3. PREHISTORIC OVERVIEW

The following regional Prehistoric Overview is abstracted from Custer (Custer 1986, 1989). The prehistoric archaeological record of the Delaware Piedmont Uplands/Coastal Plain can be divided into four chronological units, defined on the basis of sets of shared cultural characteristics and common adaptations to similar environmental conditions: The Paleo-Indian Period (ca. 12,000 B.C. - 6,500 B.C.), the Archaic Period (6,500 B.C. - 3,000 B.C.), the Woodland I Period (3,000 B.C. - A.D. 1,000), and the Woodland II Period (A.D. 1,000 - A.D. 1650). A fifth time segment, the Contact Period may also be considered and lasts from approximately A.D. 1650-1750. While Native American groups may have still existed in this region after the latter date; their lifestyles, by that time, had been irreversibly altered by contact with European peoples. The following paragraphs describe the defining characteristics of each of these Culture Periods.

The **Paleo-Indian Period** (ca. 12,000 - 6,500 B.C.) encompasses the block of time witnessed by the final retreat of the Pleistocene glacial conditions from eastern North America and the onset of more modern Holocene environments. The distinctive feature of this Culture Period is an adaptation to the cold, and alternately wet and dry, conditions characterizing the times and manifested in the form of a lifestyle based primarily on hunting and gathering of foods, with hunted foods possibly comprising a large portion of the diet. Hunted animals may have included now-extinct megafaunal species, including mammoth, mastodon, Eastern Bison, camels, and horses. A mosaic patterning of deciduous, boreal, and grassland environments would have provided a large number of productive habitats for these game animals in northern Delaware and permanent watering habitats, such as those in the vicinity of Churchman's Marsh, would have been particularly good hunting settings.

Paleo-Indian populations are believed to have exhibited a highly mobile lifestyle incorporating a fairly fluid social organization based on relatively small bands of single and multiple family units. Tool kits of these peoples reflect their reliance on hunted animal resources and are characterized by a preference for high quality lithic materials and the long-term curation and maintenance of finished tools. Throughout the 5500-year time span of this period, the basic adaptation remains relatively constant, though with some modifications appearing as Holocene environmental conditions begin to emerge.

Reflecting their preference for high quality lithics, the most common known Paleo-Indian sites are quarry-related base camps, reduction workshops, and temporary hunting camps situated near surficial raw material outcrops. Within Northern Delaware the so-called Delaware Chalcedony Complex, located in the extreme northwest portion of New Castle County, in the vicinity of modern-day Newark, represents such outcrops. A secondary location for Paleo-Indian sites is adjacent to poorly drained swamps, springheads, and sinkholes, within environments similar to those surrounding Churchman's Marsh.

The **Archaic Period** (6,500 B.C. - 3,000 B.C.) is characterized by a series of adaptations to the newly emerged full Holocene environments. These environments differed from earlier ones and were dominated by mesic forests of oak and hemlock. A reduction in open grasslands associated with the onset of warm and wet conditions caused the extinction of many of the grazing megafaunal species hunted in earlier times, and saw them replaced by browsing species such as deer. Sea level rise accompanied the melting of glacial ice and resulted in the elevation of the local water table and the creation of a number of large interior swamps, including Churchman's Marsh. Warmer, wetter climatic conditions resulted in the rise of a greater variety of edible plant resources and aquatic environs such as rivers, lakes, and marshes, along with their immediate surroundings, became substantially more productive. In the face of this proliferation of resources Native American subsistence strategies changed from the hunting focus of the Paleo-Indian Period to a more generalized foraging pattern in which plants and aquatic foods played a more important role.

Reflecting this more diversified environment Archaic Period tool kits were more generalized than those of the Paleo-Indian Period and witnessed the increased use of, and reliance on, a wider array of pecked/ground plant processing tools such as grinding stones, mortars, and pestles. The presence of other tool forms, such as net sinkers, indicates an increased exploitation of, and reliance on, aquatic resources. indigenous populations evidently continued to lead a fairly mobile lifestyle with a wide range of resources and settings utilized on a seasonal basis. Social structure continued to be typified by band-level organization, with group membership evidently shifting on a seasonal basis in relation to resource availability. During this time favored site locations became more diversified and included upland settings near both ephemeral and perennial streams and elevated landforms adjacent to swampy floodplains.

The **Woodland I Period** (3,000 B.C. - A.D. 1,000) can be correlated with a dramatic change in local climates and environments that seem to be associated with events occurring throughout the Middle Atlantic region. Following the onset of a pronounced warm and dry period (3,000 B.C. - 1,000 B.C.) oak/hemlock forests were replaced by ones dominated by oak/hickory, extensive grasslands again became common, and some interior streams dried up; the overall effect of which was an alteration of the environment, but not a degradation. Continued sea level rise and a reduction in its rate also made many areas of the Delaware River and Bay Shore the sites of large brackish water marshes that were especially rich in both animal and plant resources. These changes in environment and resource distribution resulted in significant, concomitant shifts in subsistence and socio-cultural adaptations for prehistoric populations. Settlement systems were now centered around the rich and varied environments represented by the floodplains of major rivers and the margins of estuarine swamps, which become the sites of large base camps. These sites and ones like them appear to have supported larger aggregate populations than earlier base camp sites and were inhabited for longer periods of time, possibly on a year-round basis. The overall tendency witnessed during this period is toward the development of a more sedentary lifestyle and a general increase in overall Native American population densities.

Woodland I tool kits show some minor variations over Archaic Period ones as well as a few major additions. Plant processing tools become even more common and seem to indicate an intensive harvesting of wild plant foods that, by the end of the period, may have approached the efficiency of agriculture. Chipped stone tools changed little over previous types, although broad-blade, knife-like processing tools became more prevalent. The addition of stone, and later ceramic containers is also seen. These items allowed the more efficient cooking of certain types of food and may also have functioned for storage of certain surplus plant foods. Long-term stockpiling of food surpluses is indicated by the presence of large storage pits of various configurations and evidence for more sedentary habitation sites is supported by the appearance of semi-subterranean house structures.

This general trend toward increased sedentism additionally wrought changes in the socio-political organization of Native American populations. Less reliance on high-mobility subsistence strategies resulted in a reduction in effective group territory and, in conjunction with increases in overall population densities, led to the development of highly sophisticated regional trade networks. These factors, in turn, resulted in the creation of the first identifiable cultural groups, delineated on the basis of named site complexes (e.g., Clyde Farm and Delaware Park Complexes, within the vicinity of the current project area). While further to the south, in the middle Delaware peninsula, the above changes accompanied the appearance of populations exhibiting incipient ranked social structure, Native groups in the northern peninsula continued to exhibit an egalitarian social structure.

In many portions of Middle Atlantic Region the **Woodland II Period** (A.D. 1,000 - ca. A.D. 1650) is marked by the appearance of agricultural food production systems. Within northern Delaware, however, the addition of agricultural practices seems not to have appreciably altered earlier lifeways and cultural adaptations. In general, Woodland II populations exhibited many of the same characteristics as their Woodland I predecessors. Hunted and gathered foods continued to comprise the largest portion of the

diet, and tool kits and basic lifestyles remain essentially unchanged, though the extensive trading networks of the previous period did not continue. Settlement patterns during this time also followed closely those of earlier periods, with many of the same sites continuing to be revisited; however, the absence of evidence for dwellings or other signs of settled village life may signify a slight reversal of the cultural evolution trajectory, in favor of a somewhat less sedentary existence. Looking ahead, it can be said that Woodland II peoples in this region exhibited many of the same cultural characteristics and adaptations as the Delaware Indian groups that populated the area during early historical times.

The **Contact Period** (ca. A.D. 1650 - A.D. 1750) represents a poorly understood segment of the archaeological record in northern Delaware, and begins with the arrival of the first substantial numbers of Europeans to the region. In the Mid-Atlantic region the first settlers were primarily Dutch and Swedish, with large numbers of British peoples arriving after the mid-seventeenth century. Based on ethnographic accounts, three main Native American groups occupied the Middle Atlantic region at time of contact: the Munsee in the Upper Delaware Valley, the North Unami in the Middle Delaware Valley and central New Jersey, and the South Unami or Unalachtigo in the Lower Delaware Valley and southern New Jersey. These indigenous peoples referred to themselves as the Lenape (the People); due to their association with the Delaware River Europeans called them the Delawares.

Previously Recorded Prehistoric Sites

Data relating to sites previously recorded in the vicinity of the project area can be used to develop more specific expectations regarding the density, types, distribution, stratigraphic disposition, and age-range of prehistoric archaeological deposits that may be located within the proposed S.R. 41/Hockessin archaeological APE. Background research conducted in the Cultural Resource Survey (CRS) files and cultural resources report library maintained at the Delaware State Historic Preservation Office (DE SHPO), in Dover, revealed that a total of 13 Native American occupations have been previously recorded within a one-mile radius of the project area (Delaware Cultural Resource Survey [CRS] files), although none were reported within the current APE boundaries. Of this total, all prior documented sites were found by avocational archaeologists, and all but two (7-NC-A-7 and 8) were reported to have already been destroyed by development by the time of their recording. More detailed information pertaining to these sites is summarized below and in Table 2.

Of these previously recorded sites, all are known exclusively from surface collections made in plowed fields and site forms contain little information other than approximate location and incomplete descriptions of the recovered artifact assemblages. Information regarding the nature of identified cultural deposits is comparatively more complete for sites 7-NC-A-4 through 8, with all these occupations consisting of artifact scatters of some considerable size. Site 7-NC-A-4 is located alongside Mill Creek a short distance southeast of the current project area and apparently contained the greatest quantity and highest density of associated artifacts (though no information regarding site size is listed in the site form). Artifacts recovered from the site include nearly 70 potentially diagnostic projectile points, nearly 80 bifacial tools in various stages of completion, some 15 unifacial tools of various configurations, and quantities of manufacturing debitage. No Native American pottery is listed in the artifact descriptions. Projectile points from the site are recorded as dating to the Archaic and Woodland II Culture Periods, and include examples of bifurcated base, contracting stem, straight stem, Normanskill-like, and triangular varieties. Considering the large number of artifacts present, this site clearly represents a favored and intensively re-occupied locus and, considering its location along the well-watered main branch of Mill Creek, may have functioned as a seasonally established base camp.

Site 7-NC-A-5 sat on a rise adjacent to the main branch of Mill Creek a short distance south of the A-4 site and was defined by an artifact scatter that covered an area of some four to five acres. Likely

somewhat less intensively occupied than its neighbor, based on a consideration of the number of artifacts collected from it, it has also been dated to the Archaic and Woodland II periods. Artifacts recovered from the site include nine projectile points (straight stemmed, Normanskill-like, triangular), 16 bifacial and unifacial tools of various types, manufacturing debitage, one fragmentary grooved axe, and eight pieces of pottery; the latter tentatively identified as Riggins type ware. Based on the artifacts comprising this assemblage and the large size of the associated surface scatter Site 7-NC-A-5 may also have functioned as a seasonal base camp, or possibly as a frequently re-visited temporary procurement-related encampment.

Table 2: Previously recorded prehistoric sites within a one- mile radius of project area.

Site Number	Site Name	Culture Periods *	Dates	Site Type
7NC-A-4	---	Archaic; Woodland II	6500 BC –3000 BC AD 1000 – AD 1650	Poss. Base Camp **
7NC-A-5	---	Archaic; Woodland II	6500 BC –3000 BC AD 1000 – AD 1650	Poss. Base Camp/ Mult. Occupation Procurement site **
7NC-A-6	---	Archaic-Woodland I	6500 BC –AD 1000	Mult. Occupation Procurement Site **
7NC-A-7	---	Unknown Prehistoric	---	Mult. Occupation Procurement Site **
7NC-A-8	---	Unknown Prehistoric	---	Mult. Occupation Procurement Site **
7NC-A-51	Mill Creek #1	Unknown Prehistoric	---	Procurement Site
7NC-A-52	Manley #1	Unknown Prehistoric	---	Procurement Site
7NC-A-66	Manley #2	Unknown Prehistoric	---	Procurement Site
7NC-A-67	Manley #3	Unknown Prehistoric	---	Procurement Site
7NC-A-68	Manley #4	Unknown Prehistoric	---	Procurement Site
7NC-A-69	Manley #5	Unknown Prehistoric	---	Procurement Site
7NC-A-70	Manley #6	Unknown Prehistoric	---	Procurement Site
7NC-A-71	Manley #7	Unknown Prehistoric	---	Procurement Site

* Culture Periods represented at each site are taken directly from DESHPO site forms.

** Site types listed reflect the interpretations of the authors of this report based on an assessment of information contained in DE SHPO site files. Site type designations for the remaining sites are taken directly from site forms.

Site 7-NC-A-6 was located along a small unnamed tributary of Mill Creek near the intersection of Southwood and Valley Roads (Rts. 286 and 294, respectively, to the south of the present project area. Evidently much smaller than either of the two above sites, this occupation is represented by an artifact collection that includes three potentially diagnostic projectile points (straight stemmed, Fox Creek, Jack's Reef Pentangular), two bifacial tools, and a scatter of manufacturing debris, and has been provisionally dated to the Archaic Period and the Carey and Webb Phases of the Woodland I. Given its smaller size, apparent lower artifact density, and location away from Mill Creek the attributes of this site are consistent with those of a repeatedly occupied temporary camp or foraging station.

Sites 7-NC-A-7 and A-8 are both represented by surface scatters of lithic manufacturing debitage and have not been assigned to any particular period of the prehistoric era. It is not known at this time whether either or both sites have been disturbed by development as have the others discussed here. Site 7-NC-A-7 is located atop an elevated knoll a short distance south of 7-NC-A-6, along another small, unnamed tributary of Mill Creek, and is comprised of an artifact scatter that covers an area approximately 300 feet

in diameter (ca. 2.1 acres / 3.4 hectares). 7-NC-A-8 lies to the west of 7-NC-A-6, further upstream the same tributary, and sits on a high knoll. Artifacts associated with this occupation ("Considerable broken material") are spread out over an area measuring approximately 100 by 500 feet in size (ca. 1.1 acres / 1.8 hectares). Considering the locations of these sites, and with little other information to go on, both occupations may have functioned as favored, and repeatedly re-visited procurement related temporary camps.

Sites 7-NC-A-51 (Mill Creek #1), 7-NC-A-52 (Manly #1), and 7-NC-A-66 through 71 (Manly #'s 2-7) consisted of a cluster of (presumably) small sites located on upland knolls or slopes along the margins of Mill Creek, to the south of the current project area. All represented by surface scatters of manufacturing debitage (primarily quartz), these sites have apparently produced no temporally diagnostic artifacts and are interpreted in the site files as simple "procurement sites". No other artifact or contextual information is provided for any of these occupations.