

**10.0 P H A S E I I C O N C L U S I O N S
A N D R E C O M M E N D A T I O N S**

10.0 PHASE II CONCLUSIONS AND RECOMMENDATIONS

The Phase I/II archaeological investigation of the SR 1 North Frederica Grade Separated Intersection project APE recovered a significant body of archaeological data suggesting a long period of prehistoric occupation within the project area. A total of 3,772 prehistoric artifacts was recovered from among 389 10.0-meter square surface-collected grid cells, 322 STPs, and 103 1.0-meter square test units. Analysis of the artifact collection yielded a wide range of ground and flaked tool forms, ceramics, and debitage indicative of a wide variety of activities, such as raw material procurement, tool manufacture and maintenance, floral and faunal processing, and cooking.

Based on the horizontal distribution and temporal characteristics of the projectile points and ceramic sherds collected from Area 1 in the surface collection of the Phase IB Archaeological Survey, it appears that the earliest occupation of the landform took place within the northern limits of Area 1. Locus 1, representing a high density cluster of prehistoric artifacts found in the northern limits of Area 1, produced two Archaic to Woodland I projectile points and several ceramic sherds contemporaneous with the Woodland I period. Conversely, the prehistoric artifact assemblage recovered in the southern portion of Area 1, specifically in or adjacent to Loci 4, 5, and 6, produced diagnostic tools and ceramics associated with the Woodland I and II periods. Historic artifact clusters were noted in Loci 1, 2, 4, 5, and 6 as well, including a concentration of brick in Locus 5. These data suggest a couple of hypotheses. Do the loci boundaries defined in the surface collection of Area 1 represent discrete activity areas? Does the horizontal distribution of the prehistoric and historic archaeological materials recovered from the surface collection accurately represent the temporal association(s) of each loci, or have the repeated plowing activities in Area 1 skewed the accuracy of the temporal markers?

Area 1 overall is recorded as Site 7K-F-11, with the loci within identified as A, B, etc. The varied ware types found in the ceramic collection attest to the complexity of ceramic distribution patterns across the Delmarva Peninsula, and further study of the material recovered from 7K-F-11 may yield insights into the information flows and/or movements of peoples within the area during prehistory. The stone tool collection is equally intriguing, given the diversity of tool types

and lithic materials represented. The site appears to retain sufficient integrity to allow the delineation of temporally discrete activity/habitation areas. The presence of non-local rhyolite and argillite may shed some light on regional exchange networks in which the Native Americans in the vicinity of 7K-F-11 participated. The use of distinctly variegated lithic material may suggest preferential selection according to non-functional criteria such as color, patterning, or source location. Surface patination may be used to determine the depth below surface from which materials were retrieved.

In Area 1, subsurface features suggesting lithic reduction activity areas, nutmeat storage pits, and feature reuse, as well evidence of seasonal resource gathering, were identified. Given the limited area investigated during the Phase I/II studies, this suggests that within the LOD, Area 1 may contain a variety of subsurface features associated with Native American use of the site. Evidence from the Phase I/II studies suggest that these may be temporally distinct.

Given the research potential that 7K-F-11 represents, the site is recommended eligible for listing in the National Register of Historic Places. If modifications to the project's plans cannot be made to avoid the site or minimize impacts to it, the project will likely have adverse effects on this resource.

In Area 2, historic features designated as part of 7K-F-169, the Soulie Gray House site, were encountered. Two of these, Features 5 and 7, consisted of foundation remains of the mid-twentieth-century concrete block and frame barn situated in the northeast corner of the lot. Feature 4 consisted of a limited burn episode likely related to the demolition of the mid-twentieth-century concrete block and frame barn. Feature 6, because of its proximity to the location in which several outbuildings once stood, may represent deposits associated with one of the buildings, perhaps a meat house. Feature 8 appears to be a concrete cap that was used to seal a well shaft, although the date to which the well may be attributable is unclear. Artifacts recovered from the site (creamware, pearlware, slip trail redware, and handmade brick) suggest an early- to mid-eighteenth- to mid-nineteenth-century component to the site. Because Features 6 and 8 were not fully excavated, it is difficult to assess their research value, and further studies are recommended.

Within Area 5, the various loci identified during the Phase I/II studies were recorded as subcomponents of the previously reported site 7K-F-163 (such as Locus 1 as 7K-F-163G, Locus 2 as 7K-F-163H, Locus 3 as 7K-F-163I, etc.). No cultural features, prehistoric or historic, were encountered within Area 5. The Phase II investigation within the LOD of Area 5 produced a total of 57 prehistoric artifacts, 75 historic/modern artifacts, and eight faunal. The prehistoric artifact collection included debitage and tools, although no diagnostic lithics, and a single ceramic sherd identified as Minguannan (A.D.1000 to 1600) was recovered from the Ap-horizon. A small number of pieces of FCR (n=16) was also collected. Because the majority of this material was recovered from the plowzone, the artifact densities were relatively low, and because no features were identified, the prehistoric component of the site was determined to have little research potential. The historic artifact assemblage included an assortment of architectural and domestic material that was interpreted to represent refuse dumped during manuring in fields and then redistributed by historic and modern plowing. This was also assessed to have only limited research potential. The site is not recommended eligible for listing in the National Register.

The prehistoric deposits identified in Area 7 and designated as part of the previously reported site 7K-F-163B were confined to an area measuring roughly 20.0 by 40.0 meters. Artifact densities were relatively low, and nearly all of the material was recovered from the Ap-horizon. The site was interpreted to have been impacted by historic and modern plowing. No subsurface features, soil stains, or diagnostic artifacts were observed in the excavations. The site was determined to retain little research potential and was, as a consequence, recommended not eligible for inclusion in the National Register of Historic Places.

It is evident from the limited archaeological testing undertaken to date that significant episodes of prehistoric occupation took place within Area 1. The exact form of the site (e.g., seasonal camp, large village) and function (e.g., cooking, butchering, lithic maintenance) is unknown. A similar comparison can be drawn with the historic artifact collection and its association with the Soulie Gray Farm and the possible river landing. What are the functions of these loci, and what is the spatial relationship of these loci to each other and the immediate topographical setting? Through the formation of hypotheses concerning the function of the artifact classes, certain assumptions can be made concerning the types of features expected to be recovered, the size of

the features, and other key components of their composition. Further investigation of the site will provide the data that can be used to verify or refute the hypotheses.

The second research issue concerns the prehistoric artifact assemblage associated with Area 1. The excavation of the Robbins Farm #1 Site (7K-F-12) on the west side of SR 1, approximately 7.6 meters west of the current study area, uncovered a prehistoric storage refuse pit that contained Keyser Cord Marked and Potomac Creek wares, ceramic types traditionally found in western Maryland and northern Virginia. Two possible sherds of Potomac Creek Ware were found in Area 1. What can the ceramic assemblage from the current study area and 7K-F-12 tell researchers about the lives of the Native American inhabitants occupying this small area? What can the ceramic assemblage tell researchers about the exchange network, or migration patterns, linking this prehistoric site in Kent County, Delaware, to contemporaneous prehistoric sites in the Chesapeake Bay region, or in the Piedmont region of Maryland? Is the prehistoric ceramic component in the current study area indicative of an isolated occupation, or part of a larger, interconnected series of occupations extending along the waterway?

The large assemblage of lithics recovered from Areas 1 and 2 consisted of jasper, chert, quartz, quartzite, rhyolite, and argillite material. Projectile points, scrapers, cutting tools, ground stone tools, grinding stones, shaft abraders, and a selection of other tool forms were recovered from Areas 1 and 2. The diverse assortment of diagnostic cultural materials would suggest a major processing site for plant and animal resources, as well as lithic maintenance activities. Additional archaeological analyses may provide evidence of organic remains (fauna and flora) and chemical signatures validating the processing site theory.

The third issue centers on the presence of eolian deposition and site preservation in Areas 1 and 2. A surface inspection and test unit excavations in Areas 1 and 2 identified patches of gravel-rich Pleistocene deposits visible in the plowzone, while other areas exhibited a plowzone consisting of fine sand and silts lacking gravels. Prehistoric remains were recovered below the plowzone in the fine sand and silts episode. The gravel-rich portions of the project area produced historic and prehistoric materials in or near the plowzone.

The areas identified as fine sand and silts and greatly reduced gravel content in the plowzone are thought to represent the deposition of wind-blown sediments from eroded dune features. It is suggested that the eolian deposits may have acted as a blanket and preserved prehistoric archaeological deposits in a stratified context, while the gravel-rich Pleistocene deposits exposed near the surface were impacted by historic plowing activities in the project area. The Phase II archaeological investigation will delineate areas of possible eolian deposits and expose soil profiles within these areas. From the soil profiles and the cultural material assemblage recovered within, can a correlation be drawn between soil types and the vertical integrity of the site? Analysis of the soil types (sediment size, organic composition) may be helpful in distinguishing eolian sediments in the soil profile. What can the composition of the possible eolian deposits tell us about environmental conditions of the project area during the Holocene period?

Of additional interest is the nature of the soft soil anomalies encountered within the APE. The possibility that these may represent periglacial features, the presence of which may have affected Native Americans' decisions in choosing locations for habitation or for cobble exploitation, would be of value to explore. Further analysis of such features could confirm the presence of a permafrost environment as far south as southern Kent County, Delaware, and could also suggest an as-yet unanticipated environmental feature that would have been exploited preferentially by indigenous peoples during prehistory.