PREHISTORIC OVERVIEW

RECORDS CHECK

Archaeological site records were reviewed at the Bureau of Archaeology and Historic Preservation, Delaware Department of State, Division of Cultural Affairs, in Dover. No previously recorded sites are located within the actual Route 113 project right-of-way; nine sites (Table 3) have been identified, however, within a two- to three-mile distance of the project area. The distribution of known sites shows a concentration in the Milford vicinity, near the northern terminus of the project. Known sites in that area appear to be concentrated along the marshy flood-plain margins of Mispillion Creek headwaters and its tributaries. In the southern portion of the Route 113 project vicinity, prehistoric sites are less common, but again, the favored aboriginal locations appear to be along the margins of high-order stream floodplains such as Ellendale Swamp and Maple Marsh.

The completeness of information pertinent to these sites is uneven, but in most cases it was possible to determine each site's cultural affiliation either from the survey forms or by an examination of the collections. Information for the sites in the Route 113 project vicinity is summarized in Table 3.

PREVIOUS INVESTIGATIONS

There has been relatively little systematic archaeological survey in the Route 113 project area vicinity, and there have been no previous studies within the actual project right-of-way. One cultural resource management study of Warren's Tax Ditch was sponsored by the Soil Conservation Service for a project near the southern portion of the Route 113 corridor. This study (Delmarva Clearinghouse for Archaeology 1975) resulted in the identification of three prehistoric sites (7S-C-22, 7S-C-23, and 7S-F-10), together with a possible brick kiln and a number of nineteenth- and twentieth-century refuse deposits. The survey design for this project involved an environmental study using soil maps, from which three microenvironments were delineated. The survey results suggested that prehistoric sites were strongly correlated with well-drained vs. poorly drained soils, although the number of identified sites was small and field survey conditions were generally poor.

REGIONAL PREHISTORY

The prehistory of Delaware has been divided into four periods: the Paleo-Indian Period (ca. 12,000 B.C. - 6500 B.C.), the Archaic Period (ca. 6500 B.C. - 3000 B.C.), the Woodland I Period (ca. 3000 B.C. - A.D. 1000), and the Woodland II Period (A.D. 1000 - A.D. 1650). The time frame

TABLE 3

PREVIOUSLY RECORDED SITES IN THE RT. 113 PROJECT VICINITY

SITE NO.	SOIL	REMARKS
7S-C-2	RuA, SaA	Artifacts include triangular projectile point and pestle; Woodland II
7S-C-3		(no information on site form)
7S-C-13	EvA, Pm	Artifacts include triangular projectile point; Woodland II
7S-C-14	EvA,Wo	
7S-C-22	SaA, Wo	Artifacts include two stemmed projectile points (probable Woodland I affiliation), an historic ceramic sherd and a clay pipe stem
7S-C-23	EvA	Artifacts include a hammerstone, a mortar and a pitted stone; early 18th century occupation also indicated by presence of five historic ceramics and one glass sherd
7S-C-24	EvA	Collection includes 1 tan chert or jasper bifacial tool, possible scraper
7S-C-25	Fa	Findspot in cleared field; artifacts include broken (non-diagnostic) projectile point
7S-F-3	EvB, Pm	Artifacts include Coulbourne and Mockley ceramics (Woodland I affiliation); University of Delaware records indicate a Clovis point (Paleo-Indian affiliation) from the site

Soil abbreviations:
EvA: Evesboro loamy sand (0-2% slopes);
EvB: Evesboro loamy sand (2-5% slopes);
Fa: Fallsington sandy loam;
Pm: Pocomoke sandy loam;
RuA: Rumford loamy sand (0-2% slopes);
SaA: Sassafras sandyloam (0-2% slopes);
Wo: Woodstown sandy loam.

between A.D. 1600 and approximately A.D. 1750 marks the final years of Native American occupation of the area during early European colonization of the state (Custer 1984, 1986).

The Paleo-Indian Period (ca. 12,000 B.C. - 6500 B.C.) marks the initial occupation of the state by small groups of nomadic Native American hunters and gatherers. Their presence coincided with the transition from ameliorating late Pleistocene glacial environmental conditions into the onset of early Holocene conditions consisting of cool temperatures and alternating levels of precipitation. The economic system of the Paleo-Indians was based largely upon the hunting of large, cold-adapted animals including both migratory and non-migratory species. Although direct evidence of Paleo-Indian use of non-mammalian food resources is lacking in the archaeological record of Delaware, paleoenvironmental data indicate that their exploitative territories included habitats in which plant foods and other edible resources were available. Palynological and geomorphological data suggest that the vegetation in Delaware during the Paleo-Indian Period consisted of a mosaic comprised of deciduous and boreal forests and grasslands that would have provided graze, browse, and shelter for a variety of small and large mammals. Where coinciding with surface water settings, these habitats would have been focal points for Paleo-Indian foragers.

The stone tool kit of the Paleo-Indians was characterized by a limited number of bifacial and unifacial implements that suggest a heavy emphasis on the procurement and processing of animal resources. These include projectile points, hafted and unhafted knives, scrapers, and less formalized flake tools. Of these, the fluted point is the diagnostic hallmark of the Paleo-Indian Period. Other point styles indicative of the later part of this cultural period include both unfluted triangular forms and notched and stemmed points. The distributions and environmental settings of Paleo-Indian sites and isolated point finds suggest that these people maintained a lifestyle that consisted of relatively frequent movements of single or multiple family groups to and from resource-rich habitats. It appears that this basic subsistence/settlement strategy persisted with only minor variations for approximately 5,500 years.

Custer has identified a concentration of Paleo-Indian sites along the Mid-Peninsular Drainage Divide of the Delmarva Peninsula, a physiographic unit that encompasses the Route 113 study area. Using modern LANDSAT imagery, Paleo-Indian site loci were found to be strongly correlated with poorly drained or swampy areas. The Hughes complex in Kent County exemplifies this Paleo-Indian site distributional pattern. This complex includes a series of six surface finds located on low, well-drained knolls within or adjacent to a large freshwater swamp and other poorly drained areas (Custer 1986:49-51).

The Archaic Period (ca. 6500 B.C. - 3000 B.C.) is characterized by a series of changes in prehistoric Native American technologies, subsistence, and settlement. These shifts are interpreted as gradual human responses to

the emergence of full Holocene environmental conditions. The landscape was dominated by mesic oak and hemlock forests. Reductions in open grasslands brought about by warm and wet conditions resulted in the extinction of certain cold-adapted grazing animal species (i.e., caribou and bison) that were the favored prey of Paleo-Indian groups. Alternatively, these vegetational changes were favorable to browsing animals such as deer which flourish in such settings (Custer 1984, 1986).

A rise in the sea level and an increase in precipitation at the beginning of the Holocene would have facilitated the development of inland swamps within the Mid-Peninsular Drainage Divide. At this time, Native American populations in these locales shifted from the more hunting-oriented foraging pattern of the Paleo-Indian Period to one in which plant foods became a more important part of their economies. In southern Delaware, large swamp habitats such as Cedar Swamp and Burnt Swamp would have served as locations for the first large residential base camps, possibly occupied by several different family groups. Associated with these larger group camps are more numerous and smaller procurement sites situated in various settings that would have been favorable for hunting and gathering activities during different seasons of the year.

Archaic tool kits differ from those of the Paleo-Indian Period in that they include a number of artifacts indicative of plant food processing (i.e., grinding implements and stone mortars). Although Archaic groups in Delaware appear to have been less mobile than the preceding Paleo-Indian populations, they were more mobile than later Woodland Period groups. The sizes of Archaic exploitative groups seem to have fluctuated seasonally and with the availability of food resources.

Based upon palynological and geomorphological data from the Middle Atlantic region, the Woodland I Period (ca. 3000 B.C. - A.D. 1000) has been described as a time of "dramatic change in local climates and environments" in which "a pronounced warm and dry period" (i.e., a mid-postglacial xerothermic) began at approximately 3000 B.C. and persisted to approximately 1000 B.C. (Custer and Bachman 1984). During that period, the mesic oak hemlock forests of the Archaic were replaced by more drought- resistant (xeric) oak and hickory forests and more abundant grasslands. Although these conditions effected the drying up of some interior streams, continued sea level rise resulted in the creation of highly productive and large brackish water marshes. In essence, the xerothermic is hypothesized to have effected shifts in the distributions of plant and animal species and the establishment of new resource-rich settings in some areas of the state.

In turn, these proposed shifts in climate, environmental conditions, and resource distributions are believed to have resulted in radical changes among resident prehistoric Native American populations in the study area including a trend toward greater sedentism and more complex systems of social organization and interactions. For example, major river floodplains

and estuarine swamp habitats became the primary resource zones and the locations of large residential base camps occupied on a multi-seasonal or year-round basis. Such sites are particularly prominent in northern Delaware; they include the Delaware Park Site, the Clyde Farm Site, the Crane Hook Site, and the Maamans Creek Site. Artifact assemblages and features from these sites suggest intensive utilization by prehistoric populations and a trend toward more sedentary lifeways. In the southern Delaware, there was an increase in the utilization of shellfish in the coastal areas, concurrent with an inland shift in the locations of macro-band base camps along the tidal drainages. Within the Mid-Peninsular Drainage Divide zone, there is little evidence that site distribution patterns changed from the preceding Archaic Period (Custer 1986).

The tool kits of Woodland I groups contrast with those of the Archaic by the addition of such items as heavy woodworking tools, soapstone and ceramic containers, broad-bladed points, and netsinkers. The increased abundance of plant processing tools over the preceding period suggests more intensive utilization of plant foods, which by the end of Woodland I times may have approached the level of productive intensification. The presence of non-local lithic materials such as argillite, rhyolite, and soapstone is interpreted as an indicator of incipient regional trade and exchange networks. Soapstone and ceramic vessels are viewed as items that facilitated more efficient food preparation and storage of surplus foods. Pit features employed for food storage and the remains of prehistoric dwellings have been documented at the Delaware Park and Clyde Farm sites in northern Delaware.

The inferred reduction in overall group mobility, the presence of certain artifact types indicative of intensified resource processing, the possible generation of food surpluses, the presence of artifact caches, and the possible existence of increased interregional exchange networks as inferred from the presence of non-local lithic raw materials are interpreted as indicators of the initial development of ranked social organization as opposed to earlier egalitarian systems.

The Woodland II Period (ca. A.D. 1000 - A.D. 1650) within the Middle Atlantic region is marked primarily by the development of horticulture and increased sedentism. During this period, villages became larger and more permanent and tended to be located adjacent to areas with easily worked floodplain soils. This period is also characterized by a reduction in the interregional trade and exchange systems.

Two Woodland II complexes have been defined for Delaware. In Southern Delaware, the Slaughter Creek complex is characterized by the presence of Townsend ceramics, triangular projectile points, large macro-band base camps, and possibly fully sedentary villages with numerous food storage features. Most major sites assigned to the Slaughter Creek complex have been identified in the Delaware Shore, Mid-Drainage, and Coastal/Bay physiographic zones of southern Delaware. Current Slaughter Creek complex

settlement models indicate that the Mid-Peninsular Divide Zone would have been used for special resource procurement sites (Custer 1986).

The Contact Period (ca. A.D. 1600 - A.D. 1750) is marked by both the initial contact between the Native American inhabitants of Delaware and European colonists and the total collapse of traditional native lifeways and sociopolitical organization. The picture is further complicated by the paucity of sites dating to this important period within the state. However, historical sources indicate that resident Native American populations had minimal interaction with European settlers and were subjugated by the Susquehannock Indians of southern Lancaster County, Pennsylvania. A small number of descendants of the original Native American inhabitants of Delaware still reside in the state today.