the factories shut down (Miller 1970:133-134).

Today, Kent County has experienced a shift away from agrarian pursuits. The major employers in the county now include the state and local government and the Dover Air Force Base. The majority (approximately 28.5 percent) of the employed civilian population of Kent County are engaged in management, professional, and related occupations. Approximately 26.9 percent are engaged in sales and office occupations; 17 percent are engaged in educational, health, and social services; 15.3 percent are engaged in production, transportation, and material-moving

occupations; and 11.6 percent are engaged in construction, extraction, and maintenance occupations. Presently, only 0.7 percent is engaged in agriculture, forestry, and fishing occupations (U.S. Census Bureau:Census 2000). Today the project area remains largely in agricultural use.

### 3.3 Local Archaeological Site Context

An examination of the Delaware Cultural Resource Survey archaeological site forms and the Cultural and Historical Resource Information System (CHRIS) website (accessed May 2010) documents historic and pre-European contact occupations in the project vicinity. No known archaeological sites are situated in the APE. Most of the sites appear to be associated with the Murderkill River and its tributaries. Most of the sites were identified in cultivated fields and were recorded by avocational archaeologists and/or members of the Archaeological Society of Delaware (ASD). The collecting of Native American artifacts has been a popular activity in the region for over a century, and although many archaeological sites have not been formally recorded by the State, information (artifacts) from precontact sites has been collected by local residents for decades.

Thirteen recorded archaeological sites are located within an approximately 2-mi radius of the APE (Table 1). Nine of the sites contain evidence for pre-European contact occupations. Six of these contain evidence for Woodland I occupations, and two contain evidence for both Woodland I and Woodland II occupations (of these latter two sites, one contains evidence for a Late Archaic period occupation and one contains evidence for only Paleoindian occupation). The two loci at one site (7K-F-147A and 7K-F-147B) contain evidence for historic occupation. The site forms for four sites were incomplete; no temporal association is available for the occupations at these sites.

**Table 1. Recorded Archaeological Sites within 2 Mi of the APE.**

CRS #	Site #	Site Name	Period	Site Type	Location Relative to APE
K-632	7K-F-11	Gray Farm Site	Woodland I	Open camp	~1 mi N of APE
K-637	7K-F-1, A-C	Coverdale Farm	Woodland I	Not reported	~0.5 mi N of APE
K-774	7K-F-2	Frederica Adena	Woodland I	Burials	~1 mi NW of APE
K-772	7K-F-3	Holleger	Not reported	Not reported	~2 mi W of APE
K-773	7K-F-5	Isaac's Woods	Woodland I	Not reported	~1.5 mi W of APE
K-636	7K-F-26	-	Woodland I	Not reported	~1 mi NW of APE

CRS #	Site #	Site Name	Period	Site Type	Location Relative to APE
K-638	7K-F-38	Coverdale Site	Woodland I-Barker's Landing	Macroband-base camp*	~1 mi N of APE
K-639	7K-F-39	-	Not reported		~1 mi N of APE
K-766	7K-F-59	-	Not reported	Not reported	~1 mi NW of APE
K-767	7K-F-61	Hog Island	Not reported	Not reported	~1 mi NW of APE
K-5465	7K-F-125	UDRF Survey Mil III.48	Paleoindian	Procurement/lithic scatter	~1 mi W of APE
K-6353	7K-F-146	-	Woodland I and II	Microband-base camp*	~1 mi N of APE
K-6354	7K-F-147, A and B	-	A-Late Archaic, Woodland I and II and Historic 18 <sup>th</sup> -c. B-Historic, Mid 18 <sup>th</sup> to Mid 19 <sup>th</sup> c.	Precontact-not reported, Historic-domestic	~1 mi N of APE

Reference: Delaware CRS forms/CHRIS website, accessed May 2010

\*Source: Custer 1984; *Delaware Prehistoric Archaeology*

The archaeological site files, which were prepared between 1960 and present-day, vary in level of detail. Site location and setting were often vague, or site location was simply inaccurate, as in the case of 7K-F-61, a site that was described in the file as located on an island in the Murderkill River. The site location is mapped inland on the site form, possibly to preserve the site's precise location. One of the older nearby sites is 7K-F-125, which was recorded by the University of Delaware as a Paleoindian site located between the Murderkill River and US 113 adjacent to Cripple Swamp. A surface collection of the site yielded a Kirk-style projectile point and flakes, and the site was the subject of an ASD Bulletin article in 1993 (Custer and Galasso 1993).

A pedestrian survey of 7K-F-146 located south of the Murderkill River identified a scatter of oyster and clam shell, fire-cracked rock (FCR), and stone tools. Projectile points include a Claflin's Savanna River contracting stem and three triangular-shaped points. Woodland I-period Wolfe Neck pottery, a soapstone bowl fragment, ground stone implements, and utilized flakes are listed in addition to Woodland II-period materials that include non-local Potomac Creek pottery. A similar Woodland-I assemblage was recovered from a precontact site identified during this investigation.

Site 7K-F-147 is a multi-component site possessing Archaic as well as Woodland I and II occupations, in addition to being a historic-era domestic site. The site is located west of

7K-F-146. The site file lists Wolfe Neck and Hell Island wares, in addition to three soapstone fragments. Diagnostic hafted bifaces include a small stemmed point attributed to the Late Archaic period Snyder-type biface, which is attributed to Woodland I period. Woodland II-era Potomac Creek pottery is also listed in the site assemblage, along with hammerstones and a cache of eight argillite blades/blanks. A variety of historic-period material dating from the mid-eighteenth to mid-nineteenth centuries was collected during a pedestrian survey of the cultivated field at the site. Artifacts included hand-pressed brick fragments, vessel glass, shell-edge pearlware, white earthenware, red earthenware, and white salt glaze and basalt stoneware.

In summary, the local archaeological context indicates the presence of Late Archaic through Woodland II occupations as well as late-eighteenth- and nineteenth-century occupations. Most of these sites are located near the Murderkill River or one of its feeder streams. Prior to this investigation, no known archaeological sites were identified inside the APE.