

RESEARCH DESIGN

The primary goal of the Phase I survey was the simple location and identification of cultural resources in the proposed ROW. As such, it is difficult to link the Phase I study with an explicit research design. However, the site location data can be used to test predictive models of site locations developed in earlier planning studies of the Route 13 Corridor (Custer, Jehle, Klatka, and Eveleigh 1984). More detailed discussions of the predictive models are also provided in the Phase I/II research plan (Custer, Bachman, and Grettler 1987). In the final section of this report, we will report on an evaluation of the predictive models in light of the findings of the Phase I survey. A brief discussion of specific site location predictions by time periods is noted below.

During the Paleo-Indian Period (ca. 12,000 - 6500 B.C.), settlement patterns were focused upon areas with either readily available cryptocrystalline outcrops or poorly drained swamps (Custer, Cavallo, and Stewart 1983). Paleo-Indian sites related to lithic sources are not expected in the study area. There are many game-attractive swamps or bogs at ephemeral streams, major drainages, and interior areas in the Early Action Segment of the U.S. 13 Relief Route Corridor and they may be the locations of Paleo-Indian procurement sites. Figure 4 shows potential Paleo-Indian site locations in the study area.

Archaic Period (ca. 6500 - 3000 B.C.) settlement patterns in Central Delaware are similar to those of the Paleo-Indian Period. Therefore, the potential Paleo-Indian site locations shown in

Figure 4 are also potential Archaic Period procurement site locations. It should also be noted that the isolated and clustered bay/basin features in the project area have a high potential for being Archaic Period site locations because previous studies (Custer and Bachman 1986a) have shown that these features first begin to be utilized during this time period.

Site location potentials and settlement patterns became more diversified during the Woodland I Period (ca. 3000 B.C. - A.D. 1000) and the project area was the location of some of the greatest social complexity recorded on the Delmarva Peninsula for this time period. A few large base camps from several cultural complexes are represented in the project area and related small base camps, procurement-staging sites, and procurement sites are also expected in this zone. Figure 5 shows the projected site location model for major drainage wetlands and the potential locations for these sites are noted in Figure 6. These types of sites are expected throughout the study area with procurement sites found adjacent to interior swamps, bay/basins, and ephemeral streams and procurement-staging sites found in areas where there are clusters of procurement sites.

Of special interest is the large number of recorded Delmarva Adena Complex sites known from central Delaware. To this point, only mortuary/exchange centers have been located and an understanding of Adena settlement pattern remains elusive. Figure 7 shows a localized site location model for the Delmarva Adena Complex.

Prehistoric settlement during Woodland II times (ca. A.D. 1000 - 1600), seems to have been less dense, less sedentary, and

FIGURE 5

Woodland I Basic Mid-Drainage Settlement Pattern

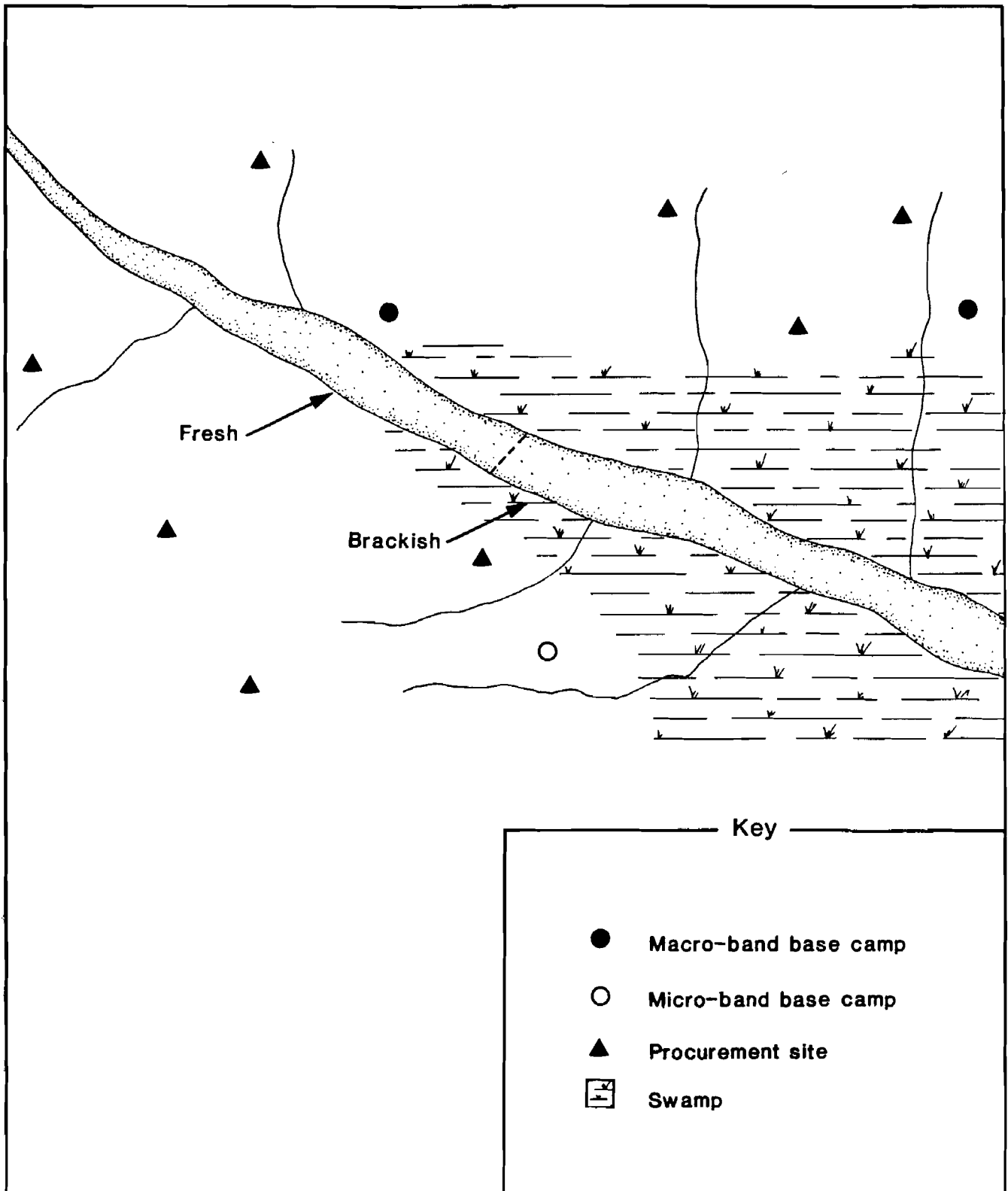
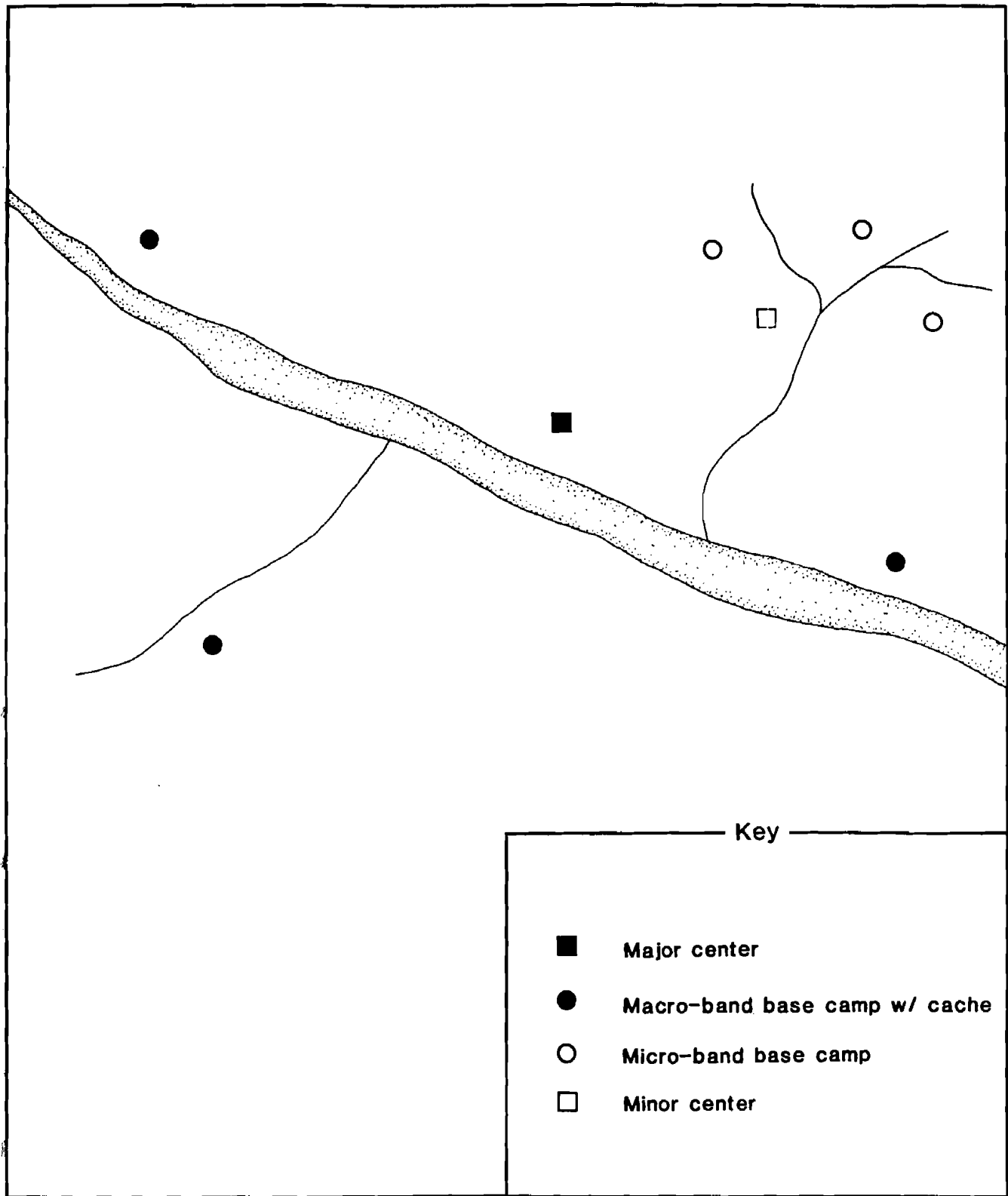


FIGURE 7

Woodland I Mid-Drainage Mortuary/Exchange Center
Settlement Pattern



less intensive than that of the Woodland I Period (Custer 1982; Custer and DeSantis 1986:56-58; Stewart, Hummer, and Custer 1986). Procurement sites would be similar to those noted for the Woodland I Period. The Early Action Segment falls primarily within the southern section of the Minguannan Complex distribution, although the southern portion of the Early Action Segment does fall within the northern fringe of the Slaughter Creek Complex (Custer 1984a). For the most part, Woodland II sites in the northern portion of the project area are smaller than those located farther south on the Delmarva Peninsula. The Woodland II sites of the northern portion of the study area fall well within the range of the site sizes seen among Woodland II sites of the Minguannan Complex (Custer 1984a:155-157; Stewart et al. 1986). There seems to be little difference in site selection between Woodland I and II Period sites within the Minguannan Complex, except for the Woodland I emphasis upon the bay/basin features. The implication of this absence of change is that there was no settlement pattern shift associated with the development of agriculture and that the Woodland I intensive hunting/gathering subsistence pattern was continued into the Woodland II Period within the Minguannan Complex. Within the southern segment of the study area that falls within the Slaughter Creek Complex, and indeed within the entire range of the Slaughter Creek Complex, the reliance on agriculture is also minimal (Custer and Griffin 1986). However, some larger Woodland II sites may be expected, such as the Hughes-Wilgus site (7K-D-21), which is located near the study area.