INTRODUCTION

This report describes the research methods and plans, excavations, analyses, and results of the archaeological investigations of the Patterson Lane Site Complex, near Christiana, New Castle County, Delaware (Figure 1). The Patterson Lane Site Complex consists of three separate historic sites: the Patterson Lane Site (7NC-E-53), the William Dickson Site (7NC-E-82), and the Heisler Tenancy Site (7NC-E-83) (Figure 2 and Plate 1). Archaeological investigations were conducted on the sites within the complex as part of the cultural resources survey of the planned realignment of Delaware Route 7 around the town of Christiana, which in turn was part of a larger upgrading and realignment of Route 7 from I-95 to U.S. 13 (see Catts et al. 1988a). Phase I survey and testing and Phase II investigations of the sites were funded by the Delaware Department of Transportation and the Federal Highway Administration, and were undertaken to fulfill regulatory obligations under Section 106 of the National Historic Preservation Act (amended) to evaluate the effects of the proposed relocation and realignment of Delaware Route 7 on significant, or potentially significant, cultural resources as defined by the National Register of Historic Places (36 CFR 60).

The Patterson Lane excavations were conducted in the summer of 1982 by archaeologists of the Delaware Department of Transportation. Phase I and II field investigations of the Dickson and Heisler Sites were undertaken in the winter and spring of 1986 by archaeologists from the University of Delaware,

FIGURE 1

Project Area Location

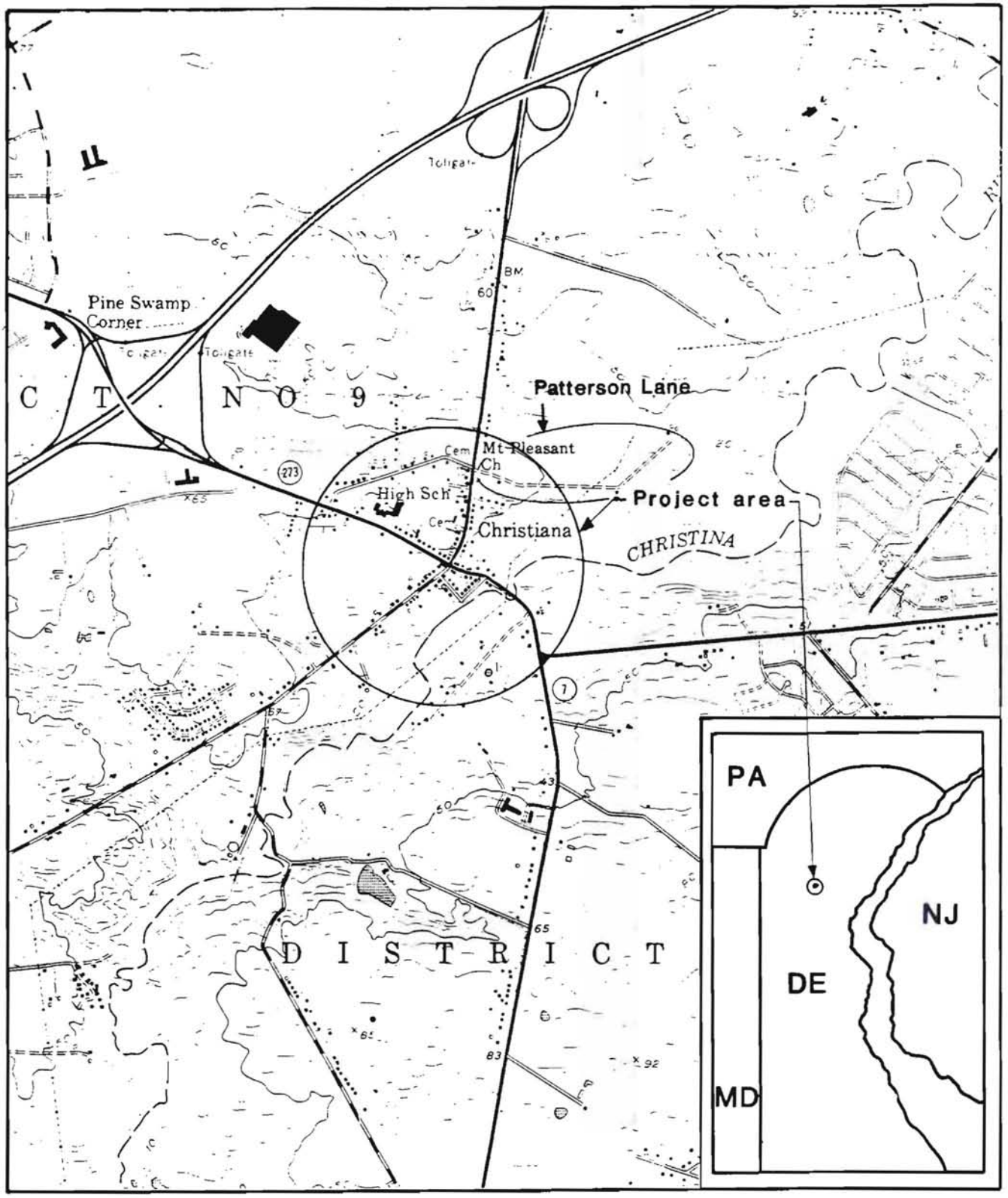


FIGURE 2

Patterson Lane Site Complex Location

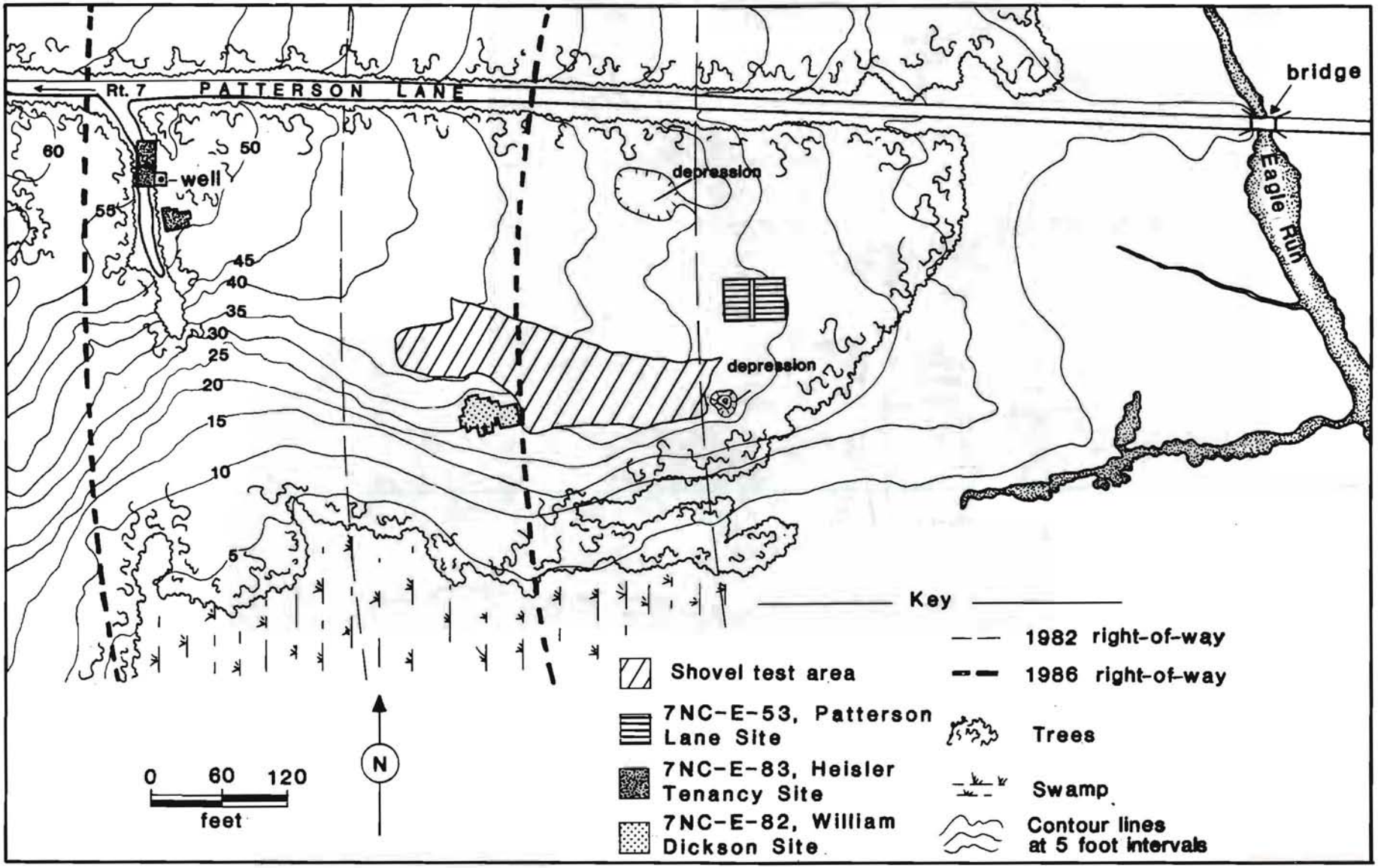
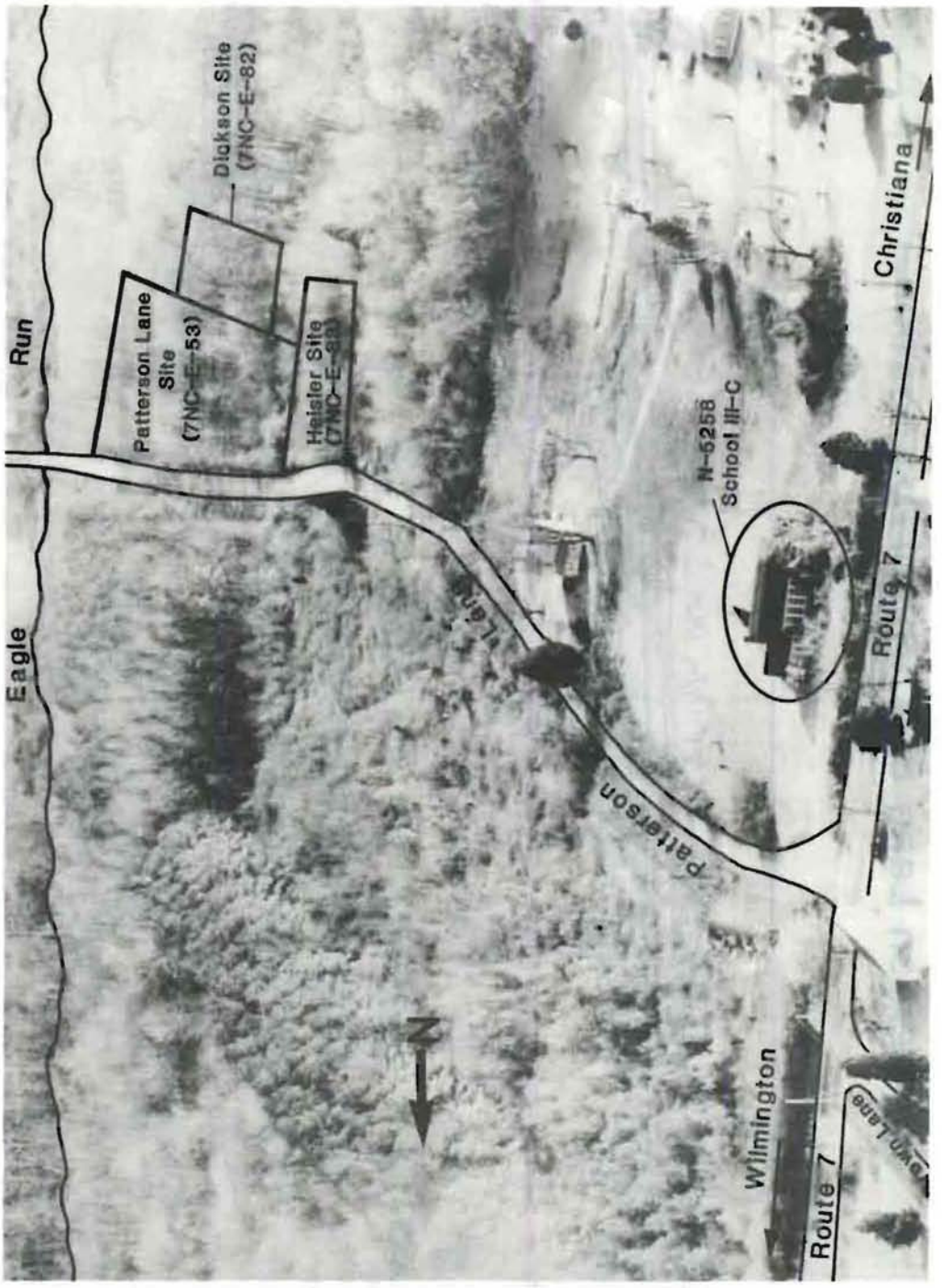


PLATE 1

Aerial View of Project Area



Center for Archaeological Research (UDCAR). Preliminary artifact cataloging and analysis was performed on the Patterson Lane Site artifact assemblage by the DelDOT archaeologists, and final artifact cataloging and analysis, and report preparation for all three sites were conducted by UDCAR in 1987.

The realignment of Route 7 in this portion of the Route 7 South Corridor consists of an entirely new right-of-way located approximately 0.2 miles east of the present road-bed of Route 7. The proposed ROW is approximately 350 feet wide at this point, and extends northwards from the crossing of Christina River, across 0.1 mile of wetlands and marsh, and up the bluff and across the uplands of the Patterson Lane Site Complex (Figure 2). The original Phase I survey conducted by DelDOT archaeologists investigated the proposed alignment that traversed the Patterson Lane Site. Later design changes, which shifted the proposed ROW approximately 350 feet westward, made the additional investigations by UDCAR archaeologists necessary, thus allowing the identification and excavation of the Dickson and Heisler Sites.

In the following pages, the Patterson Lane Site Complex will be discussed in terms of its environmental setting, its relation to regional historic developments, in particular to the village of Christiana Bridge, and site specific historic research. Field methods and research goals will be presented, followed by the results of the excavations. Artifact analysis and site interpretations, from both intra- and inter-site perspectives, will be undertaken, and finally management recommendations regarding the sites will be made.

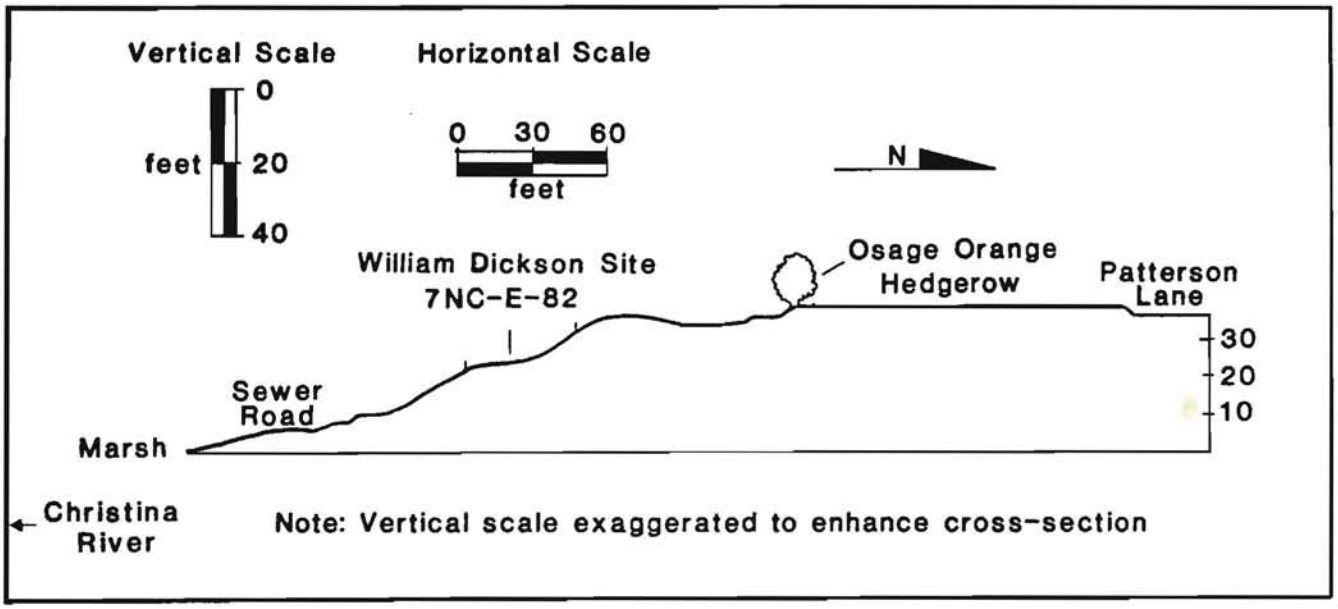
ENVIRONMENTAL SETTING

The project area of the Patterson Lane Site Complex is located within the High Coastal Plain of Delaware just to the south of the Fall Line, directly on the middle reaches of the Christina River, a high order tributary of the Delaware River (Figure 2). The High Coastal Plain, which is located between the Fall Line and the Smyrna River to the south, is characterized by rolling topography and elevation differences which can range up to 50 feet (16 meters) from the headlands bordering high order streams to adjacent floodplain marshes. The bluff and slope along the southern border of the Patterson Lane Site Complex is the dominant topographic feature in the immediate vicinity of Christiana, rising steeply from the marshlands at the base of the bluff to nearly 50 feet in the area of the Heisler Site (7NC-E-83), and to 80 feet above sea level where the present road bed of Route 7 intersects with Patterson Lane, to the west of the project area. A schematic cross-section of this bluff, from Patterson Lane south to the Christina River, is illustrated in Figure 3. This high ground east of the village was one of the earliest parcels of land to be patented by the Penn government, and was called "Eagles Point" in the early deeds.

The soils in the project area are characterized as silty and clayey sand ranging from steep slopes of 12 to 40% along the fringes of the marsh to more gradual slopes along the road bed of Patterson Lane. Soils of this type are not suited for cultivation, due to the extreme erosion and density of the clays, although silty and clayey soils are suitable for limited livestock pasturage (Mathews and Lavoie 1970).

FIGURE 3

Schematic Cross-section of Project Area



The Christina River dominates the hydrology of the project area. Although it is fed by a number of low order intermittent and perennial streams and springs, it is principally fed by Eagle Run, a perennial tributary which empties into the Christina from the northwest, just to the east of the Patterson Lane Site Complex. Like the Christina, Eagle Run has figured prominently in the development and growth of the Patterson Lane area and the village of Christiana Bridge. The Christina is tidal to Smalley's Mill Pond, a distance of approximately 15.8 miles from the river's mouth near Wilmington, and about 1 mile west of the town of Christiana. The project area is included within the tidal portion of the drainage. Historic agricultural practices and recent suburban development in proximity to the river and its tributaries has increased the local rate of run-off during periods of high precipitation. This problem, coupled with the

river's tidal nature, make the Christina especially susceptible to flooding. In fact, the bankfull stages of 8 feet were exceeded fifty-nine times between the years 1943 and 1968, and record floods occurred on July 5, 1937 and May 1, 1947 (U.S. Army Corps of Engineers 1968). The former flood severely damaged the earthen and sod retaining banks in the vicinity of the Churchmans Road bridge, causing a flooding of the area now known as Churchmans Marsh. Prior to that time, starting in the mid-eighteenth century and continuing into the twentieth century, much of the marsh had been drained by a system of dikes and ditches, and utilized for salt hay production and livestock grazing land (Robert Lynam, personal communication 1984).

The combination of different hydrological settings and varied soils in the vicinity of the study area allowed for a broad range of environmental settings during the past 13,000 years of prehistoric utilization and occupation of the region. Table 1 lists the varied environments through time for the major drainage floodplains around the Christina River and the headlands and interior areas during the past 10,000 years based on local paleoenvironmental research (Custer 1982, 1984; Custer and Watson 1987). More detailed environmental reconstructions (Custer 1980; Custer and DeSantis 1986) may also be applied to the project area, and the location of the project area with respect to these reconstructions is shown for different points in time in Figure 4. These regional reconstructions highlight both the environmental diversity and the upland/interior versus floodplain dichotomy, particularly apparent in the Patterson Lane vicinity.

TABLE 1

LOCAL PALEOENVIRONMENTS

Date	Floodplain Margins	Bluffs and Interior
prior to 6500 B.C.	deciduous gallery forests	Scattered grasslands and boreal woodlands
6500-3000 B.C.	mixed oak/hemlock gallery forest	Hemlock/oak woodland
3000-800 B.C.	deciduous gallery forests	Open oak/hickory woodland with scattered grasslands
800 B.C.-recent	deciduous gallery forests	Mixed oak-chestnut woodland

Source: Custer 1982, 1984a; Custer and Watson 1987

It is expected that this dichotomy would have important effects upon prehistoric settlement patterns in the study area.

Lithic resources which would have been available to both the prehistoric and historic populations of the study area consisted of primary outcrops and secondary cobble resources (Custer and Galasso 1980). Aboriginal populations utilized locally available secondary resources of jasper, chert, quartz, quartzite, and chalcedony which had been laid down as bed deposits by the ancestral Susquehanna and Delaware Rivers. High quality primary resources were not immediately available in the project area, but could be found in nearby areas (Custer, Ward, and Watson 1986). Cryptocrystalline jaspers, cherts, and chalcedonies of the Delaware Chalcedony Complex can be found in the Newark gabbro formation in the western portion of northern Delaware,

FIGURE 4A

Environmental Reconstructions (Late Glacial)

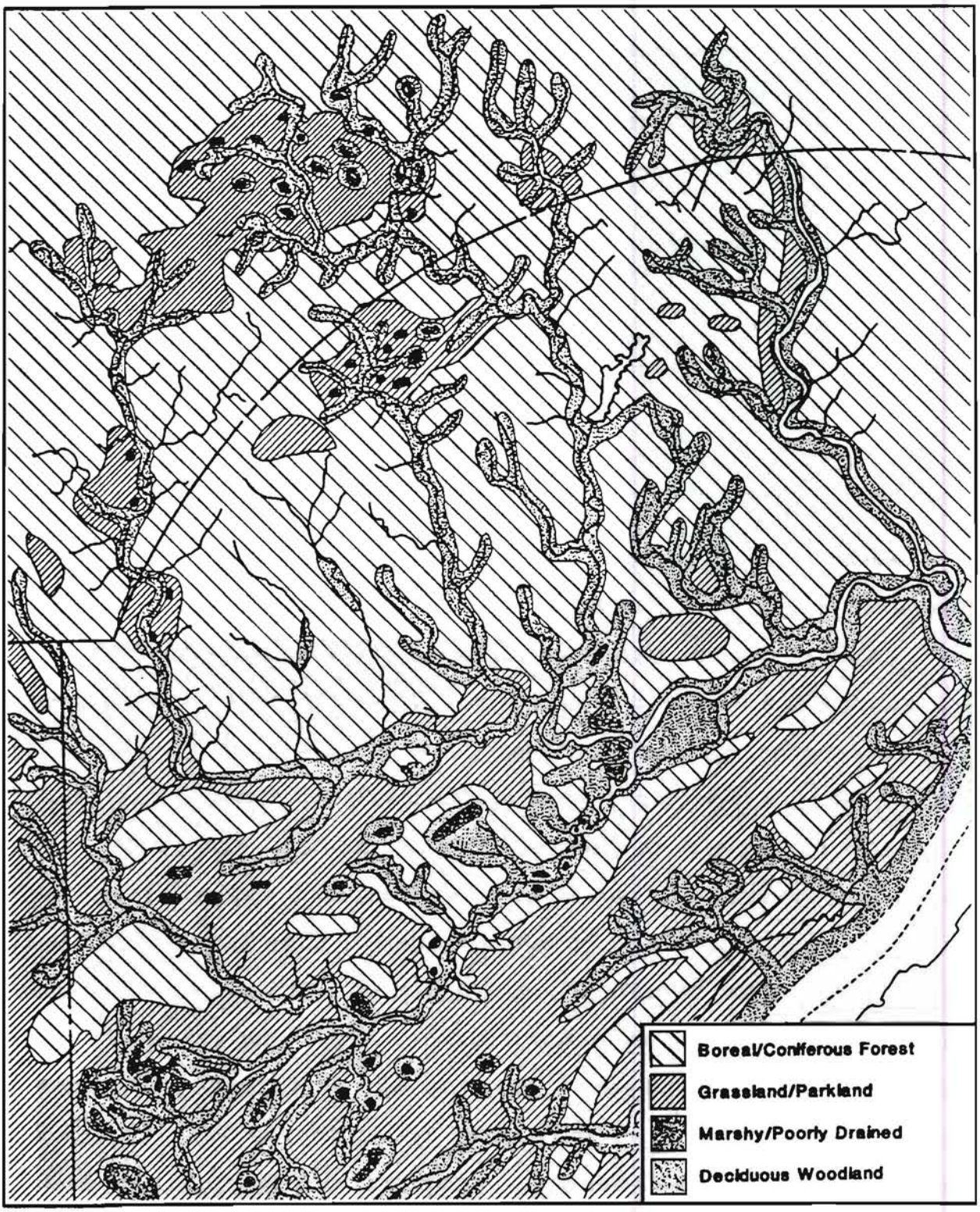


FIGURE 4B

Environmental Reconstructions (cont.)

(Pre-Boreal/Boreal)

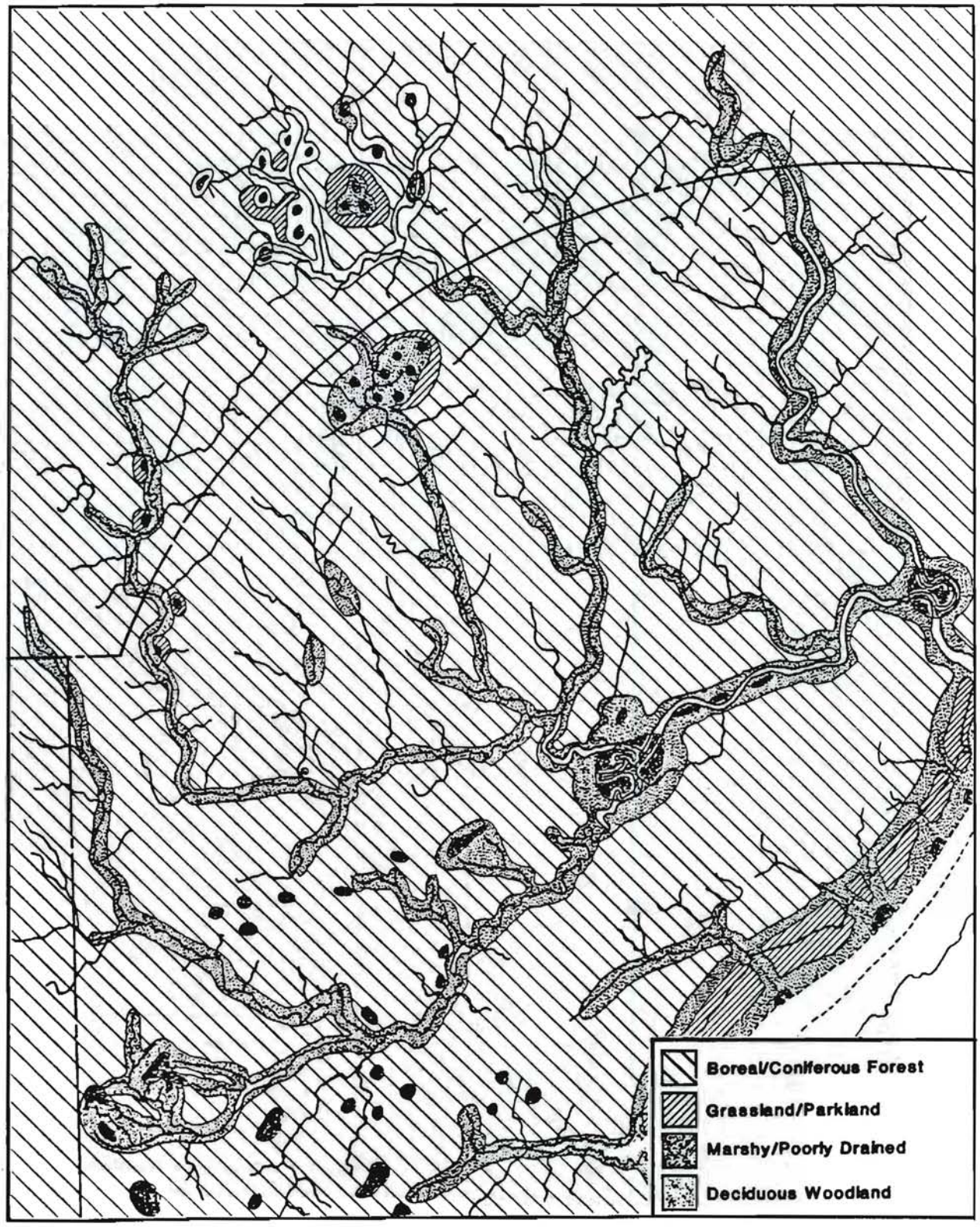


FIGURE 4C

Environmental Reconstructions (cont.)

(Atantic)

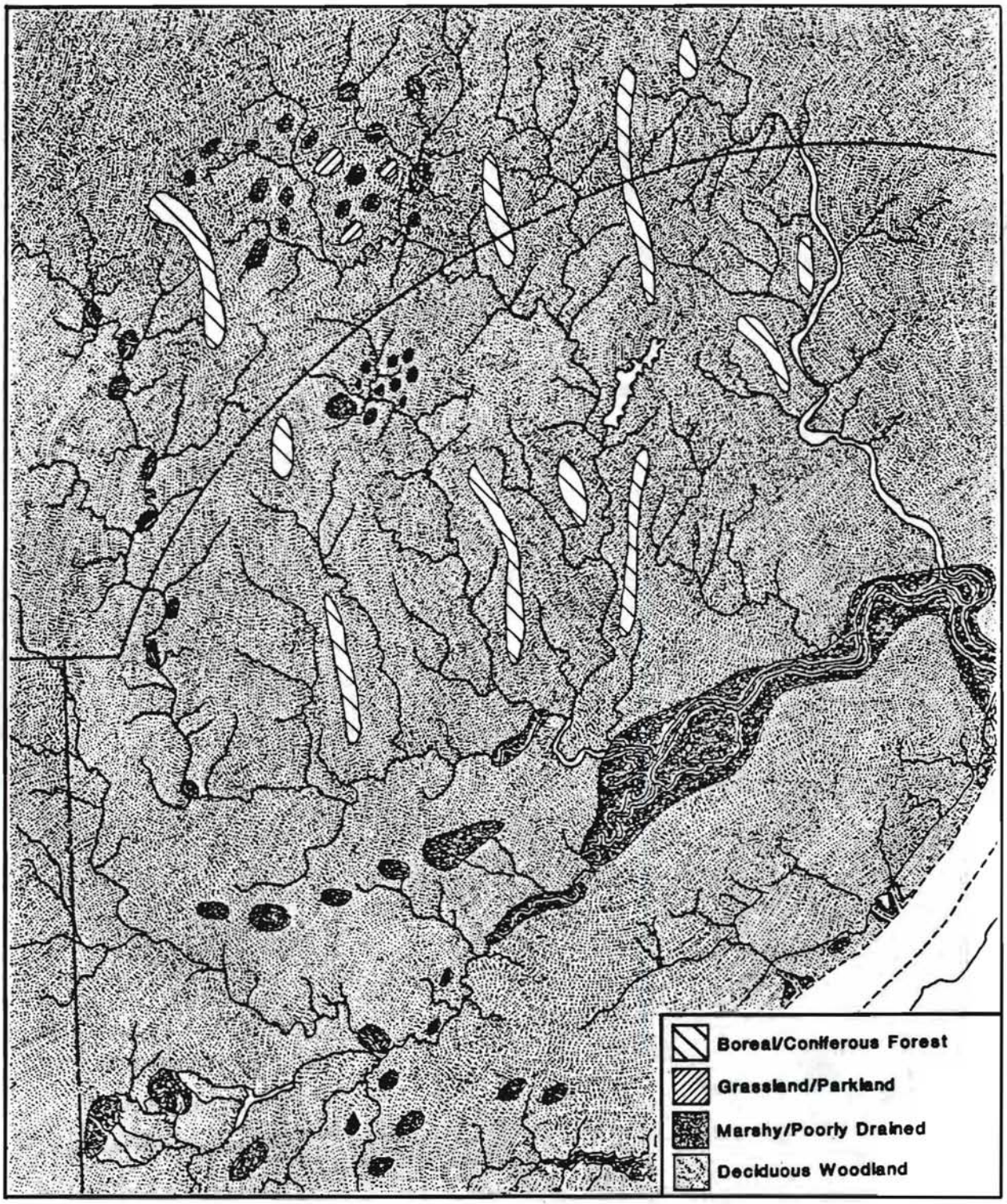


FIGURE 4D

Environmental Reconstructions (cont.)

(Sub-Boreal)

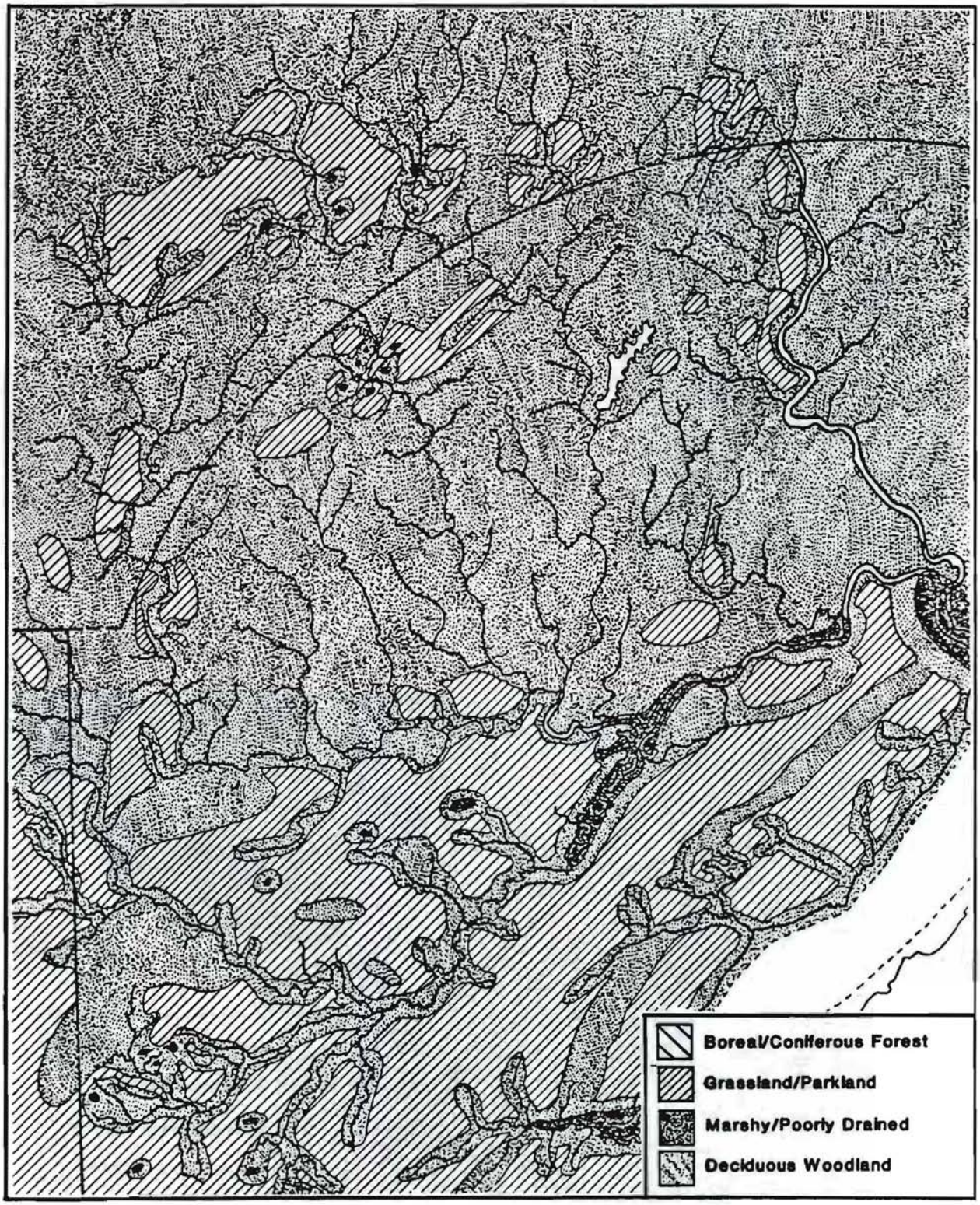
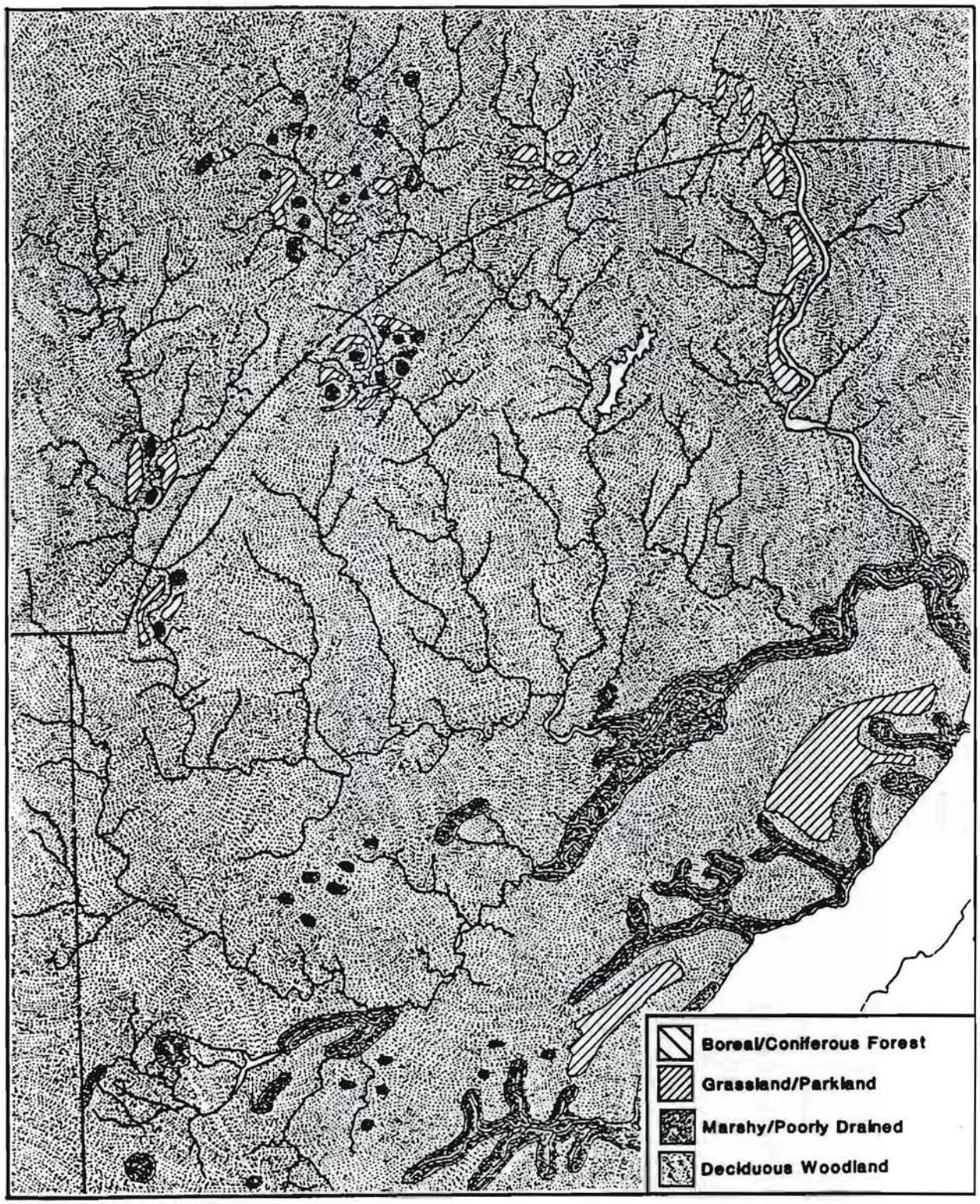


FIGURE 4E

Environmental Reconstructions (cont.)

(Sub-Atlantic - Recent)



northeastern Maryland, and southeastern Pennsylvania, particularly in the vicinity of Iron Hill, located about 6 miles west of Christiana Bridge in Pencader Hundred. Historic populations in the region were quick to utilize the iron ore that could be obtained from Iron Hill, and Welsh settlers in the early eighteenth century established iron furnaces on the slopes of the Hill (Heite 1983; Owen 1977).

The Christina River has provided the focus of historic settlement, commerce and industry for the project area. The village of Christiana Bridge was established at the head of tidal navigation of the river by the late seventeenth century, and a bridge was in place by the beginning of the eighteenth century. The economic livelihood of the village and the surrounding region was governed by ability of the local merchants and landholders to keep the river open for efficient water-oriented transportation, and for much of the eighteenth century, Christiana Bridge was a prominent central place on the Delmarva Peninsula, providing crucial terminus for water and land carriage between the Delaware River and Philadelphia, and the Head of Elk and the Chesapeake Bay. Besides some slight channel alterations due to flooding, the present configuration of the Christina River is a direct result of this marine dependency, because in the 1820s the river was channelized just below the Route 7 bridge in an effort to compete with the construction of the Chesapeake and Delaware Canal to the south. The completion of the canal and the later opening of the Philadelphia, Wilmington and Baltimore Railroad (PW&BRR) several miles north of the village led to the economic decline and stagnation of the Christina, an event from which it

has not recovered. Ironically, it can be noted that the recent construction of shopping malls, professional centers, a hospital, hotels and meeting facilities in the immediate vicinity has put the name of Christiana "back on the map". The modern environmental setting of the project area is now one of extensive suburban and commercial development, when only twenty to thirty years ago, nearly all of the land was utilized for agricultural cultivation or livestock production. Directly south of the Patterson Lane uplands are tidal marshes that were created during the nineteenth century channelization and extend nearly 600 feet to the present bed of the Christina River. Above this marshland, the area is characterized by dense scrub woodlands, mostly of oaks, hickories and other hardwoods, that were previously agricultural fields and house sites. For the most part, the land has been abandoned for the last twenty years, and has been allowed to return to a semi-natural condition, all in anticipation by local landowners of imminent suburban and commercial development and road construction.

REGIONAL PREHISTORY

The prehistoric archaeological record of the northern New Castle County area can be divided into four blocks of time: The Paleo-Indian Period (ca. 12,000 B.C. - 6500 B.C.), The Archaic Period (6500 B.C. - 3000 B.C.), the Woodland I Period (3000 B.C. - A.D. 1000), and the Woodland II Period (A.D. 1000 - A.D. 1650). A fifth time period, the Contact Period, may also be considered and includes the time period from A.D. 1650 to A.D. 1750, the approximate date of the final Indian habitation of northern

Delaware in anything resembling their pre-European Contact form. Each of these periods is described below and the descriptions are summarized from Custer (1984).

Paleo-Indian Period (12,000 B.C. - 6500 B.C.) - The Paleo-Indian Period encompasses the time period of the final disappearance of Pleistocene glacial conditions from Eastern North America and the establishment of more modern Holocene environments. The distinctive feature of the Paleo-Indian Period is an adaptation to the cold, and alternately wet and dry, conditions at the end of the Pleistocene and the beginning of the Holocene. This adaptation was primarily based on hunting and gathering, with hunting providing a large portion of the diet. Hunted animals may have included now extinct megafauna and moose. A mosaic of deciduous, boreal, and grassland environments would have provided a large number of productive habitats for these game animals throughout Delaware, and watering areas would have been particularly good hunting settings.

Tool kits of the people who lived at this time were oriented toward the procurement and processing of hunted animal resources. A preference for high quality lithic materials has been noted in the stone tool kits and careful resharpening and maintenance of tools was common. A lifestyle of movement among the game attractive environments has been hypothesized with the social organizations being based upon single and multiple family bands. Throughout the 5500 year time span of the period, the basic settlement structure remained relatively constant with some modifications being seen as Holocene environments appeared at the end of the Paleo-Indian Period.

Numerous Paleo-Indian sites are noted for northern Delaware including hunting and processing sites near Hockessin and adjacent to the Wilmington Medical Center, possible quarry sites near Iron Hill, and isolated point finds.

Archaic Period (6500 B.C. - 3000 B.C.) - The Archaic Period 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 in the face of warm and wet conditions caused the extinction of many of the grazing animals hunted during Paleo-Indian times; however, browsing species such as deer flourished. Sea level rise was also associated with the beginning of the Holocene Period in northern Delaware. The major effect of the sea level rise was to raise the local water table, which helped to create a number of large swamps, such as Churchmans Marsh. Adaptations changed from the hunting focus of the Paleo-Indians to a more generalized foraging pattern in which plant food resources would have played a more important role. Large swamp settings such as Churchmans Marsh supported large base camps as indicated by the remains at the Clyde Farm Site. A number of small procurement sites in favorable hunting and gathering locales are also known in northern Delaware.

Tool kits were more generalized than earlier Paleo-Indian tool kits and showed a wider array of plant processing tools such as grinding stones, mortars, and pestles. A mobile lifestyle was probably common with a wide range of resources and settings

utilized on a seasonal basis. A shifting band-level organization which saw the waxing and waning of group size in relation to resource availability is evident.

Woodland I Period (3000 B.C. - A.D. 1000) - The Woodland I Period can be correlated with a dramatic change in local climates and environments that seems to have been a part of events occurring throughout the Middle Atlantic region. A pronounced warm and dry period set in and lasted from ca. 3000 B.C. to 1000 B.C. Mesic forests were replaced by xeric forests of oak and hickory, and grasslands again became common. Some interior streams dried up, but the overall effect of the environmental changes was an alteration of the environment, not a degradation. Continued sea level rise also made many areas of the Delaware River and Bay shore the sites of large brackish water marshes which were especially high in productivity. The major changes in environment and resource distributions caused a radical shift in adaptations for prehistoric groups. Important areas for settlements included the major river floodplains and estuarine swamp/marsh areas. Large base camps with fairly large numbers of people are evident in many areas of northern New Castle County such as the Delaware Park Site, the Clyde Farm Site, the Crane Hook Site, and the Naamans Creek Site. These sites supported many more people than previous base camp sites and may have been occupied on nearly a year-round basis. The overall tendency was toward a more sedentary lifestyle.

The overall tool kits show some minor variations as well as some major additions from previous Archaic tool kits. Plant processing tools became increasingly common and seem to indicate

an intensive harvesting of wild plant foods that may have approached the efficiency of horticulture by the end of the Woodland I Period. Chipped stone tools changed little from the preceding Archaic Period; however, more broad-bladed knife-like processing tools became prevalent. Also, the presence of a number of non-local lithic raw materials indicates that trade and exchange systems with other groups were beginning to develop. The addition of stone, and then ceramic, containers is also seen. These items allowed more efficient cooking of certain types of food and may also have functioned as storage for surplus food resources. Storage pits and house features during this period are also known from the Delaware Park Site and the Clyde Farm Site. Social organizations also seem to have undergone radical changes during this period. With the onset of relatively sedentary lifestyles and intensified food production, which might have produced occasional surpluses, incipient ranked societies may have begun to develop, as indicated by the presence of extensive trade and exchange and some caching of special artifact forms. By the end of the Woodland I Period a relatively sedentary lifestyle existed in northern Delaware.

Woodland II Period (A.D. 1000 - A.D. 1650) - In many areas of the Middle Atlantic, the Woodland II Period is marked by the appearance of agricultural food production systems; however, settlements of the Woodland I Period, especially the large base camps, were also occupied during the Woodland II Period and very few changes in basic lifestyles and artifact assemblages are evident. Intensive plant utilization and hunting remained the

major subsistence activities up to European Contact. Similarly, no major changes are seen in social organization for the Woodland II Period of northern Delaware.

Contact Period (A.D. 1650 - A.D. 1750) - The Contact Period is an enigmatic period of the archaeological record of northern Delaware which began with the arrival of the first substantial numbers of Europeans in Delaware. The time period is enigmatic because few Native American archaeological sites that clearly date to this period have yet been discovered in Delaware, although numerous Contact Period sites are evident in southeastern Pennsylvania. It seems clear that Native American groups of Delaware did not participate in much interaction with Europeans and were under the virtual domination of the Susquehannock Indians of southern Lancaster County, Pennsylvania. The Contact Period ended with the virtual extinction of Native American lifeways in the Middle Atlantic area except for a few remnant groups.

REGIONAL HISTORY

The following regional history will focus primarily on the growth and historic development of the village of Christiana Bridge, also known throughout its history as Christeen, X-teen, "Bridgetown", and Christiana. This village history will be integrated into larger scale regional developments insofar as they affected the growth of the town. Overviews of the regional culture history of the northern Delaware area can be found in several previously published archaeological site reports, (Catts and Coleman 1986:3-21; Basalik et al. 1987:4-31; Thompson

1987:16-38; Coleman et al. 1988a; Catts et al. 1986:12-30; Catts et al. 1988a:20-51; Catts et al. 1988b:12-53).

The village of Christiana Bridge is located on the north bank of the Christina River in White Clay Creek Hundred at the head of tidal navigation 13 miles from its confluence with the Delaware River. The Swedes and Dutch, who had pushed their settlement up the Christina River valley towards the Elk River, probably had erected a crossing at this location by about 1660 (Conrad 1908:495). The area that was to become the village was originally part of a tract of 75 acres called "Eagle's Point" which was surveyed for John Ogle by the government of William Penn in 1683. This parcel of land was located to the north of the present-day intersection of routes 7 and 273, and contained the upland and high ground north of the modern town. Ogle sold the parcel in 1731 to Dr. Rees Jones, a "practicioner of Physick", and a prominent individual in the village, and the land was resurveyed to Jones in 1741. By the time of his death in 1754, Jones owned several houses and lots, including a tavern, in Christiana.

A bridge was probably constructed at the village by the end of the seventeenth century, and was definitely in existence by 1723 when the settlers of Pencader Hundred petitioned the Levy Courts of New Castle County and Cecil County, Maryland, for a road to be laid out from the Head of Elk River to "New Castle and Christiana Bridge" (Scharf 1888:933). This petition on the part of the relatively isolated settlers of the Welsh Tract west of Christiana signaled the "opening up" of this region of New Castle County (Catts et al. 1988b), the simultaneous beginnings

of the village's physical and economic growth, and its slow rise to regional importance as a shipping center for grains produced in northern New Castle County, adjoining Cecil County, and the lower reaches of the Susquehanna River valley. Dr. Rees Jones, in his Pennsylvania Gazette advertisement of 1748, foresaw great things for the village, and predicted that Christiana Bridge would "... in a few years be a considerable town, being at the head of navigable water, surrounded by good country, and a much nearer landing to the Conestogoe (sic) country than Philadelphia, besides the advantages of having no ferries to cross" (Catts n.d.:22). This same blossoming of urban growth and expansion was witnessed throughout the central Middle Atlantic region (Lemon 1967). The towns of northern New Castle County, such as Christiana Bridge, Stanton, and Newport, have been called commercial towns by one historian (Main 1973:28) because of their proximity to markets, their agricultural hinterlands, and their placement on navigable rivers.

An examination of survey plats, deed records, travellers' descriptions, and newspaper advertisements indicate that by 1750, Christiana Bridge consisted of at least a score of houses, including shops and taverns (about 1 dozen built of brick), a Presbyterian Church, and a milling complex, called Christiana Mills, west of the town. Along the river, clustered to the east (downstream) of the village, were several wharves and storehouses, which were clear indicators of the commercial aspect of Christiana Bridge, and the importance of the town's location as a transshipment center. A little further east, at the

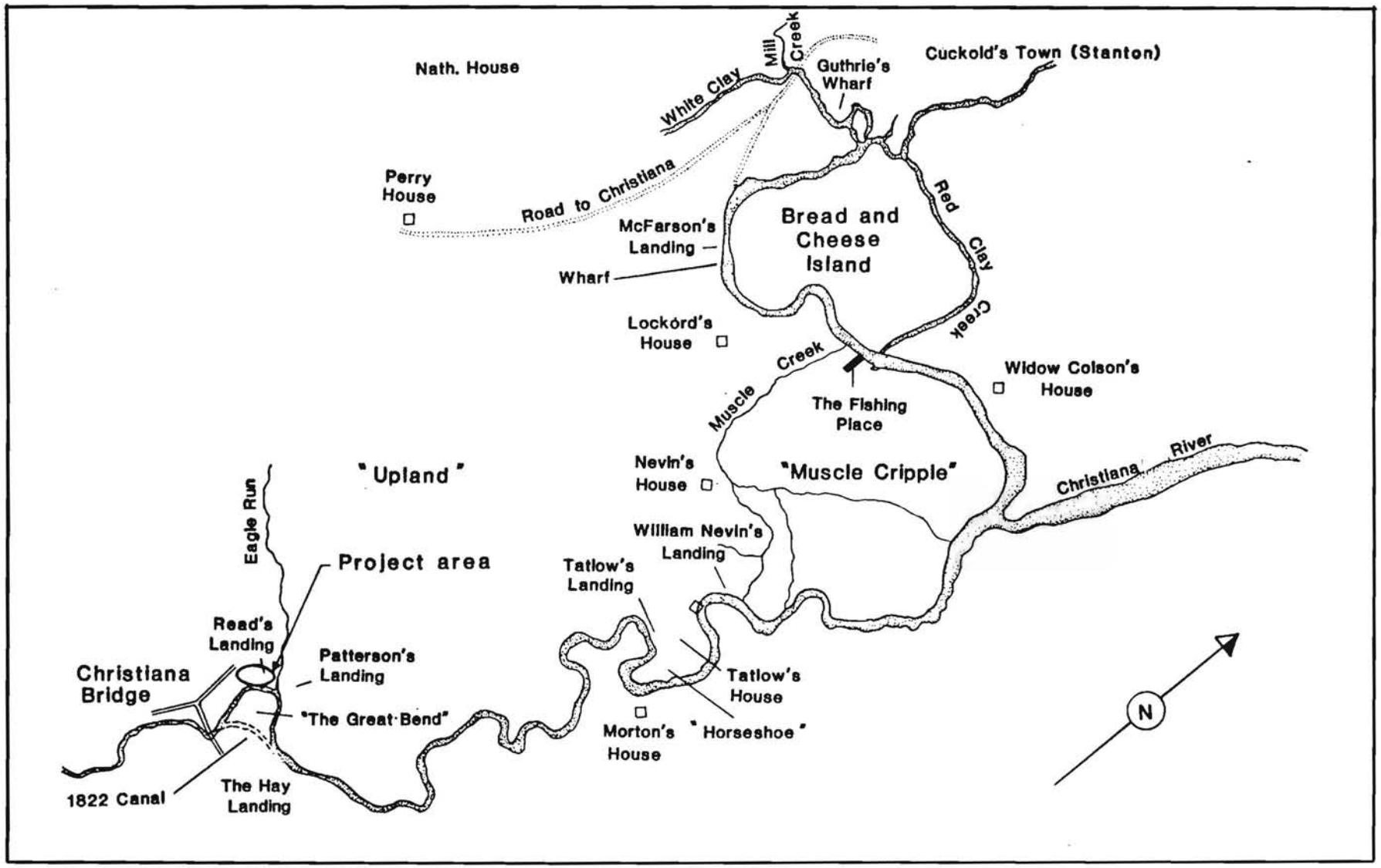
confluence of the Christina River with Eagle Run, were two landings, Read's and Patterson's.

Much of the growth and development of Christiana Bridge and the surrounding country was owed to these landings and their attendant wharves, and the merchants and shopkeepers that operated them. The influence of these establishments on the village and the surrounding region cannot be underestimated, for they functioned as distribution centers for a rural community. In 1746 there were at least six landings and wharves along the Christina and White Clay Creek between Cuckoldstown (present-day Stanton) and Christiana Bridge; from east to west these were McFarson's Landing (also known as White Clay Creek Landing), the Fishing Place (Landing), William Nevin's Landing, Tatlow's Landing, Patterson's Landing, and Read's Landing (Figure 5). Properties that were advertised for sale in the Pennsylvania Gazette in the surrounding area, and indeed throughout the three Lower Counties, frequently indicated the distance to the closest landing, implicitly suggesting the importance of those locations for trade and communications (Catts n.d.).

Landings functioned as nodal points (Hickman 1977) for the surrounding countryside. They were places where water transportation to Philadelphia and other points could be obtained, where manufactured items, such as "European and West India Goods" were purchased by cash or credit, and where agricultural produce and home manufactures were stockpiled, shipped, and traded (Catts n.d.). The advertisement for White Clay Creek Landing -- earlier described as "one of the (lately) most frequented landings on the said Creek" -- by Archibald

FIGURE 5

Locations of Landings on the Upper Christina, circa 1750



Finney and Henry Loughead in April 1761, gives a clear indication of a landing's purposes, and also the competition for business between different merchants at rival landings:

> Notice is hereby given, that the Landing on White Clay Creek, commonly known by the Name of McPherson's Landing, is now put in good Order, and everything in Readiness for carrying on the Shalloping Business. Likewise a good Stable and Troughs for the Feeding of Horses. Also good Stores for the securing of Goods from the Inclemency of the Weather, or any other Disadvantages. Those who are pleased to favour us with their Custom, may depend upon having their Business transacted with the utmost care and Dispatch, and at as low Rates as is common in Newport, by ARCHIBALD FINNEY, and HENRY LOUGHEAD.
>
> N.B. Said Landing is a Mile and a Half nearer for those Waggons that go down the Newport Road, and but six Perches farther for the Waggons that come by Way of Newark. The Road is altogether as good, if not better. The Road from said Landing comes into Christiana Bridge Road, at the House known by the Name of the Widow Shannon's House, where those who come by way of Newark, are desired to strike off (Pennsylvania Gazette, April 9, 1761).

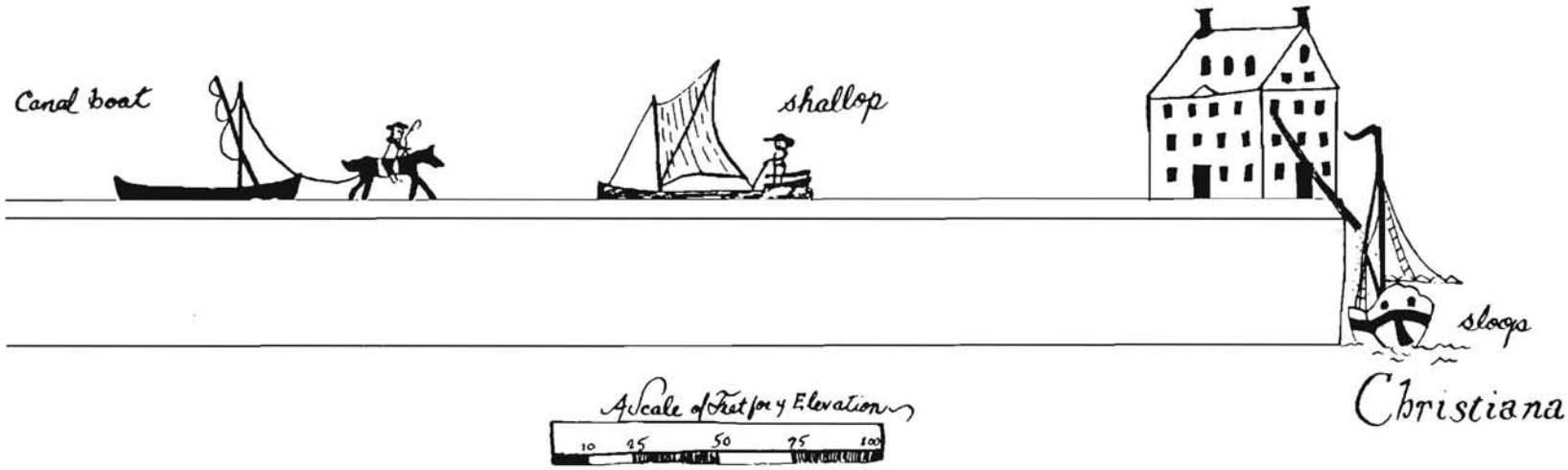
The merchants who owned these landings were important citizens and prominent landholders in the community and region, forming an elite upper class population. These men included John Read, William Patterson, Tobias Rudolph, Joseph Beddome, and Thomas Montgomery (Catts n.d.). Jackson Turner Main, in his work The Social Structure of Revolutionary America, defines the eighteenth century merchant as "one who imported and who characteristically sold at wholesale" (Main 1973:86). By this definition, and by the nature of their trade, merchants lived in those locations that engaged in overseas trade, of which the landings along the upper reaches of the Christina were not a part. Instead, the owners of the Christina landings were shipping and receiving their goods primarily from Philadelphia, and to a

lesser extent, from Wilmington. The persons operating landings and stores in New Castle County can be more properly characterized as shopkeepers and/or traders, an occupation defined by Main as "a trader who sells from a shop ... typically he was a small retailer, who only occasionally sold goods at wholesale" (Main 1973:86). By Main's definitions, there were strictly speaking no merchants in the village of Christiana Bridge, although between 1735 and 1800 twenty-two merchants and shopkeepers operated establishments out of the town. From this total, only four were from beyond the immediate region (Dunn 1974). Gerald Carson, in his antiquarian-styled book, The Old Country Store, has suggested that the storekeeper liked the title of 'merchant', because it placed him in the dominant mercantile class, and "though he did not send full-rigged ships around the world, he [the country trader] was an entrepreneur according to his locations and means...."(Carson 1954:12).

The poor overland road network of eighteenth century Delaware and the Delmarva Peninsula, made landings and water-oriented shipping crucial to the lives of the region's inhabitants (Munroe 1954:137; Gray 1961:309; Hoffecker 1977; Catts and Coleman 1986). Most of the coasting trade in the area was carried on by boats, sloops, and shallops, and the Christina was navigable to Christiana Bridge, a distance of about 13 miles (Hempstead 1901). Shallops were small, shallow draft vessels, capable of maneuver on inland tidal creeks by oar or sail (Figure 6). Crews were usually two to four men. Advertisements in the Pennsylvania Gazette give ample descriptions of these vessels:

FIGURE 6

Shallop, Sloop and Canal Boat on the Christina River and Canal, circa 1770



Redrawn from original map by Edward Gilpin, January 1770, shows details of coastal trading vessels

* original located at Pennsylvania State Archives, in Harrisburg, MG-11, Map # 110

> To be sold ... A good shallop, about 18 months old, 31 foot keel, straight rabbit, 14 foot 4 inches beam, the hold 5 foot 2 inches deep, and in all other respects well proportioned, and fitted with sails, anchors, cordage, etc., with all appurtenances whatever belonging. (Pennsylvania Gazette)

Shallops were the workhorses of the creeks, and were used chiefly in the shipping of agricultural produce from Christiana Bridge to Wilmington and Philadelphia. This was termed the "upfreight" trip, and the shallops plying from Christiana Bridge were laden almost exclusively with flour and tobacco. On the "downfreight" trip they carried manufactured goods and commodities that were difficult to obtain or produce in the rural community. Merchant account records of the 1780s indicate the types of goods brought into Christiana, and these included bundles of brushes, "sundries" (which could be almost any item), Cedarware, barrels, kegs, trunks, bushels of salt, hogsheads of molasses, paper bundles, earthenware, boxes of candles, tea, sugar, boxes of soap, barrels of beer, boxes of lemons, coils of rope, rolls of leather, bags of shot, barrels of coffee, bundles of tools, and horse furniture, such as bridles and saddles (Hollingsworth, Maxwell, and Adams 1789-1798; Delaware Shipping Accounts 1781-82). It was a remarkable business, connecting numerous farmsteads and isolated locales with urban centers, but it was not without difficulties. Occasionally, as with any business, items were lost, misplaced, or delivered to the wrong party. Problems like these are attested to in this August, 1762 advertisement in the Pennsylvania Gazette, and suggest that once a mistake was made, it was a long time before it was rectified:

Put on board Levi Hollingsworth's Shallop, of Christine-bridge, New-Castle County, at Thomas Riche's Wharff, sometime in December last, a Crate of Tortoiseshell Ware, marked B.K. The Owner, by applying to George Adams, at Christine-bridge, or to the Subscriber, may have it again.

Also was put on board same Shallop, instead of the Subscriber's, about the latter End of November 1761, three Half Chests of Window Glass, directed, for John Shute, of Baltimore Town.

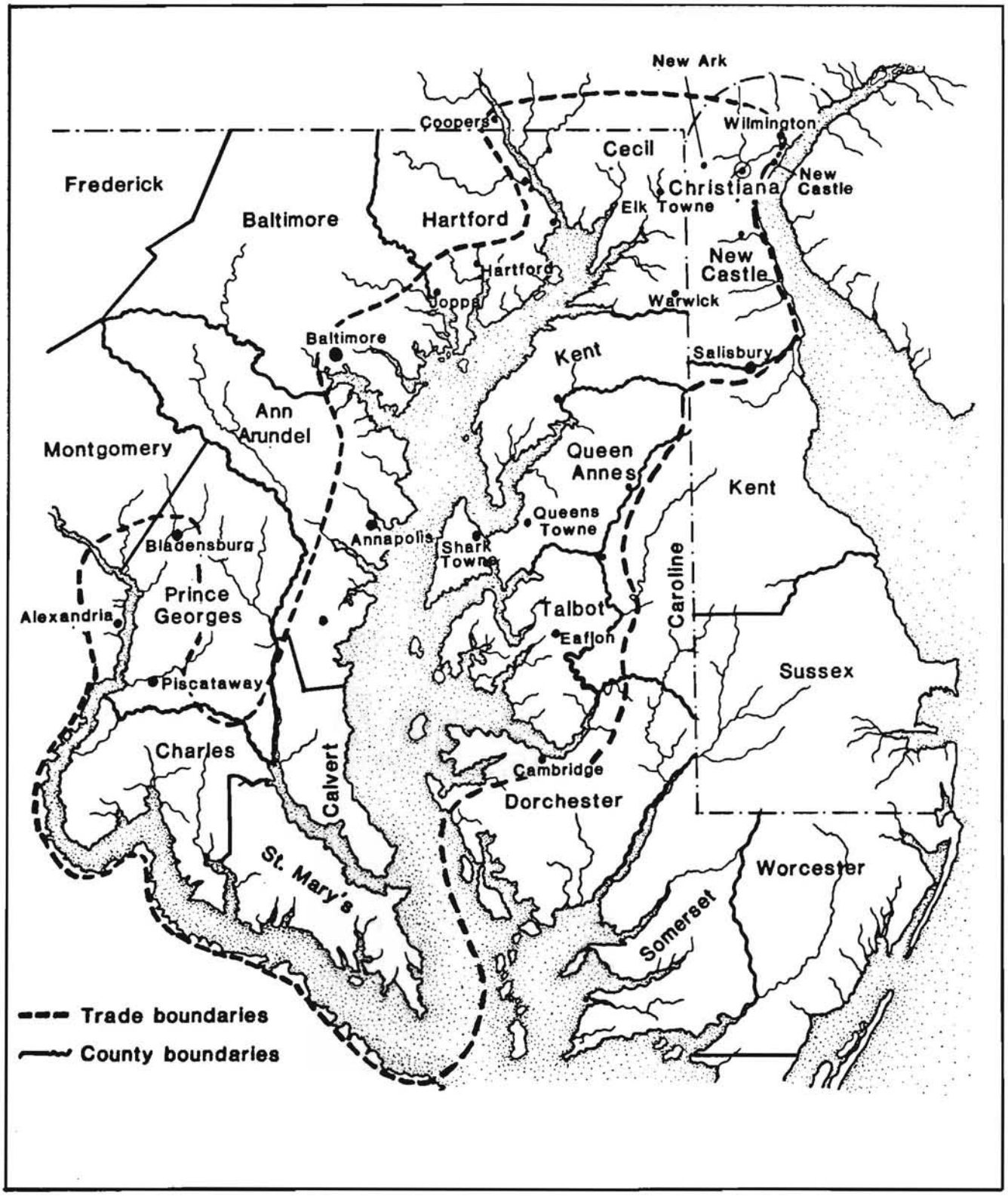
Likewise was put on board same Shallop, at the Bird in Hand Wharff, about the Middle of June last, a green Cloth Side Sadle, and a Snuffle Bridle, instead of the Subscriber's. Those that have said Goods, by giving Notice to Mr. George Adams, on delivering them to Messeurs Lathim and Read, of Philadelphia, near the Drawbridge, shall be rewarded by George Adams, or

LEVI HOLLINGSWORTH

Besides supplying their local clientele, Christiana Bridge merchants and freighters were involved in business transactions over much of the Eastern Shore of Maryland, and southeastern Pennsylvania. The late eighteenth century shipping firm of Hollingsworth, Maxwell, and Adams, based at the Bridge, conducted business from Nottingham and the lower reaches of the Susquehanna River, to Cambridge and Oxford on the Choptank River of the Eastern Shore. Figure 7 illustrates the range of the trade of several firms from the village between 1781 and 1798, suggesting the importance of Christiana Bridge in the regional economic network. It is interesting to note the absence of delivery points along the western shore of the Delaware. This absence is most likely due to the presence of the numerous wharves, stores, and landings located along the Appoquinimink, St. Jones, Mispillion, Broad, and Murderkill creeks in Kent and Sussex counties where landings were located long distances up the drainages. Several drainages such as Duck Creek, Dover (St.

FIGURE 7

Christiana Bridge Trading Connections, circa 1790



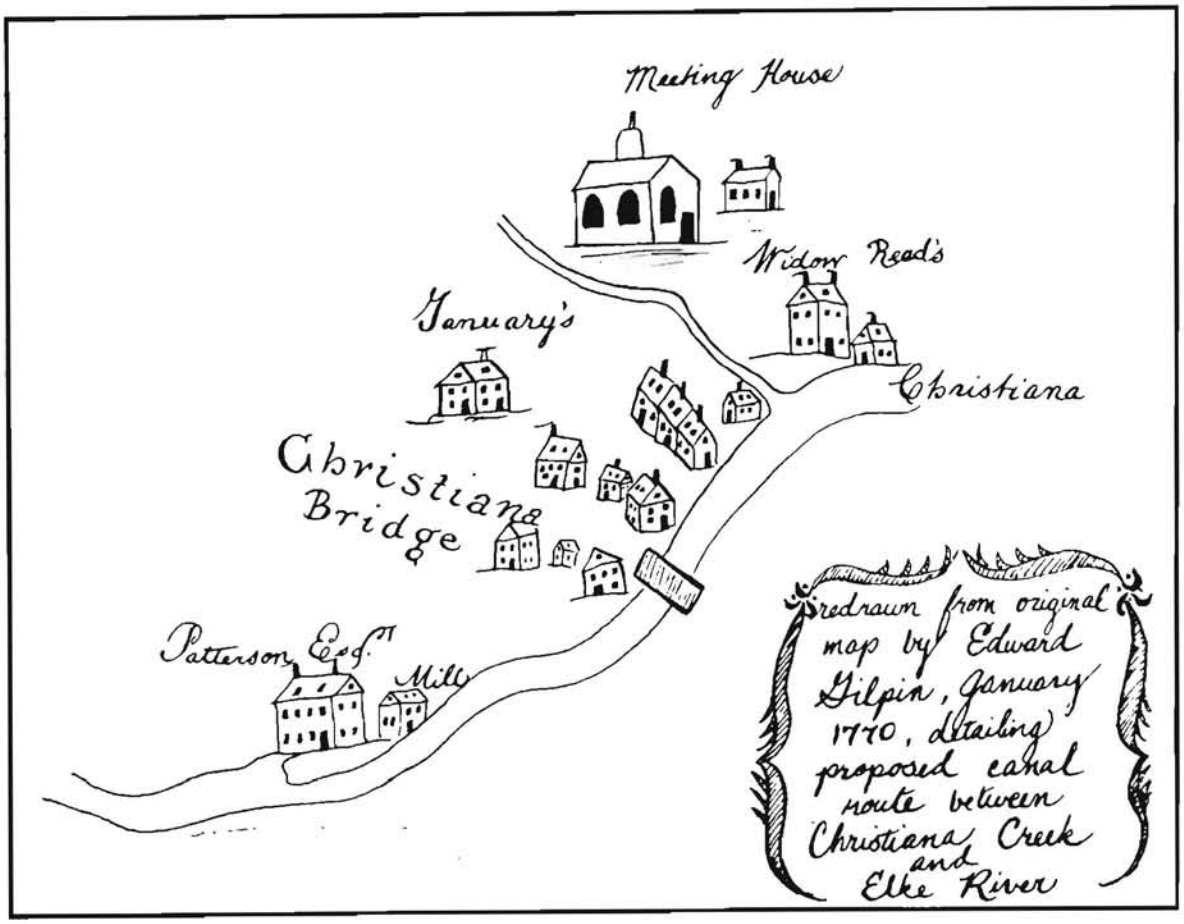
Jones) Creek, and Murther (Murderkill) Creek, were navigable by shallops up to twenty miles inland (Munroe and Dann 1985).

Christiana Bridge was first and foremost a mercantile village, and in addition to wharves and storehouses, contained other structures, most notably taverns, whose function it was to house and entertain travellers. There were several of these in the town, including the "Crooked Billet", owned by Jacob and Isaac Janvier, and the tavern operated by James Keapock, lately of Philadelphia, called "the Sign of the Right Honorable William Pitt". Dr. Rees Jones owned one of the taverns, and the tavern operator was Abel Armstrong (Catts n.d.). Christiana's taverns figured prominently in the town's life, serving as social gathering spots and political rallying points during the eighteenth and nineteenth centuries (Cooch 1976). By 1770, Christiana Bridge was a cluster of houses nestled on the side of the bluff on the north side of the creek, and was described by the traveller, Dr. Robert Honyman, as lying,

> in a Bottom at the head of Christeen Creek over which there is a Bridge here & to which the tide flows, bringing up sloops & such like vessels. Christeen is a small town & trades principally in flower (sic), there being several large mills in the neighborhood (Padelford 1939:10-12).

Figure 8 presents a view of colonial Christiana Bridge, taken from a manuscript survey map of a proposed canal between the town and the Head of Elk. Prominent buildings in the town were the Presbyterian Church, present in the town by 1738 (Dunn 1974), the tavern -- the structure marked as "January's" -- and the mills to the west of the town, called "Patterson's Mills".

FIGURE 8
Christiana Bridge, 1770



During the American Revolution, Christiana was a key center of military activity due to its strategic location at the head of navigation and the crossroads of four major regional connectors, and due to its important shipping facilities (Dunn 1974; Cooch 1976; Basalik et al. 1987). Considerable activity took place in the town during the late summer of 1777, when the British Army, under Sir William Howe, landed at the Head of Elk, and later in 1781, when the American General Lafayette brought his force of 1500 men through the town on their way to Virginia. Throughout the war, the town was garrisoned by small numbers of American

Continentals or State militia, and was a major supplying depot and shipping center for the American Army. The extent of the overuse of the road network in the area, particularly the road from Christiana to Head of Elk (present-day Old Baltimore Pike) can be seen in the road petition of the local inhabitants in 1782 deploring the state of the road, due to incessant use, and lack of manpower for repairs (Catts et al. 1988b:46).

Christiana's development began in earnest after the Revolution, when the town's transshipping facilities flourished. The years between 1780 and 1820 were the town's most prosperous, as packet boats, shallops, and sloops plied the river from the town to the Brandywine mills, shipping from this portion of the region 20,000 bushels of flour, 250,000 bushels of wheat, 1000 hogsheads of meal, 150 tons of iron, and 2000 hogsheads of tobacco (Weslager 1947; Cooper 1983:108). The village is shown in several late eighteenth and early nineteenth century maps (Plate 2, Figures 9 and 10), and was formed in the shape of a rough triangle whose sides were created by the road network and the river. By 1800, Christiana Bridge could boast a population of 289 inhabitants and between 50 and 60 buildings, including 33 dwelling houses, wharves, storehouses, shops and taverns, and a Presbyterian Church (Rogers and Easter 1960:47; Moore and Jones 1804:46; Scott 1807:180). It was variously described as "much larger [than Stanton] & quite snug, [and] lies in a Vale with good lowlands & Mills" (Kent 1952:136), and as "the only considerable place on this road [from Elkton to Christiana]. It is at this place that corn that comes by land-carriage is put on vessels for Philadelphia" (La Rochefoucault 1800:711). Hezekiah

PLATE 2

The French Army Map:
Road from Christiana Bridge to Head of Elk 1781

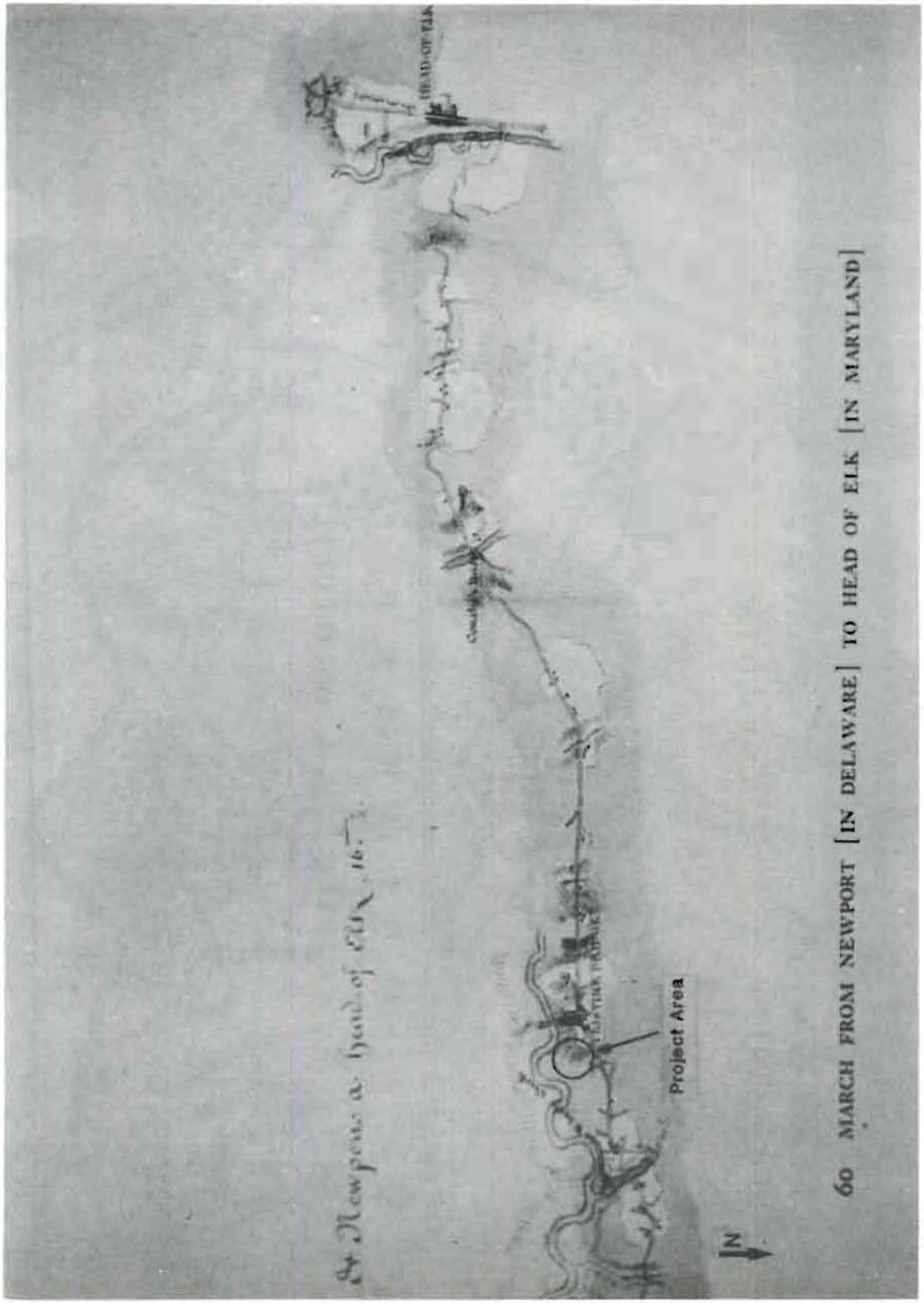


FIGURE 9

Section of the Road from Philadelphia to Annapolis 1789, Showing the Project Area

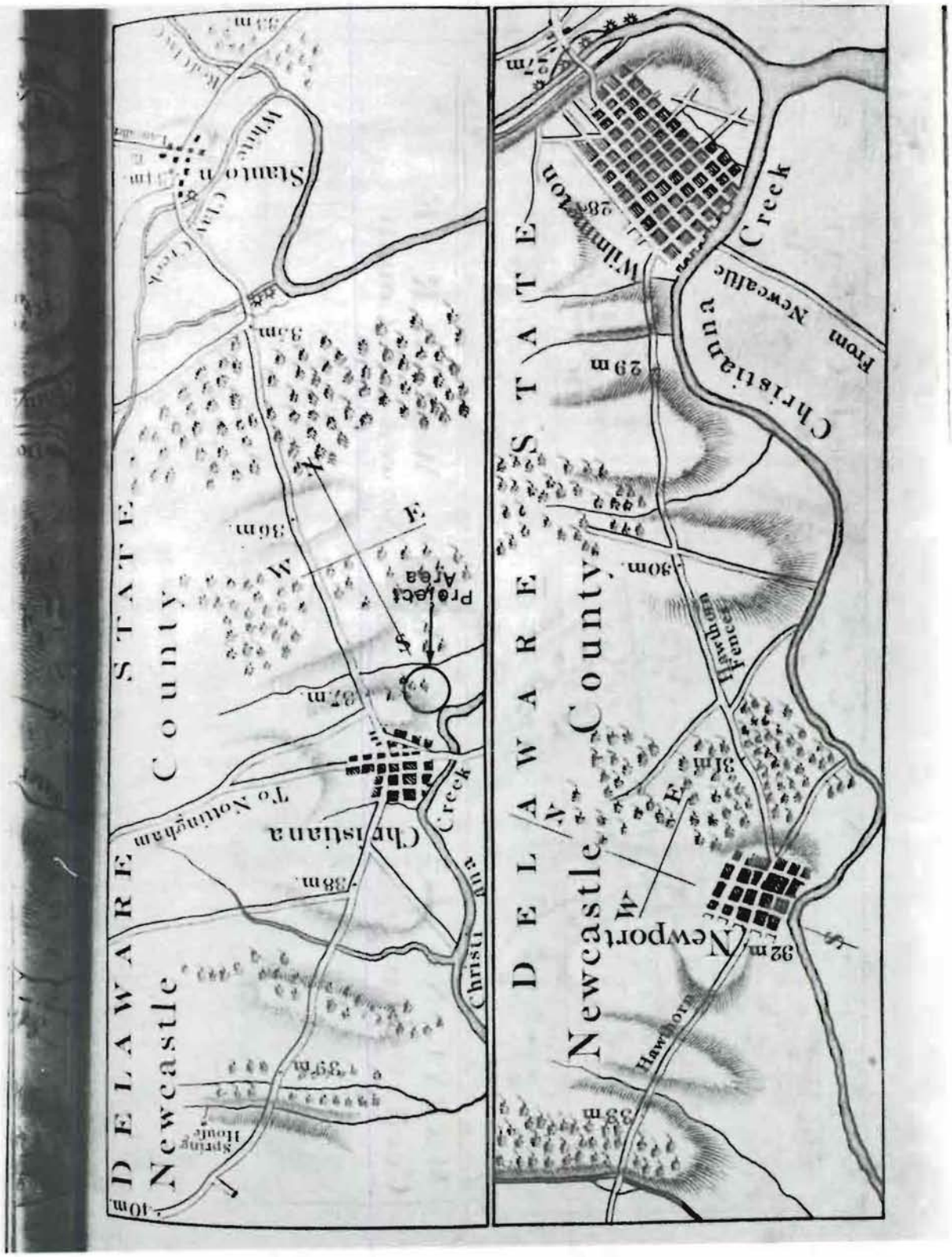
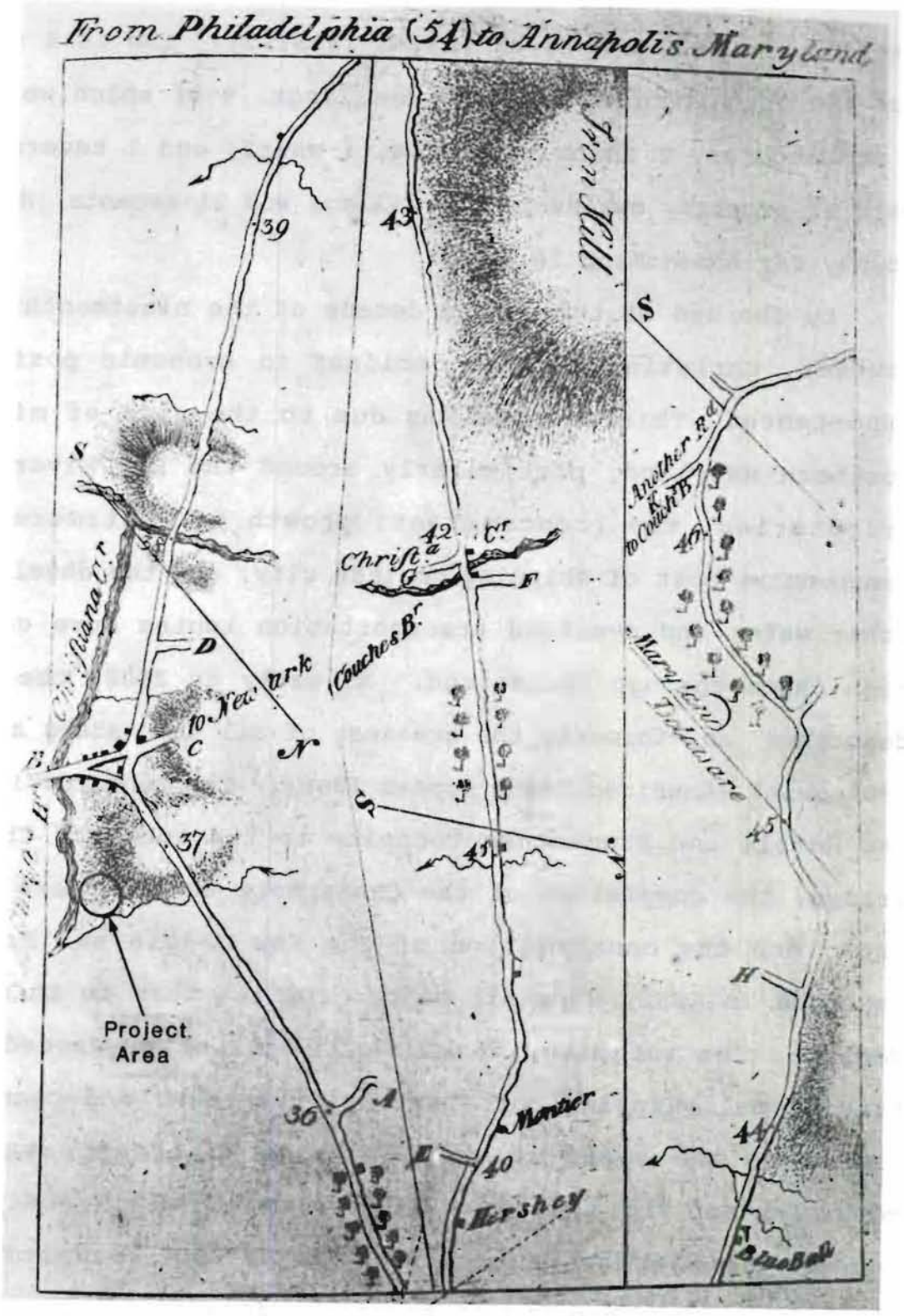


FIGURE 10

Section of the Road from Philadelphia to Washington 1804, Showing the Project Area



Niles, the Wilmington-born publisher of Nile's Weekly Register, praised Christiana as "an important place as a depot of goods transporting east or south, as it offers the shortest land carriage between the bays" (Niles 1815:93). The 1816 tax lists for the town recorded 35 total dwellings, 9 of which were brick, 3 storehouses, 2 shops, 2 stores, 1 wharf, and 1 tavern. There were 22 property owners in the village and 21 tenants (New Castle County Tax Assessment 1816).

By the end of the second decade of the nineteenth century, however, Christiana Bridge declined in economic position and importance. This decline was due to the rise of milling in northern Maryland, particularly around the Elk River and its tributaries, the (concomitant) growth of Baltimore and the inexpensive cost of shipping to that city, and the development of other water and overland transportation routes more convenient than those through Christiana. As early as 1808, the town was described as "formerly the greatest of all the waters across the peninsula" (American State Papers 1808). The construction of the New Castle and Frenchtown Turnpike to the south of Christiana Bridge, the completion of the Chesapeake and Delaware Canal in 1829, and the construction of the New Castle and Frenchtown Railroad in 1832, were all major contributors to this gradual decline. The turnpike, canal, and railroad by-passed the old traditional shipping route through the town, and considerably increased the speed of the processes of transportation and communication for the upper Delmarva Peninsula. Additionally, several bridges at Newport and Wilmington, downstream from Christiana, were erected in the first decades of the nineteenth

century, compounding the difficulties in shipping goods to the head of tidal navigation. Finally, the major transportation routes by-passed the town altogether with the opening of the Philadelphia, Wilmington, and Baltimore Railroad to the north of Christiana in 1838 (Weslager 1947; Munroe 1954; Gray 1961; Catts and Coleman 1986; Basalik et al. 1987).

Christiana attempted to compete with these threats to its economic well-being by incorporating the Elk and Christiana Turnpike Company in 1813, and the Wilmington and Christiana Turnpike Company in 1815. Both turnpikes followed already existing road-beds, and were aimed at accelerating the overland passage of goods between Wilmington and the Chesapeake Bay (Catts and Coleman 1986; Catts et al. 1988b). The town also petitioned the Delaware State Legislature in 1821 for the minor channelization of the Christina River below the town, a request that was definitely a reaction to the presence of the Chesapeake and Delaware (C&D) Canal. The petition stated, "Whereas the cutting and opening of two navigable canals communicating with Christiana Creek a short distance below or to the eastward of the harbor of Christiana Village ... would afford great facilities to vessels navigating the said creek and be of public benefit". The petition was approved and the Christina Canal Company was formed, constructing in the next decade two small canals (Figure 5). One of these canals removed the "Great Bend" in the river, on land of Jeremiah Lewden just below the wharves of the town, and the other removed a smaller loop further east (Delaware Enrolled Bills, 1821). In the process, this

channelization also straightened Eagle Run, the tributary on which Patterson's and Read's Landings were located. All of this channelizing, which created a marshland and silted-in the old river channel below the Patterson Lane bluff, had a profound effect on the development of the Patterson Lane area.

Population figures from the nineteenth century for Christiana Bridge graphically illustrate the decline of the village (Table 2). The number of inhabitants dropped drastically in 1810 from nearly 300 to less than 150, a decline of 50%. By the middle of the nineteenth century, the population had slowly increased to about 350, and continued a gradual rise for the rest of the century (U.S. Census Returns, 1800-1890; Delaware State Directories, 1865-1897).

Historic maps from the nineteenth century show little major development of any kind at Christiana. The road network still defined the town's boundaries, and the town contained about 60 structures by mid-century (Figures 11, 12 and 13). The economic focus for Christiana Bridge by this time was no longer water-oriented, though shipping was still plainly important, as shown by the location in 1868 of Walter F. Southgate's and A.P. Shannon's storehouses close to the river (Figure 13). Instead, service oriented occupations, designed to aid travellers and the local rural population, such as blacksmithing, dry goods merchants, druggists, hotel-keeping, shoemaking, and carriage-making can be found in the town throughout the last half of the nineteenth century (Delaware State Directories 1865-1897). The town of Christiana, as it was now known, had adapted to changing economic and social forces, and was still a viable, successful

TABLE 2

POPULATION FIGURES FOR CHRISTIANA BRIDGE, 1800-1890

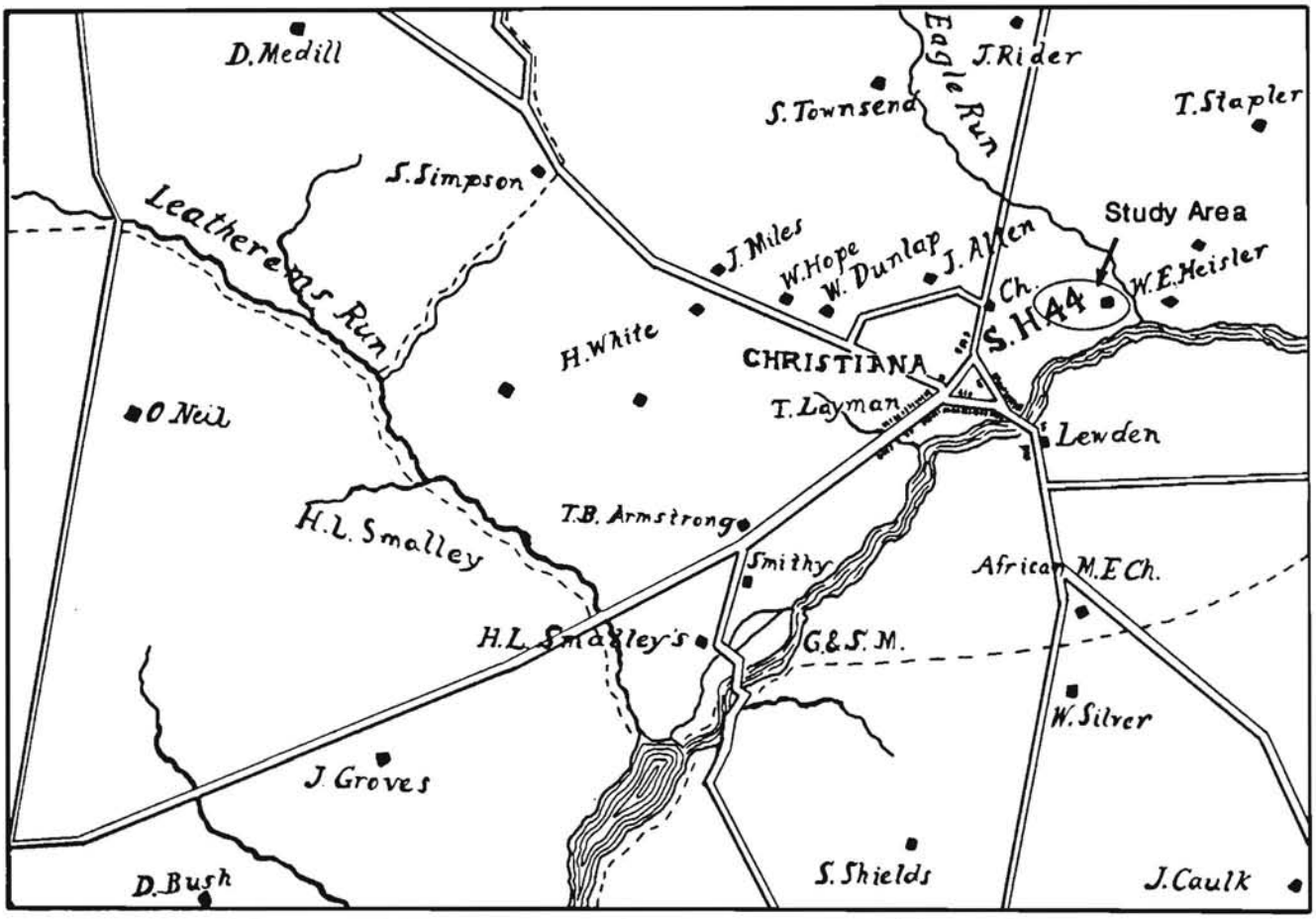
Date	Population
1800	239
1865	350
1870	443 (134 negros)
1882	600 (approximately)
1888	400 (approximately)
1894	498
1897	500

farm-oriented community. By 1894, the town had a population of 498, and four churches (Presbyterian, Methodist, American Union, and A.M.E) and two schools, one called "public", which in reality meant for white children only, and the other for blacks.

Afro-American's have been present in Christiana's population since the colonial period; there are numerous runaway notices in the Pennsylvania Gazette, reporting the escape of slaves from wealthy landowners in the village (Pennsylvania Gazette, passim.). The town's large-scale involvement in shipping and transportation, occupations considered by colonial and early national period whites as acceptable for blacks to perform, doubtless gave Christiana a high proportion of blacks in its labor force (Nash 1973; Berlin 1974). Much of the town's nineteenth century black population seems to have resided on the periphery of Christiana Bridge, particularly on the land to the north and east, around present-day Brown's Lane. The establishment of a black community in this area is directly

FIGURE 11

Detail of Christiana Bridge from Rea and Price "Map of New Castle County", 1849



attributable to the movement in 1868 of the African Union Methodist Church from south of the River, in New Castle Hundred, to a point on the hill north of the Presbyterian Church (Catts et al. 1988a:108-116). The church acted as a focus for the black community, which by 1870 numbered 134, or about 30% of Christiana's total population (Delaware State Directory 1874:397) (Plate 3).

Despite the by-passing of Christiana by road, canal, and rail, the town remained an important community in northern New Castle County throughout the nineteenth century and into the

FIGURE 12

Detail of Christiana Bridge from Lake and Beers' Map of "Philadelphia and Its Vicinity", 1860

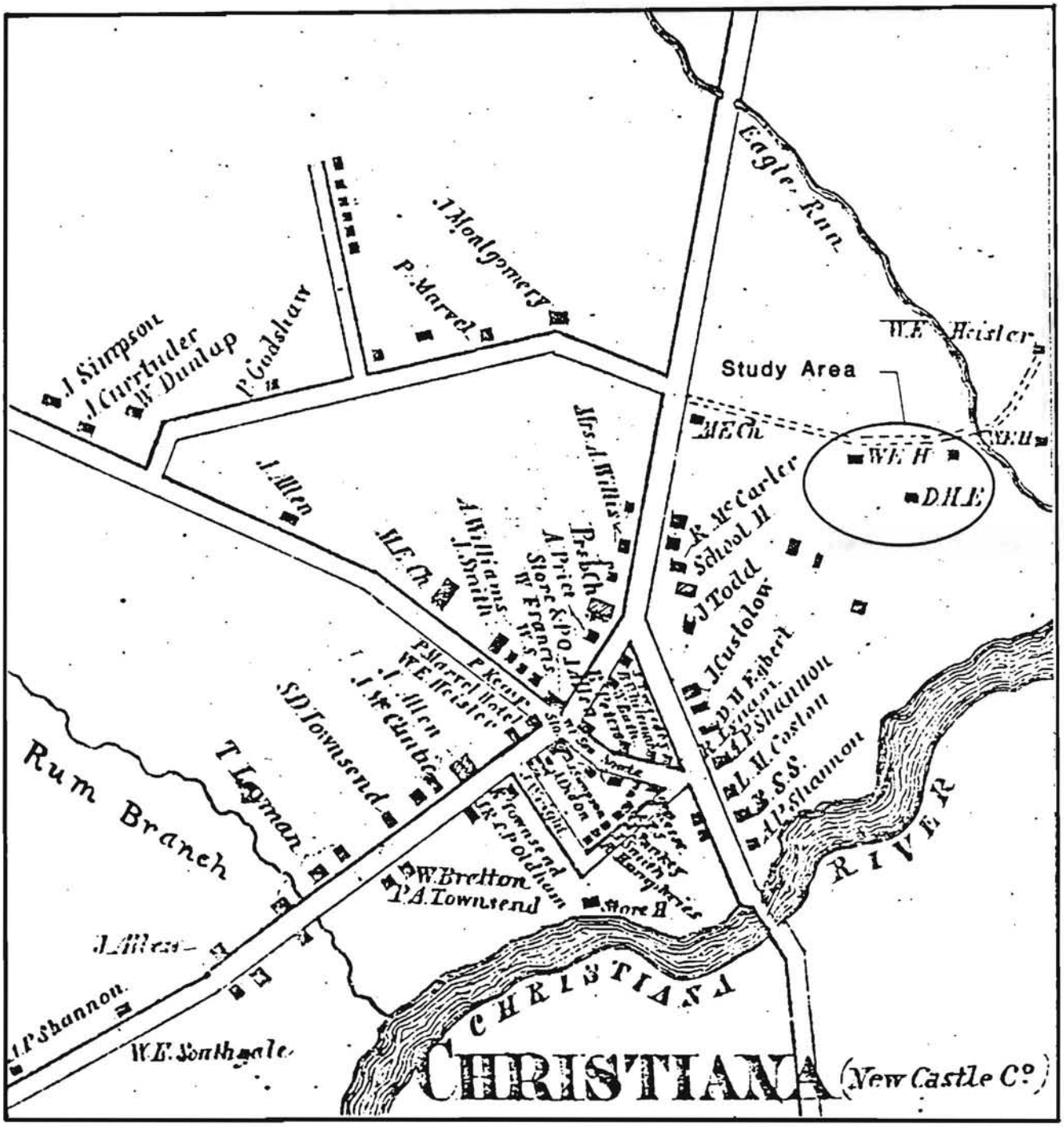
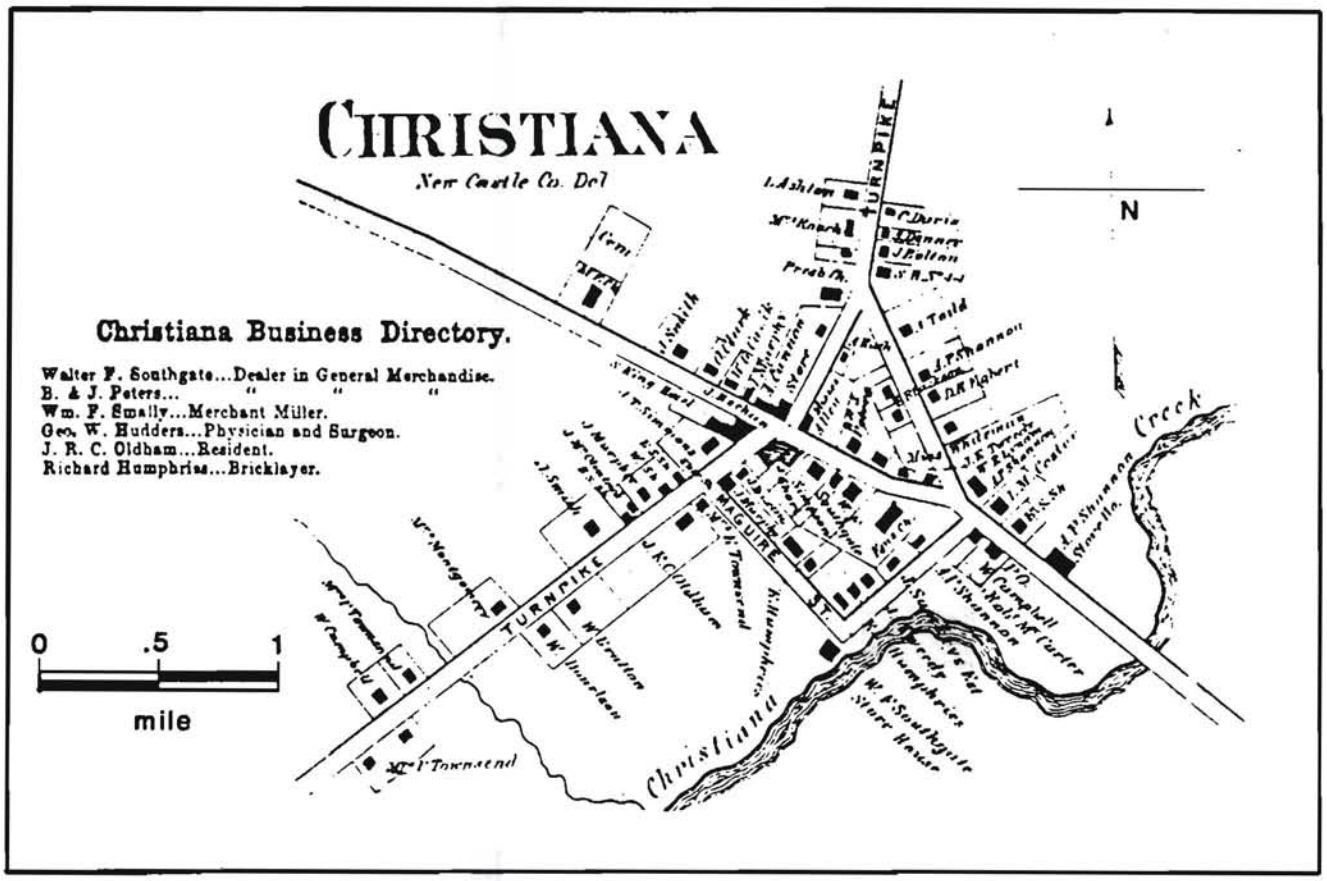


FIGURE 13

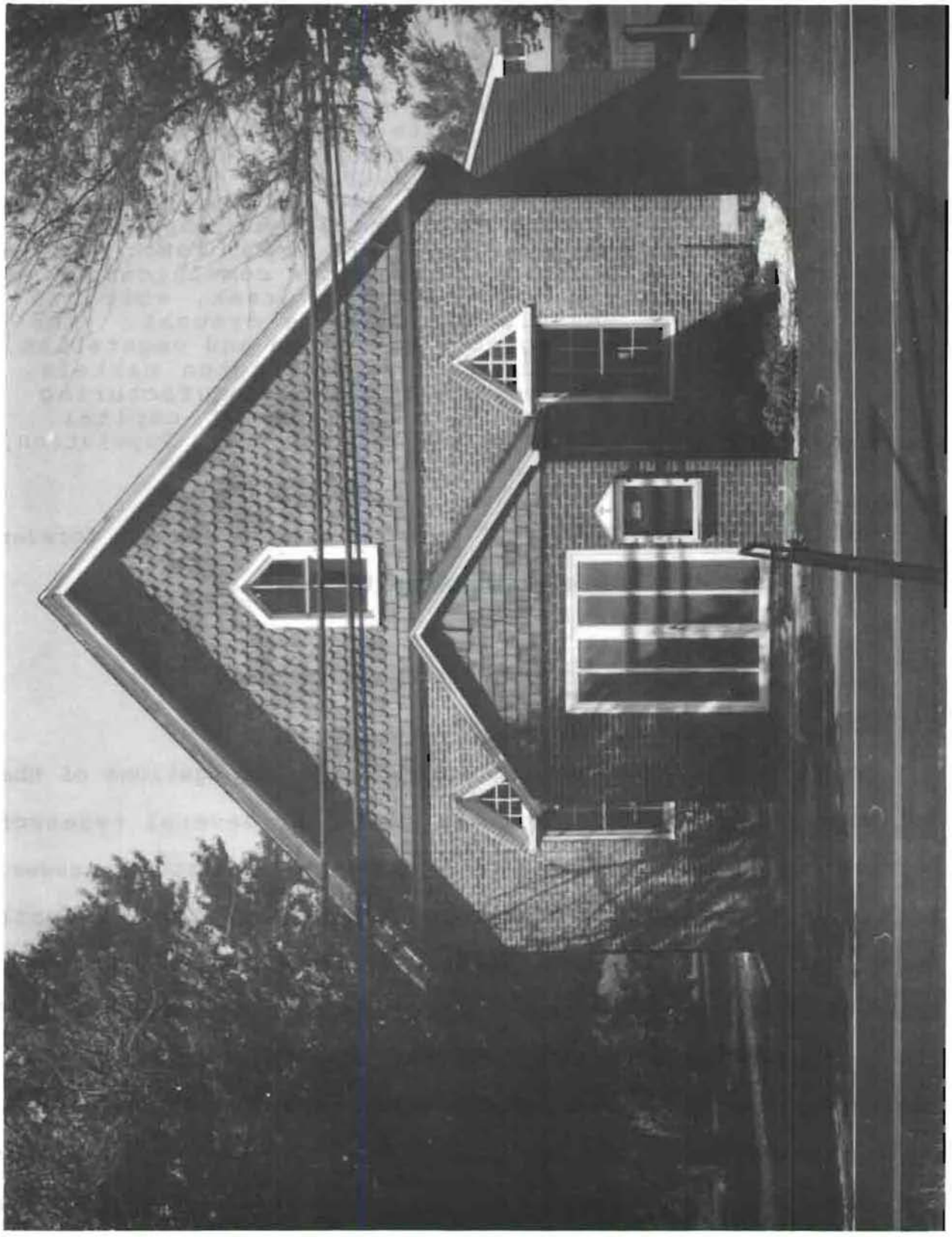
Detail of Christiana Bridge from Beers' "Atlas of the State of Delaware", 1868



present century. Although some dredging of the Christina, which opened the river for small craft, occurred in the second half of the nineteenth century, shipping played a minor role in the town's economic livelihood. For the most part, Christiana was a market-garden center for agricultural produce to be consumed in Wilmington. There was little manufacturing activity in the town, and it was felt in 1882 that "any energetic person who would establish a canning factory, machine shop, rolling mill or other manufacturing business here, would be certain to succeed" (Delaware State Directory 1882:83). However, no one ever followed up this suggestion. By the end of the nineteenth

PLATE 3

Present-day View of African Union Methodist Church



century, Christiana was described in the Delaware State and Peninsular Directory for 1897-98 (1987:47) in the following optimistic and glowing terms:

> Christiana is pleasantly situated on the banks of the Christiana Creek, in White Clay Creek hundred, and nine miles southwest of Wilmington. It's railroad communication is by the P.W.&B.R.R., the nearest station on which is Stanton, two and one-half miles distant, and also the Delaware branch road at Bear Station, about the same distance. A mail coach runs to Stanton, fare 25 cents. Good water communication is also furnished by the Christina Creek, which is navigable for vessels of moderate draught. The principal farming products are grain and vegetables, which are sent mostly to the Wilmington markets. Christiana is a good opening for manufacturing interests; plenty of room for men of capital. Convenient to banks in Newark and Newport. Population, 500.

Ironically, the "men of capital" have now arrived and are forever changing this small, close-knit community.

RESEARCH CONTEXT AND CONSIDERATIONS

INTRODUCTION

The Phase II historic archaeological investigations of the Patterson Lane Site Complex was guided by several research perspectives which dealt with local and regional historic issues. Because the excavations were performed by two separate organizations at different times, and in separate locations, research perspectives began to take shape after the completion of the initial Phase I testing and considerable background historic research. Broadly defined, the research perspectives employed to interpret the Patterson Lane Site Complex included both historic research and archaeological research perspectives. It should be