

3.1 Prehistoric Context Summary

A cultural context for archaeological resources in the project area was included in the previous Phase Ib/II survey (Emory et al. 2007). The background research presented below focuses more specifically on contexts for the prehistoric and historic occupations at Sites 7K-F-11/169. The cultural sequence for prehistoric occupation is based on the chronology developed by Custer (1996) with adaptations as outlined by Fiedel (2004).

Paleo-Indian / Early Archaic: Late Pleistocene - 6500 BC

Two concentrations of fluted points have been noted in Delaware (Custer et al. 1983); one between Newark and Elkton, and another in the poorly-drained Mid-peninsular Drainage Divide. The former is located in proximity to high quality lithic raw material outcrops and the latter is located where numerous game-attractive loci (e.g., swamps and bogs) were extant in the Pleistocene/Early Holocene transition. The Everett Site is likely representative of Paleo-Indian period sites in an optimum setting in northwestern Delaware. The site is located within 500 m of the Iron Hill School Quarry site adjacent to a bay/basin feature. A Paleo-Indian fluted point and later Kirk and Palmer notched projectile points were included in the assemblage, along with cutting and scraping tools. The artifacts were made exclusively from the locally available lithic raw materials (Custer et al. 1986).

For the Mid-peninsular Drainage Divide and the Mid-drainage Zones, Custer et al. (1983) suggested the following settlement preferences. Base camps were most likely on well-drained ridges in areas of maximum habitat overlap. Base camp maintenance stations were likely to be located in game attractive locales (swamps, bay/basins), and hunting sites were likely to be found in game attractive areas away from base camps.

Paleo-Indian sites in the general vicinity of Site 7K-F-11 and 7K-F-169 consist exclusively of isolated fluted point finds, likely representing hunting episodes. Custer et al.'s (1983) concept of serial use of high quality lithic sources suggests that settlement would be sparse and widely spaced across the landscape.

Archaic (Traditional Middle Archaic): 6500 - 3000 BC

Archaic diagnostic materials in Delaware generally consist of sparse subassemblages at multi-component sites dominated by Woodland I components. Such sites include Wrangle Hill, the Osborne Wetland Site, the Snapp Site, and the Frederick Lodge Site. These sites yielded one or two projectile points representing Kirk, Bifurcate, and/or Stanley types of the Early and Middle Archaic that were likely associated with low frequencies of debitage. They represent procurement sites at which site utilization was sporadic and brief. These components tend to occur on small streams and adjacent to wetlands.

Custer's Archaic site typology in the Mid-Atlantic Coastal Plain (e.g., Custer 1984, 1996) included macro-band base camps, micro-band base camps, and procurement sites. For macro-

band base camps, low terraces along major drainages were favored locations, especially at lower order confluences. Micro-band base camps are found in upper terraces of major drainages, along lower order tributaries, and at low order stream confluences up to 10 km from major drainages. Procurement sites occur near swampy floodplains of major and minor drainages, alluvial fans associated with swamps and bogs, and near lithic resources. However, in the decades since formation of this model, Archaic components discovered in northern and central Delaware overwhelmingly represent procurement sites. There appears to have been a continuation of the adaptive strategies and concomitant settlement patterns of precontact people from Paleo-Indian, through Early Archaic and Middle Archaic times.

Woodland I: 3000 BC - AD 1000

Woodland I groups adapted to conditions of the Sub-boreal (3000-800 BC) and Sub-atlantic (800 BC – AD 1000) climatic episodes. By about 1000 BC, sea level rise had stabilized leading to increases in fish and shellfish resources in rivers and estuaries, causing population increases and diminished territory sizes. The early part of the period (referred to here as the early Woodland I, 3000-1500 BC) is marked culturally in Delaware by use of broadspears and stemmed points. An increase in use of non-cryptocrystalline lithic materials such as quartz and quartzite occurred, while elaborate exchange networks were developed to obtain cryptocrystalline materials for broadspear knife manufacture and non-cryptocrystalline rhyolite and argillite for other needs. The latter raw materials were presumably obtained from distant sources in Pennsylvania and New Jersey.

A number of major sites with dominant early Woodland I (3000-1500 BC, traditional Late Archaic) components have been excavated in the region in the past two decades. Such components were found at the Hickory Bluff Site (Petraglia et al. 2002), the Puncheon Run Site (LeeDecker et al. 2005), the Snapp Site (Custer and Silber 1995), the Carey Farm Site (Custer et al. 1996b), the Pollack Site (Custer et al. 1994), the Leipsic Site (Custer et al. 1996a), and the Blackbird (Bowen et al. 2012) and Black Diamond (Bowen et al. 2011b) Sites. These components were dominated by stemmed points of a range of sub-types, which appear after 3000 BC. Late in the period, broadspears co-occur with steatite vessels. Non-local lithic raw materials became important representing far-flung trade and social relationships among prehistoric groups. A wide variety of cultural features, including residence structures, storage pits, hearths, and problematic features are typical of the period.

The middle Woodland I (1500 BC – AD 0, traditional Early Woodland) is marked by the introduction of ceramic vessel technology. In the Barker's Landing Complex (circa 2000-500 BC), stemmed and notched points and broadspears continued in use, and use of ceramics began. Early types dating to this period include Marcey Creek, Dames Quarter, and Selden Island. The Wolfe Neck and Delmarva Adena complexes occurred later in the Middle Woodland I, from 500 BC – AD 1. The Adena complex was a central Delaware phenomenon marked by elaborate mortuary and exchange patterns, and use of clay tempered ceramics. The nearby Frederica Adena Site contained an undetermined number of burials associated with ceremonial and trade items (Wilson 1964, Thomas 1976). The Wolfe Neck complex was more generally distributed in the region, lacked the mortuary and exchange patterns of Adena, and was characterized by Wolfe Neck ceramics. Stemmed points were common in both. The mortuary practices of the Adena

complex suggest an incipient ranked society, with differential access to goods obtained in elaborate exchange networks. During this period a continued concentration on aquatic resources likely prevailed, and various wild seeds, nuts, and roots were likely important. However, rudimentary horticulture probably began to be practiced through minor cultivation of crops such as sunflowers and chenopods.

As defined herein, the late Woodland I period extended from ca AD 1-1000 (traditional Middle Woodland). The Carey Complex dates to AD 0-500 in central Delaware, marked by the use of Fox Creek and Jacks Reef points and Coulbourn and Mockley ceramics. Important socio-ideological shifts occurred during this time, with decreases in signs of social ranking as seen through mortuary practices. The Webb Complex follows, from AD 500 – 1000, when Hell Island ceramics were in use. Some revitalization of Adena-like trade networking occurred in parts of Delaware, although other areas witnessed a continuation of Carey Complex-like adaptations.

Woodland II (traditional Late Woodland): AD 1000 - 1600

For the Mid-drainage Zone, Custer (1984) suggest continuity of Woodland I settlement location typology but lacking mortuary sites. The typology includes macro-band base camps along major streams; micro-band base camps along low order streams; and procurement sites along minor and ephemeral drainages, next to woodland swamps, and on small sand knolls. Many of the Woodland II base camps recorded in northern Delaware also have evidence of earlier Woodland I occupations (Custer and Griffith 1986).

Despite the apparent continuity in base camp location preferences, significant cultural transformations occurred in the Woodland II period. The practice of maize, bean, and squash cultivation may have been adopted in Delaware, although exploitation of wild resources likely continued to be important. Finer, thinner walled ceramics such as Townsend, Killens, and Minguannan wares were used. Use of non-cryptocrystalline materials for tool making diminished, and the new small, triangular points (Levanna) were made primarily on local cherts and jaspers from flakes struck from pebbles. The small points served to tip projectiles for another innovation that diffused to the Middle Atlantic, the bow and arrow. In some cases village settlement developed for the first time, and the concomitant population increases and sedentary lifestyle likely spawned internecine warfare.

The Lewden Green Site south of Christiana yielded Woodland II Minguannan ceramics, but lacked subsurface features. Large Woodland II habitations occur at the Delaware Park Site (Thomas 1981) and at the nearby Clyde Farm Site (Stewart et al. 1986). Peoples lifeways during the Woodland II period appear to have been similar to those of Woodland I people, despite the development of a horticultural economy. No large village-type Minguannan settlements are known on the Delmarva Peninsula.

Contact: AD 1600 to 1750

The Contact period in Delaware witnessed the establishment of European settlements, first along the Delaware River and then on the Delmarva Peninsula more generally. This precipitated a

major disruption in the lives of native peoples already living on the peninsula. The European market for furs altered Native American economies and European goods replaced traditional technologies. European diseases and conflict over control of the fur trade resulted in social and political disruptions. By the end of the period, traditional lifeways were irreparably altered and few Native Americans remained on the Delmarva Peninsula.

During this period the Refugee Complex developed as indigenous people migrated west from areas of European settlement to areas still in Native American control (Custer 1984, 1996; Kent 1989). Sites of this period 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 SR 1 Corridor study (Kellogg et al. 1994).

3.2 Historic Context Summary

Exploration and Frontier Settlement (AD 1630 to 1730)

Early explorers of the Delaware Bay included Henry Hudson and Samuel Argall, who briefly sailed into Delaware Bay. Dutch settlements at High Island (Burlington, New Jersey) in 1624 and Lewes in 1631 opened the area to colonization, but did not survive for more than two years (Weslager 1961). Led by Peter Minuit, Swedish colonists landed at the confluence of the Christina and Brandywine Rivers in what is now Wilmington in 1638. Within a few years, a church and fort had been built, and a small farming community had developed (Weslager 1961).

The Swedish colony threatened Dutch colonial interests in the Delaware Bay area. As a result, in 1651 Peter Stuyvesant, the Dutch governor of New Netherland, established Fort Casimir near what is now New Castle. A series of military conflicts ensued, and the victorious Dutch established the town of New Amstel (New Castle) near Fort Casimir in 1656 (Weslager 1961).

In 1681, William Penn received proprietary rights to Pennsylvania from King Charles II of England. Penn subsequently appealed to the Duke of York to grant him control of the land needed to gain access to seaports on the coast, and in 1682, the Duke of York conveyed the three Delaware counties of New Castle, Kent, and Sussex to the proprietary government of Pennsylvania. However, political dissension and mistrust eventually led to relative autonomy for Delaware. The lower Delaware Counties nevertheless maintained social and economic ties with Philadelphia throughout the seventeenth and eighteenth centuries (Munroe 1979).

By the mid-1680s, settlements in Delaware were spreading rapidly. Landings appeared along the banks of the Murderkill River almost immediately following the movement of the first European settlers into the area. One of the earliest established communities in the project vicinity was Frederica. It was originally known as “Johnny Cake Landing” and “Indian Point” (Conrad 1908). Many of the early settlers were English, although some were Dutch (Miller 1970). Johnny Cake Landing was one of many such landings along the Murderkill River.

Intensified and Durable Occupation (1730 to 1770)

By the middle of the eighteenth century, Delaware was experiencing an increase in population and commercial expansion. Small hamlets located in riverine settings such as Frederica and at crossroads grew rapidly. However, farming remained the most important economic activity, with wheat as the primary crop. Corn, barley, oats, and garden vegetables were also common. Many farms contained orchards with apples and peaches predominating. Livestock husbandry supplemented farming incomes (Passmore et al. 1978).

The small landing at Frederica gradually grew into a shipbuilding center and also served as a port for vessels engaged in coastal trade. John Emerson first surveyed the town and laid out lots in 1772. The town has been called Frederica since at least as early as 1796, and was incorporated as such in 1826 (Valle 1984). In 1736 the Hopewell, a ten-ton sloop, was launched there. It was the first ship built and launched on the Murderkill River (Scharf 1888).

Transformation from Colony to State (1770 to 1830)

During the American Revolution, British ships entered the Delaware River and Delaware Bay and disrupted local and long distance maritime trade. British, French, and Continental forces passing through Delaware disrupted overland travel and trade as well. British and Hessian troops marching from Cecil County, Maryland skirmished in the fall of 1777 with American forces south of Newark and seized Wilmington. In 1781, Lafayette's French troops disembarked at Christiana and then marched west towards Tidewater Virginia.

After the Revolution, the population of Delaware grew rapidly. The population of Kent County was about 18,920 in 1790 (Munroe 1993). However, decreases in soil fertility and competition for good land, coupled with a decline in the price of wheat forced many small farmers to sell their holdings to wealthier farmers with larger farms. At the same time, it became more difficult to maintain the drainage systems along the coast that converted marshlands to arable fields (Fletcher 1971). A shift in rural settlement patterns occurred as farms moved from coastal regions to inland areas. Improvements in agricultural technology and crop rotation resulted in better yields from these upland fields.

Throughout the eighteenth and early nineteenth centuries, African-Americans were the principal ethnic minority in central Delaware. Most were slaves or were in long-term bonded servitude (Williams 1996). A movement to free Delaware's slaves began after the Revolution. In 1790, more than half of the state's African-Americans were in servitude; by 1810, less than one-quarter remained so. This created farm laborers that neither owned or rented farms. Instead, they worked for wages on farms owned by others (Zebooker 1996), and African-American wage laborers played an increasingly important role in the farming economy. A strong abolitionist movement and legislation prohibiting the importation and exportation of slaves also drew free African-Americans to Delaware (Kellogg et al. 1994).

During the nineteenth century, manufacturing and commerce prospered in Delaware. Textile manufacturers in the cotton and woolen mills along Red Clay Creek, White Clay Creek, and Brandywine Creek produced the fabrics needed to clothe a growing country (Pursell 1958). In

1825, Lewis and Thomas Lockwood manufactured fur and silk hats in Frederica, providing jobs and income for residents in the community (Coverdale 1976).

Shipping at landings along the Murderkill River also prospered. Foodstuffs including wheat, flour, corn, beef, bacon, cheese, and butter as well as lumber and wood products were sent to markets in Philadelphia and Wilmington (Miller 1970).

Industrialization and Capitalization (1830 to 1880)

The Industrial Revolution led to significant advances in transportation, urbanization, and industrialization in northern Delaware. The Chesapeake and Delaware Canal, finished in 1829, opened a route from the head of the Chesapeake Bay to the Delaware River, and promoted commercial relationships between Baltimore and Philadelphia. The towns of St. Georges and Delaware City grew rapidly as a result of the traffic on the canal. In 1850, the Delaware Railroad was built, extending south from Wilmington through Middletown and Dover. This stimulated the founding of several towns, including Felton, Canterbury and Harrington. In 1856 the railroad had reached Seaford, in Sussex County, and stimulated orchard production in the areas through which it passed (Hoffecker 1977). However, areas not proximate to the railroad were little affected, including crossroads communities and commercial centers along the St. Jones and the Murderkill, including Frederica.

Frederica's shipping industry continued to expand during the mid- to late nineteenth century (Scharf 1888). However, the Delaware Railroad began to divert shipping away from coastal routes, especially of lumber and bark. Improved highways also began to appear during the mid-nineteenth century, and further facilitated transport by rail, to the cost of ports like Frederica.

From the 1830s to the 1870s, peach production dominated Delaware's agricultural economy. The combination of rich soils, plentiful rainfall, and favorable climate provided optimum peach growing conditions. The industry directly stimulated the founding and growth of other industrial and commercial endeavors such as basket factories, canneries, and tree nurseries. Railroad and steamboat companies depended on the revenue generated from the annual peach harvests. In 1875, the peak peach production year, growers shipped almost six million baskets of peaches to market (Delaware Agricultural Museum website).

The peach "yellows" virus caused the collapse of the peach industry in the 1870s, and by the early 1900s, many farmers faced bankruptcy. Some peach growers converted their farms back into pastures and arable land, while others began raising other fruits, such as apples, grapes, melons, and strawberries. Kent County became a leading apple producer.

In the middle decades of the nineteenth century, northern Delaware began to industrialize rapidly due to available labor, access to raw materials, and sources of waterpower along the Brandywine River and its tributaries. However, Kent and Sussex Counties remained rural. At the start of the Civil War, there were 380 manufacturing enterprises in New Castle County, while manufacturing in Kent and Sussex Counties was predominantly from grist and sawmills, and their manufactured goods amounted to one-tenth of New Castle County's (US Census Bureau 1860).

Suburbanization (1880 to 1940)

As population increased and the eastern seaboard of the Nation became increasingly urban, immigrants from eastern and central Europe entered Delaware, settling into neighborhoods in Wilmington and other urban points of entry. However, the southern portions of the state remained primarily rural and agricultural with production focused on perishable goods rather than staples. Market-oriented farmers shipped dairy products, poultry, tomatoes, apples, potatoes, and other truck produce to Philadelphia, New York, Baltimore, and other cities.

The canning industry arrived in Frederica during the 1880s when Reynolds and Postles opened the largest tomato canning factory in the country. Other canning factories soon followed, including C.P. Rodgers, S.W. Hall, Reik and Carlisle, and Hydorn and McKnitt. In addition to canning operations, industrial concerns in the Frederica area included a fertilizer factory, a mattress factory, and a foundry. All of these various concerns shipped their products to market on the Murderkill River (Miller 1970).

By the early twentieth century, automobiles were beginning to replace rail and water transport, and suburban communities, accompanied by commercial and industrial strip development along major roads, began to spread throughout Delaware. These changes necessitated expansion and improvement of the state's highway system. The Dupont Highway (now US 13/113) was opened in 1924. 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). It enabled farmers in southern Delaware to increasingly orient production toward non-local markets.

Despite these trends, shipping on the Murderkill River at and near Frederica continued. In 1927, there were six landings on the Murderkill, and shipping rates for freight moving in and out of the river were 25 to 50 percent lower than by rail (War Department 1927).

As late as 1931 at the beginning of the Great Depression, selected products were still being shipped on the Murderkill, including oysters, oyster shells, coal, fertilizer, and agricultural products (War Department 1931). However, as the Depression deepened, shipping on the Murderkill declined. Its role was replaced by improved local roads, which provided easier access to nearby communities and by trucks and the railroad, which shipped produce from local fisheries and farms to markets (Institute for Public Administration 2004)

Recent History (1940 to Present)

Throughout the Depression and the subsequent war years, agriculture continued to dominate the local economy of the Frederica area and the canning industries continued to play an important economic role as well. Migrant laborers supplemented the local workforce on the farms and in the factories. However, the development of the frozen foods industry reduced the demand for canned goods, and Frederica's canneries began to close (Miller 1970). By 1970, Frederica's population was dominated by retirees and those working nearby at the Dover Air Force Base (Miller 1970). Today, occupations of residents in the area are more diverse, but the Air Force

base remains a major employer. Less than one percent of the region's population engages in agriculture or fishing (U.S. Bureau of Census 2000).

ADDITIONAL INFORMATION COMMENTS 20 through 21