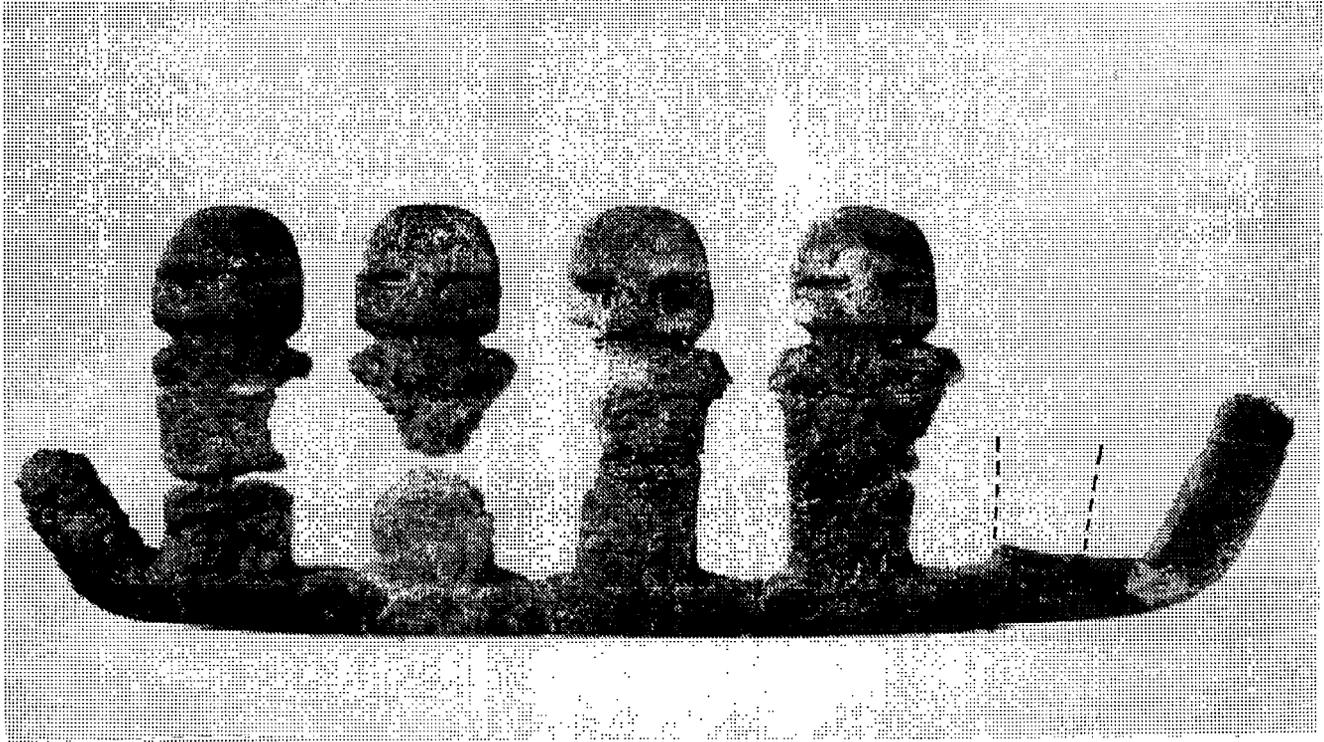


An Archaeological Planning Survey of Selected  
Portions of the Proposed East-West Corridor,  
Delaware Routes 404/18 and 9,  
Sussex County, Delaware



By

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Department of Anthropology  
Center for Archaeological Research

Delaware Department of Transportation Archaeology Series No. 115

Eugene E. Abbott  
Director of Planning

1994

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DELDOT PROJECT 88-112-01

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## ABSTRACT

Survey for cultural resources of selected portions of the East-West Corridor in Sussex County, Delaware, undertaken in 1991, produced extensive and intensive data on a wide variety of prehistoric and historical archaeological sites located within fourteen segments of the proposed corridor. Pedestrian surveys and limited subsurface testing resulted in the recording of 162 prehistoric and historical archaeological sites with the State Historic Preservation Office. Study areas that were selected for examination were considered high probability areas for the location of archaeological sites; medium and low probability areas for both prehistoric and historical resources were not as well represented in the survey areas. However, the predictive value of the high probability zones was substantiated by the survey results.

Artifacts recovered during the survey represent prehistoric settlement from the Archaic through Woodland II periods (7500 B.C. -- A.D. 1600). Ceramics types, including Wilgus, Nassawango, Hell Island, Colbourn, and Wolfe Neck varieties were recovered, and artifacts manufactured from exotic raw materials, such as argillite and rhyolite, were found. Most of the prehistoric sites are small procurement sites, but several base camp sites were also found.

Historical sites related to iron production were found at Unity Forge and Collins Pond. A wide range of late nineteenth century farmsteads, and several late eighteenth and early nineteenth century farmsteads were also documented throughout the study areas.

Cover Illustration: The cover illustration is a carved antler artifact depicting five figures in a canoe. The artifact dates to the Woodland II Period (ca. A. D. 1000 - A. D. 1600) and was found in the 1930's at the Slaughter Creek Site, which is located northeast of the Route 404 project area. This artifact was used on the cover of this report because it is an especially interesting example of prehistoric art symbolic of the Lenape occupation of Southern Delaware.

## DelDOT Archaeological Series Index Information

This form is intended to provide information on the contents of this volume for indexing. It is also intended for researchers to use to check the research methods and topics included in this volume.

Report Title: **AN ARCHAEOLOGICAL PLANNING STUDY OF SELECTED PORTIONS OF THE PROPOSED EAST-WEST CORRIDOR, DELAWARE ROUTES 404/18 AND 9, SUSSEX COUNTY, DELAWARE**

DelDOT Report Number: **115**

Level of Investigations: [Phase I, II, III, Planning Survey, Specialized Study]

### PLANNING STUDY

Basic Time Periods Covered:

- All prehistoric
- Mainly prehistoric, some historic
- Equal coverage of prehistoric and historic
- Mainly historic, some prehistoric
- All historic

Site Contexts:

	Prehistoric	Historic
Plow zone/disturbed surface soils	<b>X</b>	<b>X</b>
Intact features	<b>NOT APPLICABLE</b>	<b>NOT APPLICABLE</b>
Buried artifact-bearing strata	<b>NOT APPLICABLE</b>	<b>NOT APPLICABLE</b>

List up to five major time periods or site types

- 1. ARCHAIC THROUGH PRESENT DAY (7500 BC - AD 1993)**
- 2. PREHISTORIC SITE TYPES: PROCUREMENT AND MACRO-BAND BASE CAMPS**
- 3. HISTORICAL SITE TYPES: AGRICULTURAL COMPLEXES, DWELLINGS, STORE, MILL, FORGE**

List up to eight major topics covered in Conclusions and Discussions of Results

- 1. PREHISTORIC AND HISTORICAL ARCHAEOLOGICAL SITE PREDICTIVE MODELS**
- 2. CRITERIA FOR ASSESSING SITE SIGNIFICANCE**
- 3. DENSITY OF HISTORICAL ARCHAEOLOGICAL SITES**

**4. SUMMARY OF IDENTIFIED HISTORICAL AND PREHISTORIC ARCHAEOLOGICAL SITES WITHIN STUDY AREA**

Specialized Analyses Undertaken

Prehistoric

Historic

- Blood Residue
- Ceramic Chronology
- Ceramic Vessel Surface Alterations
- Cordage Twists from Ceramic Impressions
- Faunal Analysis
- Flake Attributes
- Floral Analysis
- Flotation
- Geomorphology and Pedology
- Glass Analysis
- HABS Documentation
- HAER Documentation
- Historic Architecture
- Informant Interviews
- Leather Analysis
- Miller Ceramic Index
- Mortar Analysis
- Palynology
- Projectile Point Chronology
- Projectile Point Function
- Radiocarbon Dates
- Soil Chemistry
- Spatial Distribution of Artifacts
- Stone Tool Functional Analysis
- Wood Identification

**X**

**X**

List up to 5 other specialized analyses not listed above:

**NOT APPLICABLE**

Geographic Area Covered

- New Castle County
- Kent County
- Sussex County
- All State

## ACKNOWLEDGEMENTS

This project would not have been possible without the cooperation of the land owners of Sussex County who allowed us access to their property. Their assistance has increased our knowledge of Delaware's prehistoric and historic past.

Appreciation for their support, administration, research, and services is extended to all of the following individuals:

Mr. and Mrs. Doug Vanderwende, William Hearn, and Bob Rider allowed us to study record their collections of Indian artifacts found over the years on their farms. Artifact collections such as these are extremely valuable for archaeologists, especially when the artifacts are labeled to record where they were found.

Lester Realty, Georgetown, was also particularly helpful with logistical support for the project by providing us with a base of operations and housing for the field crew.

From the Division of Highways: Raymond M. Harbeson, Jr., Chief Engineer/Director, Division of Highways; Raymond D. Richter, Assistant Director, Preconstruction; Joseph T. Wutka, Jr., Location Studies and Environmental Engineer; Kevin W. Cunningham, DelDOT Archaeologist; Paul A. Welsh, Location Studies Manager; Gerald R. Mulderring, Project Engineer; Carol L. Kates, Secretary; and Joanna Likens, Project Scheduling and Support.

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From the Delaware State Historic Preservation Office: Joan Larrivee, Deputy State Historic Preservation Officer, Alice H. Guerrant, Faye Stocum, and Gwen Davis Coffin, Archaeologists.

From the University of Delaware: Juan Villamarin, Chairman, Department of Anthropology; Carolyn Fierro, Administrative Assistant; and Joanne Faulls, Secretary, Department of Anthropology.

Curation Note: All artifacts, site records, analytical data, photographs, slides, and video tapes from the Route 404 project are curated at the University of Delaware Center for Archaeological Research, Newark, DE 19716. For further information contact Jay F. Custer, University of Delaware (302-831-2821) or Kevin Cunningham, Delaware Department of Transportation (302-739-3826).

## TABLE OF CONTENTS

	Page
Abstract .....	i
DelDOT Archaeological Series Index Information .....	ii
Acknowledgements .....	iv
Table of Contents .....	v
List of Figures .....	vi
List of Tables .....	vii
List of Plates .....	ix
Introduction .....	1
Environmental Setting .....	5
Regional Prehistory .....	8
Regional History .....	10
Research Methods .....	16
Results of Field Investigations .....	20
Segment 1: Five Points Study Area .....	20
Segment 2: Beaverdam Creek Study Area .....	22
Segment 3: Gravel Hill Study Area .....	24
Segment 4: Georgetown Study Area .....	26
Segment 5: Cokesbury Church Study Area .....	37
Segment 6: Cedar Corners Study Area .....	44
Segment 7: Kings Crossroads Study Area .....	49
Segment 8: Mirey Branch Study Area .....	53
Segment 9: Collins Pond Study Area .....	56
Segment 10: Unity Forge Study Area .....	65
Segment 11: Nanticoke Branch Study Area .....	69
Segment 12: Bridgeville Branch Study Area .....	73
Segment 13: Scotts Corner Study Area .....	75
Segment 14: Marshyhope Creek Study Area .....	89
Management Considerations .....	92
Analyses of Prehistoric Sites .....	94
Analyses of Historical Archaeological Sites .....	96
Assessment of Site Significance .....	99
Future Research Issues .....	103
References Cited .....	106
Personnel .....	113
Appendices .....	116
Appendix I: Explanation of Site Numbering System ..	117
Appendix II: Public Information Handout .....	119
Appendix III: Glossary .....	125

**LIST OF FIGURES**

	<b>Page</b>
Figure 1: Project Corridor Location .....	1
Figure 2: Sussex East-West Corridor Cultural Resource Management Units .....	2
Figure 3: Study Areas Chosen for Investigation in the Sussex East-West Corridor .....	3
Figure 4: Physiographic Setting of the Study Area .....	5
Figure 5: Prehistoric Chronology Chart .....	9
Figure 6: Example of the Site Numbering System Used ...	16
Figure 7: Five Points Study Area - Segment 1 .....	21
Figure 8: Beaverdam Creek Study Area - Segment 2 and Gravel Hill Study Area - Segment 3 .....	23
Figure 9: Wagamon Family Cemetery - Segment 3 .....	25
Figure 10: Georgetown Study Area - Segment 4 .....	27
Figure 11: Cokesbury Church Study Area - Segment 5 .....	38
Figure 12: Cedar Corners Study Area - Segment 6 .....	44
Figure 13: Kings Crossroads Study Area - Segment 7 .....	48
Figure 14: Mirey Branch Study Area - Segment 8 .....	54
Figure 15: Collins Pond Study Area - Segment 9 .....	57
Figure 16: Collins Pond, circa 1829 - Segment 9 .....	59
Figure 17: Unity Forge Study Area - Segment 10 .....	65
Figure 18: Nanticoke Branch Study Area - Segment 11 and Bridgeville Branch Study Area - Segment 12 .....	69
Figure 19: Scotts Corner Study Area - Segment 13 .....	75
Figure 20: Robinson Tenant House - Road Papers, circa 1850 - Segment 13 .....	80
Figure 21: Henry Smith House - Road Papers, circa 1857 - Segment 13 .....	86
Figure 22: Marshyhope Creek Study Area - Segment 14 .....	89

## LIST OF TABLES

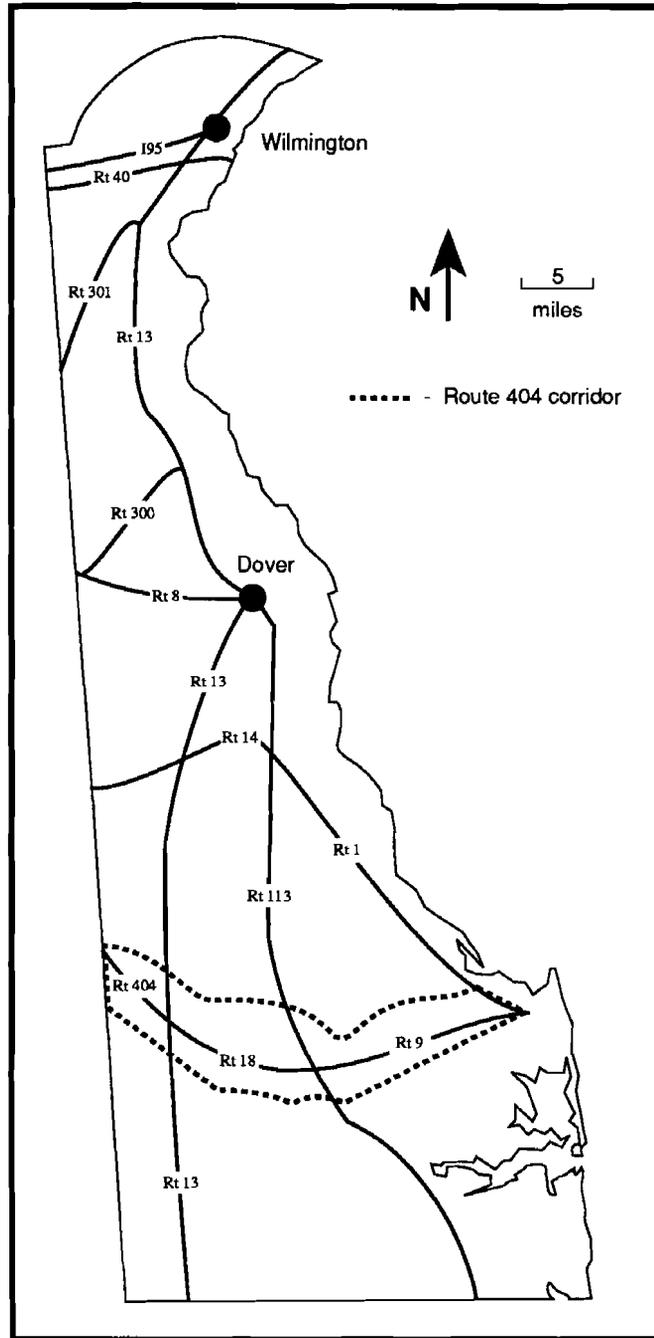
		Page
Table 1:	Paleoenvironments in the Study Area .....	7
Table 2:	Summary of Archaeological Sites Identified in the Five Points Study Area, Segment 1 .....	21
Table 3:	Summary of Archaeological Sites Identified in the Beaverdam Creek Study Area, Segment 2 .	23
Table 4:	Summary of Archaeological Sites Identified in the Gravel Hill Study Area, Segment 3 .....	24
Table 5:	Summary of Archaeological Sites Identified in the Georgetown Study Area, Segment 4 .....	28
Table 6:	Summary of Prehistoric Artifacts from Site 7S-F-89 .....	28
Table 7:	Summary of Prehistoric Artifacts from Site 7S-F-102 .....	35
Table 8:	Summary of Prehistoric Artifacts from Site 7S-F-97 .....	36
Table 9:	Summary of Archaeological Sites Identified in the Cokesbury Church Study Area, Segment 5 ...	39
Table 10:	Summary of Archaeological Sites Identified in the Cedar Corners Study Area, Segment 6 ...	45
Table 11:	Summary of Prehistoric Artifacts from Site 7S-E-157 .....	46
Table 12:	Summary of Archaeological Sites Identified in the Kings Crossroads Study Area, Segment 7 ...	49
Table 13:	Summary of Prehistoric Artifacts from Site 7S-F-2 .....	51
Table 14:	Summary of Archaeological Sites Identified in the Mirey Branch Study Area, Segment 8 ....	54
Table 15:	Summary of Archaeological Sites Identified in the Collins Pond Study Area, Segment 9 ....	58
Table 16:	Summary of Archaeological Sites Identified in the Unity Forge Study Area, Segment 10 ....	66
Table 17:	Summary of Archaeological Sites Identified in the Nanticoke Branch Study Area, Segment 11 ..	70

	<b>Page</b>
Table 18: Summary of Archaeological Sites Identified in the Bridgeville Branch Study Area, Segment 12 .....	74
Table 19: Summary of Prehistoric Artifacts from the Bridgeville Branch Site (7S-E-153) .....	74
Table 20: Summary of Archaeological Sites Identified in the Scotts Corner Study Area, Segment 13 ..	76
Table 21: Summary of Prehistoric Artifacts from Site 7S-B-53 .....	82
Table 22: Summary of Prehistoric Artifacts from Site 7S-B-61 .....	84
Table 23: Summary of Archaeological Sites Identified in the Marshyhope Creek Study Area, Segment 14 ..	90
Table 24: Summary of Prehistoric Artifacts from Site 7S-B-47 .....	91
Table 25: Summary of Prehistoric Artifacts from Site 7S-B-48 .....	92
Table 26: Prehistoric Sites and Site Significance in the Sussex East-West Corridor Study Areas ....	93
Table 27: Summary of Prehistoric Sites within Sussex East-West Corridor Probability Zones .....	93
Table 28: Historical Site Significances for the Sussex East-West Corridor .....	95
Table 29: Density of Historical Archaeological Sites in the Sussex East-West Corridor .....	97
Table 30: Summary of Potential Site Locations and Actual Historical Sites for the Sussex East-West Corridor .....	98
Table 31: Summary of Historical Archaeological Sites within the Sussex East-West Corridor Potential Zones .....	98
Table 32: Summary of Historical Archaeological Sites within the Sussex East-West Corridor Study Areas .....	101

## LIST OF PLATES

	<b>Page</b>
Plate 1: Surface Collecting Artifacts .....	17
Plate 2: Excavating Shovel Test Pits .....	18
Plate 3: Cataloging Artifacts .....	19
Plate 4: Examining Artifacts Under Low Power Magnification .....	19
Plate 5: Prehistoric Artifact Assemblage from Site 7S-F-102 .....	36
Plate 6: Prehistoric Artifact Assemblage from Site 7S-F-2 .....	51
Plate 7: Shovel Testing on the Lewis Property - Site 7S-B-74 .....	78
Plate 8: Lewis Property Tenant House .....	78

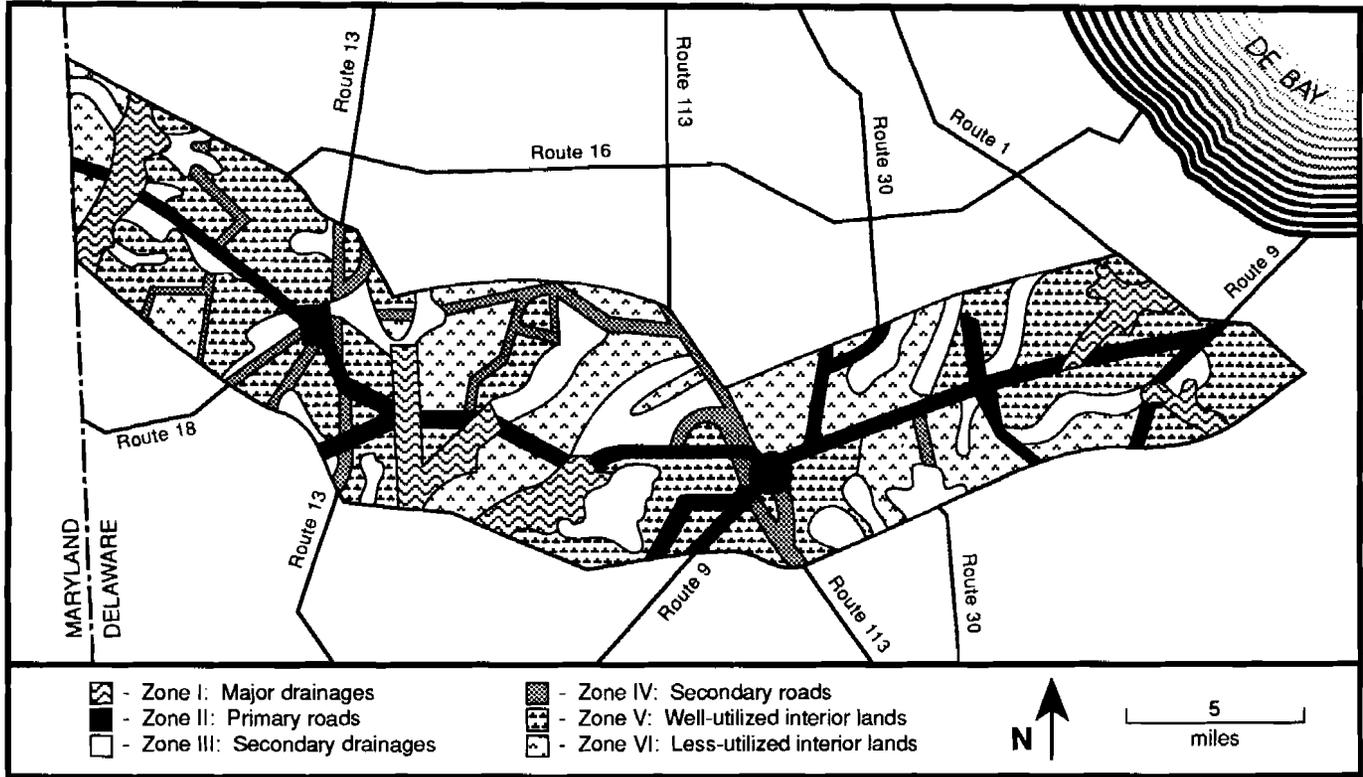
FIGURE 1  
Project Corridor Location



**INTRODUCTION**

This report presents the results of a cultural resources planning survey for selected portions of the proposed Sussex East-West Corridor, Delaware Routes 404/18 and 9, in Sussex County, Delaware. The report considers the cultural resources in fourteen sections of the proposed corridor. The surveyed areas were chosen based on an earlier cultural resources planning report (Catts, Custer, and Hoseth 1991) which documented the distribution of cultural resources within the entire Sussex East-West Corridor (Figure 1). The proposed alignments for the

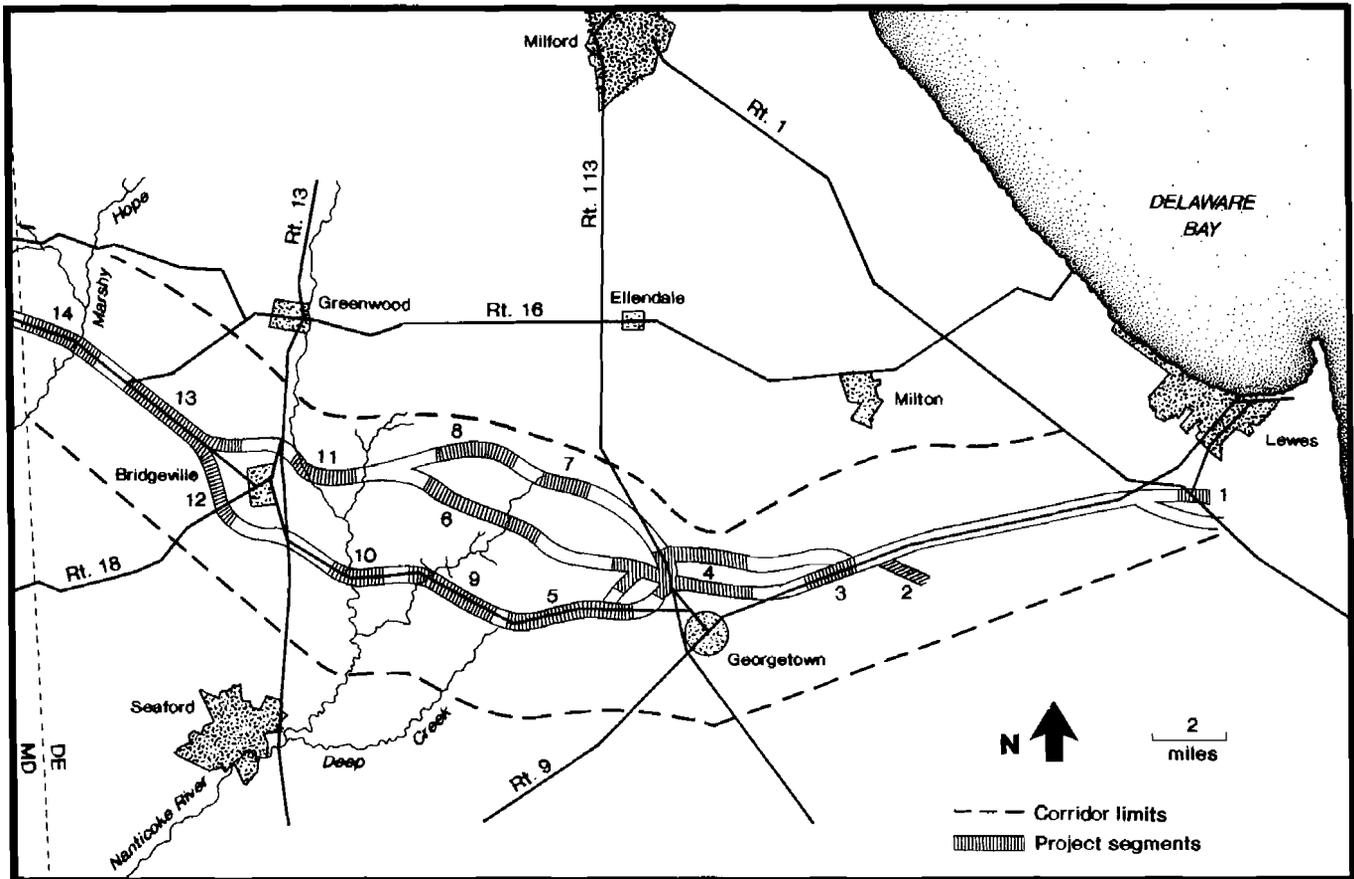
FIGURE 2  
Sussex East-West Corridor  
Cultural Resource Management Units



Sussex East-West Corridor extend from the Maryland-Delaware boundary at Adams Crossroads to the vicinity of Five Points on State Route 1. The study corridor is approximately 30 miles long and five miles wide, centered on State Routes 404, 18, and 9. The original planning report compiled data on the known locations of standing structures, historical archaeological sites, prehistoric archaeological sites, and presented predictive models for prehistoric and historical archaeological sites. The known and potential cultural resources were mapped within the entire study corridor. Areas that contained, or had the potential to contain, dense cultural resources were identified in a series of cultural resource management zones (Figure 2). Fourteen areas within the proposed alignments that contained especially high concentrations of cultural resources were highlighted as potential "problem areas" and targeted for more intensive investigation (Figure 3).

The purpose of additional study was to provide detailed information on the location of cultural resources within the proposed alignments of the Sussex East-West Corridor. The information was intended for use in the selection of the final

**FIGURE 3**  
**Study Areas Chosen for Investigation**  
**in the Sussex East-West Corridor**



alignments allowing planners to minimize the adverse impacts of the highway construction on the area's cultural resources, following the model provided by the State Route 1 (formerly Route 13) project (see Custer and Bachman 1986a; Custer, Bachman, and Grettler 1986). In addition, the planning information would be useful in later stages of cultural resources mitigation for refining archaeological knowledge of the area and refining predictive models. Furthermore, analyses of prehistoric and historical site locations from the final alignment(s) would allow the generation and refinement of research questions to be addressed in future survey and excavation stages of the project and in the region. The research questions would also be important guides for determining the significance of cultural resources and their eligibility for nomination to the National Register of Historic Places.

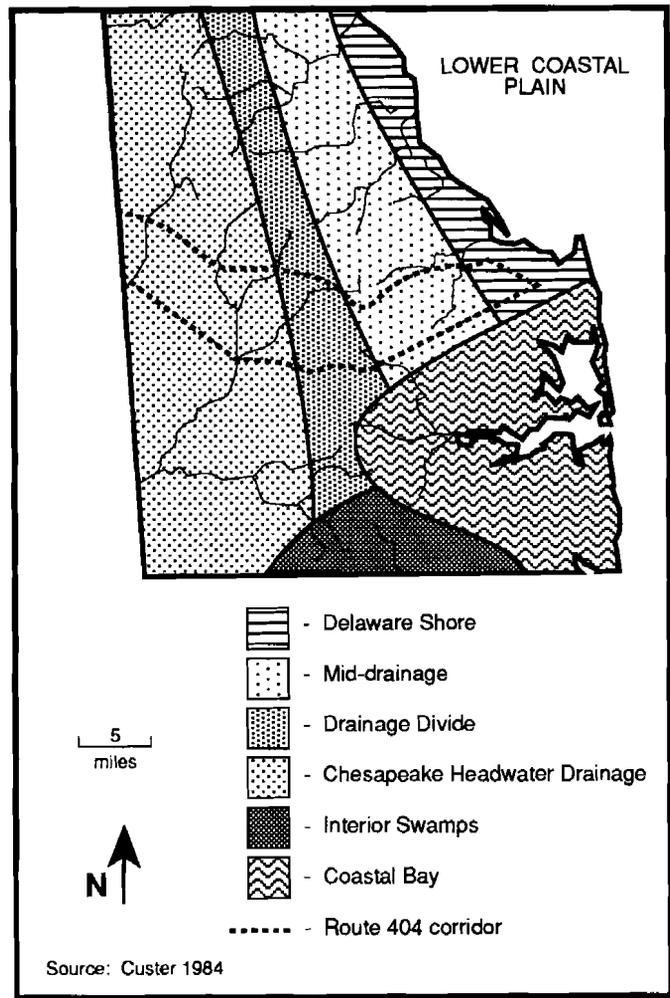
Results of the planning survey in fourteen specific "problem areas" in the proposed Sussex East-West Corridor alignments (Figure 3) are presented here. From east to west the study areas are:

- 1) Five Points Area (see Figure 7 and Table 2);
- 2) Beaverdam Creek Area (see Figure 8 and Table 3);
- 3) Gravel Hill Area (see Figure 8 and Table 4);
- 4) Georgetown Area (see Figure 10 and Table 5);
- 5) Cokesbury Church Area (see Figure 11 and Table 9);
- 6) Cedar Corners Area (see Figure 12 and Table 10);
- 7) Kings Crossroads Area (see Figure 13 and Table 12);
- 8) Mirey Branch Area (see Figure 14 and Table 14);
- 9) Collins Pond Area (see Figure 15 and Table 15);
- 10) Unity Forge Area (see Figure 17 and Table 16);
- 11) Nanticoke Branch Area (see Figure 18 and Table 17);
- 12) Bridgeville Branch Area (see Figure 18 and Table 18);
- 13) Scotts Corner Area (see Figure 19 and Table 20); and
- 14) Marshyhope Creek Area (see Figure 22 and Table 23).

The list above serves as an index to the discussions of the individual study areas that make up the body of this report. Field work for the planning survey was conducted during the fall and winter of 1990-1991 by archaeologists from the University of Delaware Center for Archaeological Research, at the request of the Delaware Department of Transportation for compliance with Section 106 of the National Historic Preservation Act in consultation with the State Historic Preservation Office (SHPO). Funding for the project was provided by the Delaware Department of Transportation and the Federal Highway Administration.

This report provides a brief description of the environmental setting of the project area, followed by a short review of the prehistory and history of the lower Delmarva Peninsula and Sussex County. The next section discusses the field and laboratory procedures and methods. The results of the project for each of the fourteen study areas follow. The report concludes with a discussion of the significance of the cultural resources encountered.

FIGURE 4  
**Physiographic Setting  
of the Study Area**



**Environmental Setting**

The Sussex East-West Corridor falls within the Low Coastal Plain physiographic zone (Figure 4), which includes most of Kent and Sussex Counties. The Low Coastal Plain is underlain by the sands of the Columbia Formation (Delaware Geological Survey 1976; Jordan 1964) extensively reworked by various geological processes to form a very flat and relatively featureless landscape with elevation differences that range up to 10 meters (30 feet). The small differences in elevation are further moderated by long and gradual slopes. Surface water has been severely affected by rising sea level and most river systems, including much of the Nanticoke, Marshyhope, Broadkill, their tributaries and lower order tributaries of Indian River and Rehoboth Bay in the study area, are tidal in their middle and lower reaches. In general, the watercourses of the study area, particularly the main course of the Nanticoke River, some of its larger tributaries, such as

Deep Creek, Broad Creek, and Clear Brook, and the Marshyhope provide a richer environment and range of resources than the less well-watered interior. Therefore, two basic environmental zones, the riverine settings and the interior, influenced human settlement in the survey area.

Most riverine areas of the Sussex East-West Corridor have fringing tidal marsh characterized as the Arrow-Arum - Pickerel Weed Marsh Type (Zone VI - Daiber et al. 1976:86-87, their Figure 25). The marshes occur adjacent to estuarine tidal mud flats where the water salinity ranges between fresh and slightly brackish. Prominent plants include arrow-arum, pickerel weed, reed grass, marsh mallow, and wild rice. Many species of duck, and muskrat are found in the area and various species of fish, including anadromous species, use these marshes as spawning areas. In general, the marshes provide an abundance of potential plant and animal foods not available in other parts of the study area. Adjacent to the fringing marsh there is usually a steep bluff of eroding unconsolidated sediments. Modern cultivation often extends to the edge of the bluff, but in some cases a fringing woodland of hydrophytic species such as loblolly pine, sweet gum, oaks, and Virginia pine is present (Ireland and Matthews 1974). Floodplains are relatively rare and confined to the Nanticoke River. For the most part, major drainage channels have been confined between the present river-edge bluffs over the course of the last 10,000 years.

Cypress swamps along the upper reaches of the Nanticoke River -- such as in the vicinity of James Branch, Hitch Pond, and Trussum Pond -- provide a unique environmental setting. In the study area, as is the case throughout the Delmarva Peninsula, cypress swamps are just upstream of the tidal marshes. Bald cypress, swamp black gum, and red maple are the dominant tree species (Braun 1967:93; Brush, Lenk, and Smith 1980:83), and many edible aquatic plants are present. Deer, and many other game animals, frequent the cypress swamps. Unfortunately, the antiquity of the cypress swamps and their vegetation history is not well known.

In contrast to the well-watered, environmentally diverse riverine areas of southwestern Delaware, the interior is drier. Consequently, plants and animal communities of the interior are not as diverse as those of the tidal wetlands. However, studies of environmental diversity in the Middle Atlantic Coastal Plain (Braun 1967; Brush, Lenk, and Smith 1980) emphasize the importance of soil drainage in determining environmental composition and there are many large patches of poorly-drained soils in the interior (Ireland and Matthews 1974). The poorly-drained areas are characterized by woodlands of either deciduous or coniferous species, including willow oak, white oak, sweet gum, red maple, water oak, cow oak, black gum, sweet oak, holly, and dogwood (Braun 1967:268). Thus, the interior, prior to the artificial draining for agricultural fields in historic times, was probably a rich mosaic of poorly-drained, fresh water swamps and bogs, and well-drained sand ridges. The poorly-drained

**TABLE 1**  
**Paleoenvironments in the Study Area**

<b>Episode</b>	<b>Interior Well-Drained</b>	<b>Poorly Drained</b>	<b>Riverine</b>
Late Glacial (12,000 BC- 8000 BC)	Boreal forest, limited grasslands	Bogs and swamps with deciduous gallery forest	Deciduous gallery forest with some floodplain grasslands
Pre-Boreal/ Boreal (8000 BC- 6500 BC)	Boreal forest	Bogs and swamps with deciduous gallery forest	Deciduous gallery forest and boreal forest
Atlantic (6500 BC- 3000 BC)	Oak-Hickory-Pine xeric forests and grasslands	Few bogs and swamps	Mesic deciduous forests
Sub-Boreal (3000 BC- 800 BC)	Oak-Hemlock mesic deciduous forest	Extensive bogs and swamps with deciduous gallery forest	Deciduous gallery forests with fringing wetlands
Sub-Atlantic / Recent (800 BC- recent)	Oak-Pine forest with mixed mesophytic communities	Bogs and swamps with deciduous gallery forest	Deciduous gallery forests with fringing wetlands

woodlands would have been productive settings for hunters and gatherers and would have been attractive for settlement even though they were not as biologically productive as the riverine areas. In sum, the study area is characterized by the contrast between very rich and productive riverine settings which include the estuarine ecotone and the less diverse, but still very productive, interior zone.

Numerous studies indicate that there were marked climatic and environmental changes over the past 12,000 years in both riverine and interior areas. Detailed discussions have been presented elsewhere (Custer 1984a:17-24, 30-37, 44-48, 62-64, 89-93, 154) and only a summary will be presented here (Table 1). It should be noted that there are numerous relevant sources of paleoenvironmental data for Delaware's Low Coastal Plain including the Dill Farm Site (Custer and Griffith 1984), a series of cores from the Nanticoke River drainage (Brush 1986), cores from a bay/basin feature near 7NC-H-20 (Custer and Bachman 1986b) and other bay/basin sites (Webb, Newby, and Webb 1988), and a series of cores from the mouth of the Chesapeake Bay (Harrison et al. 1965). It should also be noted that the productivity of the riverine zone has changed through time as post-glacial sea-level rise (Belknap and Kraft 1977) inundated drainages and pushed tidal and brackish water settings further into the interior along the major drainages. Perusal of Table 1 shows that the basic dichotomy between the riverine and interior areas was probably present for much of the Holocene and was an important factor in historic and prehistoric settlement decisions.

## **Regional Prehistory**

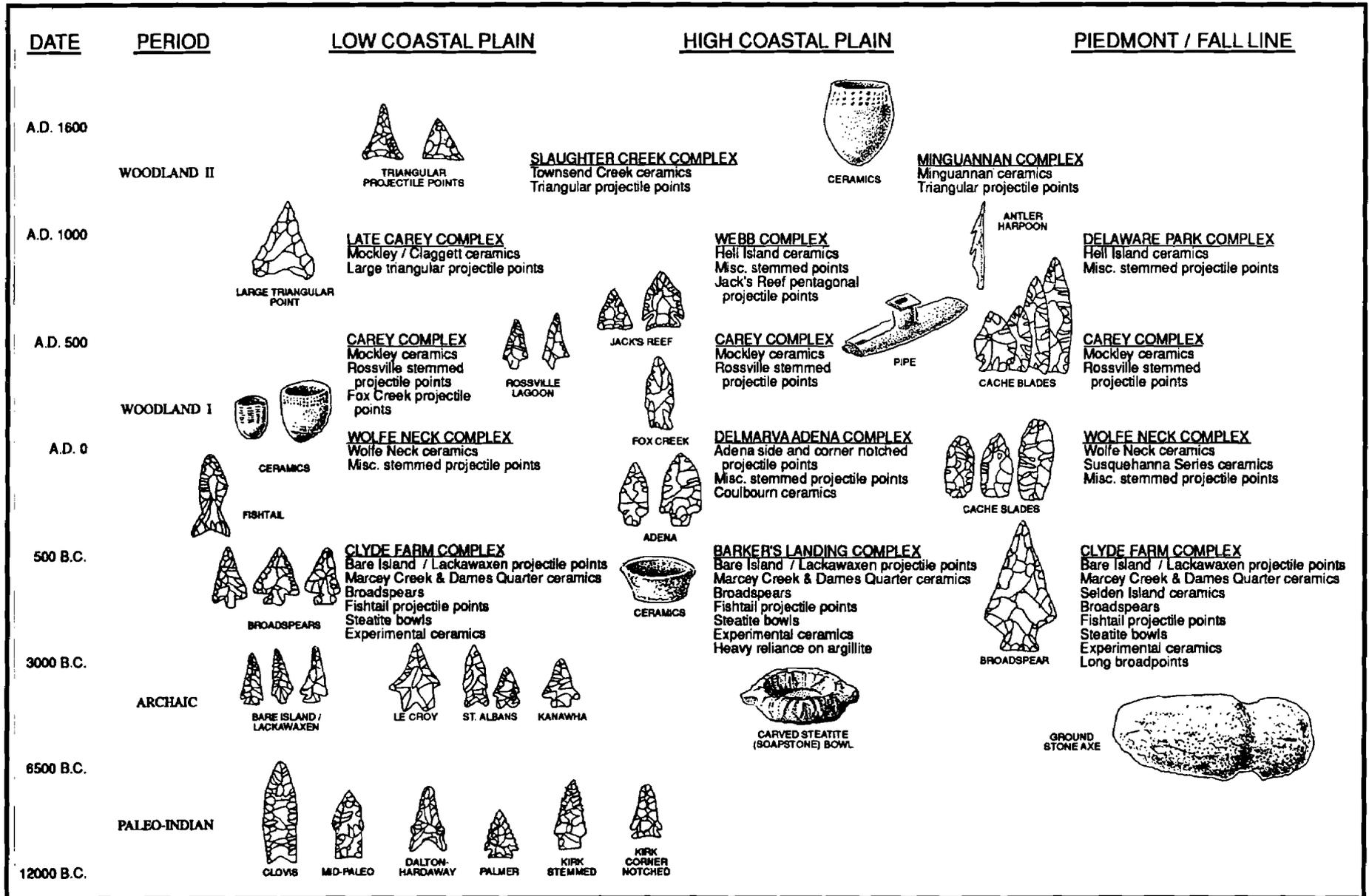
The prehistoric archaeological record of the study area, and the Delmarva Peninsula in general, can be divided into four major periods (Figure 5). A fifth time period, the Contact Period -- from A.D. 1650 to 1750 -- is transitional between prehistoric and historic times and includes the final Indian habitation of southern Delaware. The short summary that follows is taken from Custer (1983; 1984a; 1989) and a more detailed review is given in (Catts, Custer, and Hoseth 1991).

**Paleo-Indian Period (12,000 - 6500 B.C.)**. The Paleo-Indian Period begins during the final phases of Pleistocene glaciation in eastern North America. A mosaic of deciduous, boreal, and grassland environments would have provided productive habitats throughout southern Delaware. Distinctive features of the Paleo-Indian life style were an adaptation to cold, and alternately wet and dry, conditions and hunting and gathering subsistence focused on animals that may have included now extinct megafauna and moose. Paleo-Indian tool kits reflect the emphasis on hunting, and high quality lithic materials were preferred for making stone tools (Custer 1984b). A mobile lifestyle and flexible social structure based on single and multiple family bands throughout the 5500 year time span of the Paleo-Indian Period has been hypothesized. The main types of Paleo-Indian Period sites known for the study area are base camps, base camp maintenance stations, and hunting sites. The riverine settings of the Nanticoke and its major tributaries would be the expected locations for base camps, while poorly-drained interior swamps and bogs would be the foci of maintenance and hunting sites.

**Archaic Period (6500 - 3000 B.C.)**. The Archaic Period is characterized by adaptations to changing environments dominated by forests of hemlock and oak. Browsing animal species, such as deer, flourished. Human adaptations became more generalized with plant foods playing a more important role in subsistence. Archaic Period tool kits were less specialized and included plant processing tools, such as grinding stones, mortars, and pestles. A mobile lifestyle continued with a wide range of resources and settings used on a seasonal basis. A recent study of Archaic Period site distributions on the Delmarva Peninsula (Custer 1984c) indicates that although there were changes in adaptations between the Paleo-Indian and Archaic time periods, the basic site location patterns remained the same.

**Woodland I Period (3000 B.C. - A.D. 1000)**. The beginning of the Woodland I Period can be correlated with dramatic changes in local and regional climates and environments. A pronounced warm and dry period ended ca. 4000 B.C., and sea-level rise created extensive brackish water marshes which were especially high in biological productivity throughout much of southern Delaware. The changes in environment and resource distributions caused a radical shift in prehistoric human adaptations. Important areas for settlements included the major river floodplains and estuarine areas. Many large base camps with fairly high

# FIGURE 5 Prehistoric Chronology Chart



populations and a more sedentary lifestyle are evident. Social organization became more complex as population density increased (Custer 1982).

Woodland I Period tool kits include plant processing tools suggesting intensive harvesting of wild plant foods. Also, non-local lithic raw materials indicate that trade and exchange with other groups was developing (Custer 1984b). First stone, and then ceramic, containers allowing more efficient cooking also appear during the Woodland I Period.

**Woodland II Period (A.D. 1000 - 1650).** In many areas of the Middle Atlantic, the Woodland II Period is marked by agricultural and large-scale village life (Custer 1986). In southern Delaware, however, the change in lifeways is not as pronounced. There have been some finds of cultivated plants in southern Delaware (Custer 1984a:165; Doms et al. 1985), but cultivated food remains are far less common than wild plant foods (Custer and Griffith 1986:44-49). In general, Woodland II Period subsistence patterns in southern Delaware are similar to those of the Woodland I Period with the addition of minor amounts of cultivated plant foods. Changes in ceramic technology and projectile point styles identify Woodland II Period archaeological sites. Triangular projectile points, the only type found in Woodland II tool kits, appear about A.D. 1000; Woodland II Period ceramics of southern Delaware have more complex decorations than Woodland I ceramics including incised lines and cord-wrapped stick impressions (Griffith 1982).

**Contact Period (A.D. 1650 - 1750).** The Contact Period is enigmatic in southern Delaware. Only one Native American archaeological site that clearly dates to the Contact Period is known in Delaware (Custer and Watson 1985). In southern Delaware, Contact Period occupations have been reported for the Townsend Site (Omwake and Stewart 1963); however, the associations of European and Native American artifacts are questionable (Custer 1984a:177). Numerous Contact Period sites are known in southeastern Pennsylvania and on the Maryland Eastern Shore (Davidson 1982; Davidson, Hughes, and McNamara 1985; McNamara 1985). Native American groups in Delaware apparently did not interact much with Europeans and were probably dominated by the Susquehannock Indians of southern Lancaster County, Pennsylvania (Kent 1984). Only a few remnant groups of Native Americans remained in Delaware at the end of the Contact Period.

## **Regional History**

The following historical summary provides a background on important local and regional events that affected the inhabitants of Sussex County. The historical periods are defined in the Management Plan for Delaware's Historical Archaeological Resources by De Cunzo and Catts (1990), and descriptions of regional historical events are based on the works of Ames, Herman, and Siders (1987), Herman and Siders (1986), Hoffecker

(1977), Munroe (1978, 1984), and Scharf (1888). A lengthier treatment is provided by Catts, Custer, and Hoseth (1991).

**1630 to 1730: Exploration and Frontier Settlement.** The earliest colonial settlement in Delaware, at present Lewes, ended in tragedy after only a year when the all-male population was wiped out by the local Sickoneysinck Indians in 1632. Farther north in 1638 the New Sweden Company built Fort Christina in what is now Wilmington. Fort Christina became the first permanent European settlement in Delaware. The Dutch, however, claimed the area by right of prior discovery. After a series of confrontations, New Sweden ceased to exist in 1655. The Dutch erected a small fort at Lewes, called the Whorekil (also spelled Hoerenkil, Horekill, and Hoorekill), near the mouth of the Delaware Bay in 1659 to block English incursions into the area, because Lord Baltimore considered the entire Delmarva Peninsula as part of his Proprietorship on the Chesapeake. English rule of the Delaware River and Bay area began in 1664 when Sir Robert Carr attacked the Dutch settlements. The settlement at the Whorekil was seized and pillaged. Hostilities between the English and the Dutch continued until the end of the third Anglo-Dutch War in 1674.

Friction with Marylanders continued, however, and the Maryland government sent a force of forty men to the Whorekil, which was burned and pillaged for a second time in less than a decade (de Valinger 1950). In 1680 Governor Edmund Andros established the County of Deale, which included the settlements at the Whorekil northwards to Cedar Creek. Between 1676 and 1678 forty-seven land patents were issued by the Duke of York's government for lands in the area, all fronting on the coast or on navigable streams and rivers (Hancock 1976:17). In 1682, William Penn's government assumed control of the Delaware region (Munroe 1978), and Deale County was renamed Sussex County, and Whorekil was renamed Lewes. Sussex County at the time was heavily forested and swampy, and settlement was confined to an area within about 10 to 12 miles of the coastline. Lewes was the only town of any size in the county, and it became a political, maritime, and commercial center. The population of Sussex County has been estimated at less than 1000 in 1700; the majority of the inhabitants were farmers, raising crops of tobacco, corn, wheat, and rye. Hogs and cattle were also raised.

**1730 to 1770: Intensified and Durable Occupation.** By 1730 settlement in Sussex County had penetrated the interior, reaching the area of the mid-peninsular divide (just to the west of present-day Georgetown). Patents for land west of the headwaters of the Broadkill and Indian rivers, and along Gravelly Branch and its tributaries were being issued from the Pennsylvania government by the second decade of the eighteenth century (Scharf 1888:1237, 1293). The Maryland government was issuing patents and warrants as early as the 1680s for lands now in Sussex County. Until the settling of the dispute over the boundary line between Maryland and Pennsylvania (including Delaware) by the establishment of the Mason-Dixon Line in 1765, the traditional

western boundary between Sussex County and Worcester County was the Nanticoke River and its tributaries. The rather arbitrary boundary led to numerous disturbances among the "Border People."

For most of the eighteenth century, Sussex County remained heavily wooded. The population grew slowly; in 1728, The Reverend William Beckett reported that there were 1,750 inhabitants in the county -- 1,075 Anglicans, 600 Presbyterians, and 75 Quakers, as well as 241 slaves and free blacks (Hancock 1962:138). By the 1740s, it was estimated that the population of Sussex County was between 1,800 and 2,000 (Pennsylvania Archives 1891), and Hancock (1976:26) estimates that by 1775 there were nearly 14,000 inhabitants. The tremendous growth of the population between 1740 and 1775 may be attributed to the migration of settlers from the eastern shore of Maryland to Delaware lands, as well as to overseas immigration from Great Britain (Munroe 1978:150).

Throughout the 1730 to 1770 period, subsistence farming continued as the major occupation in Sussex County (Main 1973:26-32). The lumber and shellfishing industries became established in this period and grew in importance. Shipbuilding became significant, especially at Lewes, on the Broadkill, and along Indian River. Several iron furnaces and plantations were established along the Nanticoke, Gravelly Branch, and Deep Creek beginning in the 1760s (Heite 1974; Tunnell 1954). "Bog iron" ore, dug from the surrounding swamps and wetlands, supplied the furnaces; however, most of the iron furnaces were out of production by the beginning of the American Revolution.

Lewes continued to be the major town in the region. Several small hamlets sprang up, at stream and river crossing points, including Crossroads (present Milton), Bridgebranch (later Bridgeville) in Northwest Fork Hundred, Warwick in Indian River Hundred, and St. Johnstown in Nanticoke Hundred.

**1770 to 1830: Transformation from Colony to State.** By 1770 the century-long boundary dispute between Maryland and Pennsylvania had been decided, and the area west of the Nanticoke officially became part of Sussex County (Hancock 1976:25). Sussex County thus became the largest of Delaware's three counties, with a surface area of 94 square miles, nearly the size of both New Castle and Kent counties combined. By 1800 the population of the county was 19,358 inhabitants, with nearly 40 percent of the total located in the hundreds of Northwest Fork, Nanticoke, and Broadkill.

The effects of the American Revolution were largely limited to the coastal areas around Lewes, the Mispillion, Broadkill, and Indian rivers, where British blockades and shore raids disrupted trade and commerce. Inland, however, strong loyalist sentiments prevailed, and in 1780 about 400 Tories took part in the Black Camp Rebellion (Hancock 1976:43).

In 1791 the Sussex County legislature voted to move the county seat from Lewes to the new town of Georgetown resulting in improvements in the transportation network, particularly in the interior parts of the county. Within the project area, both the transportation network and the settlement pattern focused on grist mills, saw mills, and mill dams. The mills provided nodal points for the surrounding population, and other services, such as taverns, shops, and stores were erected near the mills. Mill seats sometimes expanded into larger towns, such as Laurel (1802), Millsboro (1792), and Dagsboro (circa 1780). Other small towns grew up around crossroads and fords, such as Seaford (1799) and Bridgeville (renamed in 1810), and ship building provided the impetus for the growth of Bethel (1800) and Milton (1807).

Beginning in 1779 the Sussex Legislature passed several "Ditch Acts" in an effort to drain swampy or low ground so that it would be suitable for agriculture. Between 1779 and 1812 over thirty ditch acts were passed, affecting the Marshyhope, Indian Run, Pot Hook Creek, and Almshouse Ditch drainages among others. By 1976 there were 106 independent tax ditch companies in Sussex County (Passmore 1978:19).

Subsistence farming coupled with home manufacturing dominated the economy of Sussex County. Corn was the most important crop, but livestock raising contributed substantially to the economy in the southern part of the county (Garrison 1988; Macintyre 1986; Michel 1985). Homesteads in Sussex County generally had a small frame, or log, one and one-half story house, a small orchard of apple and peach trees, and usually about four outbuildings, including a corn barn, smoke or meat house, and kitchen. Livestock commonly included a herd of hogs, cows, sheep, oxen, and an occasional horse. On most plantations, only 50 percent of the total acreage of the farm was under cultivation (Hancock 1987:24-25). Coxe (1814:76) reported that over 70 percent of the looms in the state of Delaware were located in Sussex County in 1810. Over 62 percent of the total value of flaxen goods, and over 75 percent of the wool produced in Delaware, came from homes in Sussex County.

**1830-1880: Industrialization and Capitalization.** The most significant event to occur within the county between 1830 and 1880 was the arrival of the railroad. Constructed in the western portion of the county, the Delaware Railroad reached Seaford in 1856, and Delmar by 1859 (Hancock 1976:63). The Delaware, Maryland, and Virginia Railroad ran from Harrington to Milford, to Georgetown in 1869 (LeeDecker et al. 1989:32). A third line, the Junction and Breakwater Railroad, was constructed between 1859 and 1868 to Lewes; a spur line eventually connected Rehoboth in 1878 (Hancock 1976:89). The railroads stimulated changes in agriculture and industry, and the growth of new towns. Perishable fruits -- like peaches, blackberries, and strawberries -- became viable cash crops with access to the railroads. By 1880 Sussex County was the leading peach producing area of Delaware. Canneries, like the Fruit Preserving Company and the Georgetown Packing Company (Scharf 1888:1241), were also

established. Packing companies were also established in Milton and Bridgeville (Hancock 1976:88).

Beaches and coastal areas had always held a special allure to the region's inhabitants, and improved transportation methods made resorts more accessible to the urban populations of Philadelphia and Baltimore. The Rehoboth Beach Camp Meeting was organized by the Methodists in 1873, and the Hotel Henlopen, with 75 rooms, was constructed in 1879 (Hancock 1976:90).

At the outbreak of the Civil War, Sussex County was the largest slaveholding area in Delaware, with over half of the state's slave population. Free blacks in the county generally owned little land, and like their enslaved counterparts, worked as day laborers and hired farm hands, though some were skilled artisans. As in the rest of Delaware, blacks were denied the opportunity of education, were not permitted to own firearms, and had their freedom severely circumscribed by laws (Hancock 1976:65). The end of the Civil War and the emancipation of the slaves in Sussex, though providing freedom, did little to improve their social or economic status. Several small black communities sprang up, notably the villages of Belltown (started in the 1840s) and Jimtown in Lewes and Rehoboth Hundred (Eckman 1955:494).

During the Civil War, Southern sympathies and leanings were strong in the county, particularly in the southern and western hundreds. In Broad Creek Hundred the inhabitants openly celebrated Confederate victories, and the town of Seaford was notorious for illicit trade with the south. For the most part, however, the population of the county was pro-Union, or neutral, and Sussex's economy did well during the War due to high grain prices and renewed construction activities at the local shipyards (Hancock 1976:89).

Industrialization in Sussex County lagged behind that seen in New Castle and Kent counties. By 1860 there were a total of 141 manufacturers of all kinds, including thirty-seven grist mills, fifty-six lumber mills, fifteen blacksmith shops, and six shipyards in Sussex County, and smaller numbers of boot and shoe manufacturers, leather works, agricultural implement shops, fisheries, wagon and carriage shops (U.S. Census of Manufactures 1865:54). By 1880 shipbuilding in villages, like Milton, had reached its peak (Eckman 1955:416), and the number of flour and grist mills, though still important in the County, had declined to twenty-six (Passmore 1978:24).

**1880-1940: Suburbanization.** Agriculture trends begun in the preceding periods continued, and Sussex County remained the most important agricultural region of Delaware. In 1880, corn was the dominant cash crop; Sussex County produced over 1,676,000 bushels in 1900. Today, Sussex County is characterized by a "broiler-corn-soybean complex". Several large-scale agribusinesses, such as the Newtons and Cannons of Bridgeville, and the Townsends of eastern Sussex, dominate the agricultural

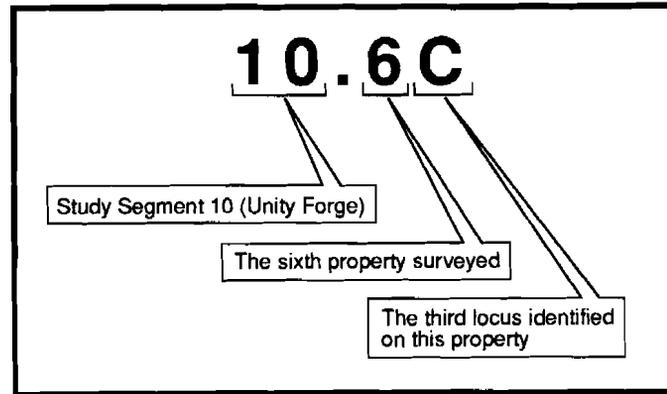
economy of the county (Hancock 1976:100-101; Munroe 1984:233). The trends in truck farming and market gardening, started in the 1870s, reached their zenith by 1890, when Sussex became the peach producing center of the state. In 1900 over 7 million quarts of strawberries were grown in the county, making Sussex the leading producer in the nation (Hancock 1976:89). By the early 1960s, however, the orchard crops had been supplanted by other, more lucrative, agricultural products.

At the start of the twentieth century, the lumber industry was a significant source of income for Sussex County. In 1909 a record amount of timber, over 55 million cubic feet, was shipped. Most was virgin Sussex pine which had grown following the initial cuttings caused by the arrival of the railroad several generations earlier. Charcoal production was an important related industry; some charcoal was still being produced in the Redden area as late as the 1950s (Passmore 1978:13,14).

In 1923, Mrs. Wilmer Steele, a farmer in Ocean View, raised broiling, frying, and roasting chickens for sale in urban markets. Based on Mrs. Steele's success, the number of broilers raised in Delaware grew from 7 million in 1934 to 54 million in 1942 -- over one-quarter of the entire commercial broiler production in the United States (Munroe 1984:214-215). By 1944 sixty million broilers were being raised annually, mostly in the southeastern portion of the county in the vicinity of Millsboro and Selbyville. By 1969 Sussex farmers were grossing over 80 million dollars per year by raising chickens, and its associated agricultural jobs of soybean and feed production (Hancock 1976:99-101). "Thanks to broilers, Sussex became one of the richest agricultural counties in the eastern United States" (Munroe 1984:216).

Internal transportation and inter-regional routes continued to develop and connect Sussex more fully with the Mid-Atlantic region. By 1910 the Maryland, Delaware, and Virginia Railroad extended from Lewes to Love Point, a ferry landing on the Chesapeake Bay, providing easier access for the people of the western shore of Maryland to the Delaware beaches. Prior to 1917, Sussex County had less than 35 miles of paved roads; Coleman DuPont's revolutionary concrete highway added 20 miles to the total between Selbyville and Georgetown. By 1924, the DuPont highway (present-day Route 113) ran the length of the state (LeeDecker et al. 1989; Rae 1975). Improvements in regional transportation stimulated continued growth in tourism, as witnessed by the establishment of Dewey Beach in 1898, and Bethany a few miles south in 1901 (Hancock 1976:90). Presently, tourism is a powerful economic force in the county. Industry in Sussex includes a major DuPont nylon plant in Seaford (built in 1939), Nanticoke Homes of Greenwood, and Vlasic Foods at Millsboro (Hancock 1976:103; Munroe 1984:189). Overall, there are over 100 firms in Sussex, employing over 12,000 people, and seven of these, including five food processing plants, one chemical company, and an instrument manufacturer, employ over 250 persons each (Hancock 1976:103).

FIGURE 6  
Example of the  
Site Numbering System Used



The population of Sussex in 1880 was over 36,000. Over the past 100 years the population has grown steadily, spurred by the growth of the broiler industry, the reclamation of land, and the arrival of light industry to the area. As of 1980, over 98,000 people made their homes in Sussex county (Munroe 1984:269), and this total swells tremendously during the summer months. In spite of population increases, Sussex is still overwhelmingly rural and agricultural, though intensive suburban and resort development in the last decade have dramatically altered the landscape of the eastern part of the county.

## RESEARCH METHODS

Each of the study areas within the proposed corridor was subjected to a preliminary reconnaissance to determine the surface visibility of the ground and to determine the percentage of the area that was wooded and could not be adequately studied through a surface survey. All locations targeted for surface and subsurface study were identified, landowners and/or tenants notified of our intentions, and permission requested from each. The majority of landowners granted access; however, where access was denied, the land was not surveyed. In order to organize the reconnaissance survey, the study areas were divided according to property tracts, and each tract was given a separate three-digit designation. The first number represents the study area or segment location (one through fourteen). The second number (after the decimal) represents a property tract within the segment. The tract may consist of one or more tax parcels, but only one owner. The letter represents the sites located within the survey area; thus A is the first site, B the second site, and so forth (Figure 6).

Surface, or pedestrian, surveys (Plate 1) of the locations within the study areas consisted of walking the fields in regularly spaced intervals (Fasham et al. 1980). The percent surface visibility, estimated for each field, expresses the

PLATE 1  
Surface Collecting Artifacts

*Example*



visible ground surface versus the vegetated surface and is an impressionistic figure best considered as a relative, rather than absolute, measure.

Where pedestrian survey was not possible, due to woods or field vegetation, subsurface testing consisting of shovel test pits excavated at regular intervals was conducted (Plate 2). The intent was to overcome any bias in the pedestrian survey introduced by the selection of farmers for arable land, to provide some indications of site locations within untilled or wooded areas, and to specifically examine some areas where potential sites were known to be present. It was also hoped that the wooded locations would locate prehistoric sites in unplowed settings. Areas that had slopes that were too steep for testing or that (more often) were poorly drained, were considered unlikely settings for prehistoric sites, and were not tested.

## Excavating Shovel Test Pits

*Example*

During both pedestrian and subsurface testing, all artifacts, whether historical or prehistoric, were marked and collected; this is a departure from the field methods used during the planning survey of the State Route 1 Corridor, where historical artifacts from pedestrian surveys were noted, but not collected (Custer and Bachman 1986a; Custer, Bachman, and Grettler 1986).

All archaeological sites found during the planning survey were given State of Delaware Cultural Resource Survey (CRS) numbers and archaeological site numbers, and Delaware archaeological survey site forms were completed and filed with the State Historic Preservation Office (SHPO) in Dover. All artifacts recovered were washed, marked, and cataloged (Plates 3 and 4) with Island Field Museum accession numbers in accordance with SHPO policies and guidelines on artifact processing and curation.

PLATE 3  
Cataloging Artifacts

*Example*



PLATE 4  
Examining Artifacts Under Low Power Magnification



## RESULTS OF FIELD INVESTIGATIONS

The discussions that follow summarize the results of field study in the fourteen study areas. The text gives verbal descriptions of the property tracts surveyed, soils information, and summaries of site settings and findings, including collections of archaeological material from the sites, and estimates of site age and function. Best use of this compendium can be made by first locating the study area segment of interest on Figure 3 and then looking up the relevant text in the Table of Contents. The list of study segments on page 4 also includes references to the corresponding figures and tables for each segment.

### **Segment 1: Five Points Study Area**

One prehistoric and two historical sites (Table 2) were found in the 2400 feet that constitute Five Points Study Area, which is the eastern terminus of the proposed Sussex East-West Corridor alignments (Figure 7). Soils in the area are of the Sassafras-Fallsington association, consisting of well-drained and poorly-drained soils that have a moderately permeable subsoil of sandy loam to sandy clay loam (Ireland and Matthews 1974.) At the time of the survey, over half of this segment was under residential development or occupied by commercial property, and consequently was not tested. Tested portions of the segment were a wooded lot and fallow fields.

#### **C. Mills (Trustee) Property: Tract 1.1.**

Locus 1.1A. A prehistoric site (7S-G-134) was discovered on Tract 1.1. The site was located in a wooded area of Sassafras sandy loam, where seven shovel test pits were excavated. One of the shovel test pits yielded a fragment of grit-tempered Woodland I Period ceramic from an unplowed setting above a small gully or ephemeral stream. The other shovel test pits, placed at regular intervals, recovered no cultural materials, though a charred nut hull was found in an unplowed setting.

#### **Texas Highway One Association Property: Tract 1.2.**

Locus 1.2A. Southwest of State Route 1, a pedestrian survey recovered a small amount of historical ceramics at Site 7S-G-135, including whiteware, redware, and glass; brick fragments were observed on the surface, but not collected. The artifacts suggest a site dating from between 1830-1880, but the site function is unknown. Visibility in this field of Sassafras loam ranged from 10 to 60 percent, and the artifacts were recovered from an area approximately 200 x 400 feet in size.

#### **E. Holsten Property: Tract 1.3.**

Locus 1.3A. Located on the northeast side of State Route 1 the Holsten Tract consisted of three separate parcels. Shovel

TABLE 2

Summary of Archaeological Sites Identified  
in the Five Points Study Area, Segment 1

Parcel/ Owner	Locus Number	Type of Testing	Type of Site
	Site Number CRS Number		
1.1 C. Mills (Trustee)	1.1A 7S-G-134 S-8593	Shovel test pits	Prehistoric
1.2 Texas Highway One Association	1.2A 7S-G-135 S-8594	Pedestrian survey	Historic
1.3 E. Holsten	1.3A 7S-G-136 S-8495	Shovel test pits/ Pedestrian survey	Historic

test pits and pedestrian surveys identified one historical (Site 7S-G-136). The artifacts, which consisted of whiteware, stoneware, glass, and metal fragments, and a part of a porcelain insulator, suggest a site dating to approximately 1830-1880, but the function of the site is unknown. The artifacts were recovered in a fallow field of Sassafras sandy loam with about 10 percent visibility.

## **Segment 2: Beaverdam Creek Study Area**

One prehistoric and two historical sites were identified (Table 3) in the Beaverdam Creek segment, which begins on Route 9, west of Harbeson, and runs southeast for 7400 feet, across Beaverdam Creek, State Route 293 and ends on State Route 5 (Figure 8). Soils consisted of the Evesboro-Rumford association of excessively drained and somewhat excessively drained soils with a rapidly permeable subsoil of sand to sandy loam (Ireland and Matthews 1974). Much of the segment was in woods and had not been previously plowed. Residential lots in the segment were not tested. Permission for testing was denied for a large area of the Beaverdam Creek segment.

### **C. Friend and N. Montgomery Property: Tract 2.1.**

Locus 2.1A. Excavation of 21 shovel test pits at various intervals, based on the topography of the area, comprised the testing on Tract 2.1. Soils consisted solely of Evesboro sandy loams. Several slight rises were investigated, but none of these yielded any artifacts. One historical site, 7S-F-80, was identified on the surface. The site is a trash dump dating to between 1880 and 1940. Artifacts included whiteware sherds, blown and molded bottle glass fragments, and whole "baking powder" bottles, asphalt shingles, oyster shells, sewer pipe fragments, and metal bucket fragments.

### **C. Kopple Property: Tract 2.2.**

Locus 2.2A. Tract 2.2 is located at the extreme southern end of Segment 2, on both sides of Route 5. The eastern portion of the tract was wooded, and the 4 shovel test pits excavated recovered no artifacts. The remainder of the tract was agricultural field with about 20 percent visibility. The entire property was Evesboro sandy loam type soil. West of Route 5 is a farmstead (7S-F-74), consisting of a farmhouse and about a dozen outbuildings built sometime between 1830 and 1880. Behind the structures, but out of the segment, was a small family burial plot (at least six interments). Local informants indicated that this farm was used until the late 1960s, when it was abandoned, and that the burial ground was related to the Veasey (or Beasey) family. Beers' Atlas shows a "Veasey" as the occupant of the farm in 1868. Only a few late nineteenth-century artifacts were surface collected from the site. The significance of this site lies in the variety of standing outbuildings.

TABLE 3

Summary of Archaeological Sites Identified in the  
Beaverdam Creek Study Area, Segment 2

Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site
2.1 C. Friend N. Montgomery	2.1A 7S-F-80 S-8673	Shovel test pits/ Pedestrian survey	Historic
2.2 C. Kopple	2.2A 7S-F-74 S-3619	Shovel test pits/ Pedestrian survey	Historic
2.3 Jehovahs Witness	2.3A 7S-F-79 S-8672	Shovel test pits	Prehistoric

**TABLE 4**  
**Summary of Archaeological Sites Identified in the**  
**Gravel Hill Study Area, Segment 3**

<b>Parcel/ Owner</b>	<b>Locus Number Site Number CRS Number</b>	<b>Type of Testing</b>	<b>Type of Site</b>
3.2 R. Lynch	3.2A 7S-F-77 S-8603	Shovel test pits	Unknown
3.7 R. Besche Furniture Store and home	3.7A 7S-F-75 S-8520	Previous survey by McCann Inc., Informant	Historic
3.7 R. Besche Furniture Store and home	3.7B 7S-F-76 S-8490	Shovel test pits/ Pedestrian survey	Historic
3.9 W. Kopple	3.9A 7S-F-78 S-8604	Pedestrian survey	Historic

**Georgetown Congregation of Jehovahs Witness Property: Tract**

**2.3.**

Locus 2.3A. Tract 2.3 comprised all of the land in the study area west of Beaverdam Creek and south of Route 9. The tract was heavily wooded, and twenty-one shovel test pits were excavated in the tract. One site (7S-F-79) was located, 200 feet south of the Delaware Coast Line Railroad Tracks, on a small topographic high of Evesboro sandy loam, bordered to the east by low, wet Johnston soils. Artifacts recovered from the shovel test pits at Site 7S-F-79, close to the crest of the rise, included two fragments of Coulbourn ceramic, and sixteen flakes (one rhyolite). Artifacts and site location suggest a Woodland I Period procurement site.

**Segment 3: Gravel Hill Study Area**

The Gravel Hill segment runs 2800 feet east and 6000 feet west, along State Route 9 from the Gravel Hill intersection (Figure 8, Table 4). Soils in the segment were of the Elkton-Matawan-Keyport association, a series of poorly-drained to moderately-drained soils with a clayey subsoil. (Ireland and Matthews 1974). Field check of the large wooded portion of the segment found no dry, testable areas. Residential development, as well as borrow pit operations by the State of Delaware, precluded testing for a large remaining portion of the segment.

**R. Lynch Property: Tract 3.2.**

Locus 3.2A. Six shovel test pits were excavated on this wooded tract with Evesboro sandy loam soils. The area contained several very large, mature hardwoods, suggesting that it had not

been plowed. The shovel test pits confirmed that the area had not been plowed. In one of the shovel test pits, an 0.8 foot thick concentration of oyster shell was encountered. No artifacts, either prehistoric or historical, were recovered. Although the exact nature of the oyster shell feature is not presently known, the location was assigned site number 7S-F-77.

#### **R. Besche Property: Tract 3.7.**

Locus 3.7A. Tract 3.7 lies north of Route 9 approximately 1200 feet west of the Route 9 and Route 30 intersection at Gravel Hill. Two historical sites were found. Site 7S-F-75, the Wagamon Family Cemetery, was discovered behind the false facade of the Besche furniture store. The owners of the store had earlier in the year requested a subsurface testing of the area to determine if any graves or burials could be detected. Test borings by an engineering firm, McCann, Inc., confirmed the presence of human remains at the site, providing rough dimensions for the burial ground of about 50 x 50 feet (Figure 9).

Locus 3.7B. North and west of the cemetery, pedestrian and subsurface testing identified an archaeological component of the Besche House (CRS S-8490), an early twentieth century Classical Box structure with associated outbuildings (Tabachnick and Keller 1992:275). Subsurface testing and pedestrian survey recovered pearlware, redware, whiteware, porcelain, and white granite stoneware fragments from the field area west of the house, and was designated as Site 7S-F-76.

**W. Kopple Property: Tract 3.9.** Tract 3.9, at the eastern end of the study area, is about 1000 feet east of the Gravel Hill intersection, both north and south of Route 9. Eight shovel test pits were excavated in the wooded area north of State Route 9. Soils consisted of Kalmia sandy loam; no plow zone was observed, and no artifacts were recovered.

Locus 3.9A. On the south side of State Route 9, approximately 2400 feet east of the Gravel Hill Intersection, a historical archaeological site was identified. The site, 7S-F-78, was located on a prominent rise of Evesboro sandy loam. No structures were extant, but a pedestrian survey of the site recovered whiteware, porcelain, white granite stoneware, stoneware, and blown glass fragments. Beers' Atlas (1868) does not show a house here. The **1913 Farm Directory of Sussex County** (Sussex Prints n.d.) records that the farm was owned by Absalom Rust, and that other members of the Rust family lived nearby. Based on the artifacts collected during the planning survey and the historical information, Site 7S-F-78 is probably a farmstead dating from 1880 to 1940.

#### **Segment 4: Georgetown Study Area**

The large Georgetown segment is located primarily to the north of Georgetown, straddling the Mid-peninsular Drainage Divide (Figure 10). Thirty-seven property tracts were field checked, and 29 prehistoric and historical sites were identified during the survey in the study area (Table 5). The study segment is characterized by a mix of woodlands and fields, with commercial and residential structures interspersed throughout. Several portions were not field surveyed due to the wet, swampy conditions, or due to access denial. Also, properties immediately west of Route 113 were not checked because they had been surveyed previously (LeeDecker et al. 1989).

Soils in the Georgetown segment fall generally into two groups. The Pocomoke-Fallsington-Evesboro association consists of very poorly-drained and poorly-drained soils that have a moderately permeable subsoil of sandy loam or sandy clay loam, and excessively-drained soils that have a rapidly permeable sandy subsoil. The Fallsington-Pocomoke-Woodstown association is similar, and consists of very poorly-drained to moderately well-drained soils that have a moderately permeable sandy loam or sandy clay loam subsoil (Ireland and Matthews 1974). The present vegetation is mostly mixed pine and hardwoods, with some small agricultural fields and dwelling complexes interspersed. The relatively rare topographic highs in the Georgetown study area were considered as potential prehistoric site settings.

#### **Redden State Forest Property: Tract 4.1.**

Locus 4.1A. Site 7S-F-88 was located approximately 2000 feet south of the intersection of State Route 522 and State Route 527, on the west side of State Route 522 on the Bailey Tract in the Redden State Forest. Twenty-one shovel test pits were excavated along both sides of the road through the mixed pine and hardwood forest. Soil development suggests that the area was unplowed. Three jasper flakes (one with cortex), one utilized jasper flake, and one jasper flake tool (with cortex) were recovered from a small rise. The site is probably a procurement site, but the cultural time period of occupation could not be determined.

Loci 4.1B, 4.4B, and 4.24A. These property tracts at the intersection of State Route 522 and State Route 527 encompass what appears to be one large prehistoric site, designated 7S-F-89. The site extends from the intersection approximately 2000 feet west towards Mifflin ditch, and 200 feet east from the intersection along State Route 527. Soils consist of well-drained Evesboro silt loam on a slight upland in the otherwise swampy forest area. Prehistoric artifacts (Table 6), including twenty-three flakes, utilized flakes, and miscellaneous tools, fire-cracked rock, and seven sherds of prehistoric ceramic, were recovered through both pedestrian surveys and the excavation of shovel test pits.

The prehistoric ceramics included three fragments of Nassawango (clay and crushed rock tempering), two fragments of Wilgus (crushed clay and shell tempering), a fragment of Mockley

TABLE 5

Summary of Archaeological Sites Identified in the Georgetown Study Area, Segment 4

Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site	Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site
4.1 Bailey Tract Redden State Forest	4.1A 7S-F-88 S-8677	Shovel test pits	Prehistoric	4.10 B. Brittingham	4.10A 7S-F-111 S-8694	Pedestrian survey	Historic
4.1 Bailey Tract Redden State Forest	4.1B 7S-F-89 S-8678	Shovel test pits	Prehistoric	4.10 B. Brittingham	4.10B 7S-F-110 S-8693	Pedestrian survey	Prehistoric
4.4 Hearn	4.4B 7S-F-89 S-8678	Pedestrian survey	Prehistoric	4.11 M. Conway	4.11A 7S-F-107 S-3213	Pedestrian survey	Historic
4.24 Tunnel Properties	4.24A 7S-F-89 S-8678	Shovel test pits	Prehistoric	4.14 Unknown	4.14A 7S-F-100 S-8685	Pedestrian survey	Historic
4.3 Gooss	4.3A 7S-F-87 S-8676	Pedestrian survey	Historic	4.18 L. Mills	4.18A 7S-F-98 S-8435	Shovel test pits	Historic
4.3 Gooss	4.3B 7S-F-86 S-8675	Pedestrian survey	Prehistoric	4.18 L. Mills	4.18B 7S-F-99 S-8684	Pedestrian survey	Prehistoric
4.4 Hearn	4.4A 7S-F-84 S-8425	Pedestrian survey	Historic	4.23 F. Craemer	4.23A 7S-F-137 S-8711	Pedestrian survey	Historic
4.4 Hearn	4.4C 7S-F-85 S-8426	Visual (can be seen from road)	Historic	4.25 E. Buck	4.25A 7S-F-103 S-3218	Pedestrian survey	Historic
4.5 G. Betts	4.5A 7S-F-91 S-8679	Pedestrian survey	Historic	4.26 W. Calloway	4.26A 7S-F-104 S-8688	Pedestrian survey	Historic
4.5 G. Betts	4.5B 7S-F-92 S-8680	Pedestrian survey	Historic	4.27 F. Conway	4.27A 7S-F-106 S-8690	Pedestrian survey	Historic
4.5 G. Betts	4.5C 7S-F-93 S-8681	Pedestrian survey	Historic	4.34 J. Clendaniel	4.34A 7S-F-102 S-8687	Pedestrian survey	Prehistoric
4.5 G. Betts	4.5D 7S-F-95 S-8682	Pedestrian survey	Historic	4.34 J. Clendaniel	4.34B 7S-F-101 S-8686	Pedestrian survey	Historic
4.5 G. Betts	4.5E 7S-F-94 S-8452	Pedestrian survey	Historic	4.36 T. Conley, G. Wilson	4.36A 7S-F-97 S-8683	Pedestrian survey	Prehistoric
4.5 G. Betts	4.5F 7S-F-90 S-8515	Pedestrian survey	Historic	4.36 T. Conley G. Wilson	4.36B 7S-F-96 S-3216	Pedestrian survey	Historic
4.6 Baxter Farms Inc.	4.6A 7S-F-109 S-8692	Pedestrian survey	Historic	4.37 J. Melvin	4.37A 7S-F-105 S-8689	Pedestrian survey	Historic
4.6 Baxter Farms Inc.	4.6B 7S-F-108 S-8691	Pedestrian survey	Historic				

TABLE 6

Summary of Prehistoric Artifacts from Site 7S-F-89

	Quartzite	Quartz	Jasper	Argillite	Chalcedony	Chert	Total
Flakes	2(2)	8(4)	8(3)	1	1(1)	1	21(10)
Utilized flakes	---	---	1(1)	---	---	---	1(1)
Miscellaneous tools	---	---	1(1)	---	---	---	1(1)
<b>Total</b>	<b>2(2)</b>	<b>8(4)</b>	<b>10(5)</b>	<b>1</b>	<b>1(1)</b>	<b>1</b>	<b>23(12)</b>
Fire-cracked rock = 4g							
Ceramics sherds	<b>Wilgus</b> 2	<b>Nassawango</b> 3	<b>Mockley</b> 1	<b>Unidentified</b> 1	<b>Total</b> 7		
( ) = cortex							

(crushed shell tempering), and one unidentified sherd. Both Nassawango and Wilgus ceramics are termed Transitional wares; they may be associated with the Delmarva Adena Complex. Nassawango, first identified at an Adena cemetery near Salisbury, Maryland (Wise 1974) grades into Coulbourn, then Wilgus ceramics, which in turn grades into Mockley types. Based on the ceramic fragments recovered during the planning survey, Site 7S-F-89 is a rather extensive Woodland I Period site situated on a narrow well-drained ridge that ranges in date from 785 B.C. to perhaps A.D. 450 (Griffith 1982; Custer 1985:146; Custer 1989:173). No features were found during shovel test pit excavation on Tract 4.1; however, on Tract 4.4, there may have been features. The owner, W. Hearn, informed us that he found many shells while excavating the foundation for a shed. He also showed us his collection of artifacts from his property and Tract 4.24 across the road, on which he has a garden.

**Gooss Property: Tract 4.3.**

Locus 4.3A. Pedestrian survey of a fallow field with 10 percent visibility recovered historical artifacts, including window glass, molded bottle glass, milkglass, a knife, and twenty-four ceramic sherds, including whitewares, bone china, white granite stoneware, American blue and gray stoneware, and decal porcelain. Site 7S-F-87 is 1600 feet east of the intersection of State Route 522 and State Route 527, and about 100 feet south of State Route 527. Near the artifact concentration is the remains of an abandoned chicken house. The artifacts suggest a date for the site of 1880 to approximately 1940.

Locus 4.3B. A pedestrian survey, 200 feet south of State Route 527, identified a prehistoric site, designated as Site 7S-F-86. A quartz pebble tool and fire-cracked rock were collected from the field along the south side of a drainage ditch running parallel to State Route 527. Visibility was 10 percent and the soils consisted of Kalmia sandy loam. No function or date can be assigned to the site based on the limited finds.

**Hearn Property: Tract 4.4.** The Hearn tract is north of State Route 527 at its intersection with State Route 522. Two historical sites associated with standing structures were identified, as well as a prehistoric site which is discussed under Locus 4.1B. Soils consisted of Evesboro sandy loams.

Locus 4.4A. Site 7S-F-84 is 50 feet north of the intersection of State Route 522 and State Route 527. It is associated with a standing structure, CRS S-8425 (Tabachnick and Keller 1992:133). Despite ground visibility of only two percent or less in the fallow fields, two separate historical artifact concentrations, including whiteware, stoneware, and glass sherds, were observed. A chicken house and other outbuildings are present.

Locus 4.4C. Site 7S-F-85, corresponding with standing structure CRS S-8426 (Tabachnick and Keller 1992:135) is 600 feet east of the intersection of State Route 522 and State Route 527 and 50 feet north of State Route 527. The house is still standing, but overgrown. No pedestrian or subsurface testing were conducted; however, the site does possess archaeological potential.

**G. Betts Property: Tract 4.5.** The Betts Property includes all the fields and woods east of U.S. Route 113 and west of the Conrail railroad tracks, from State Route 244 to the northern end of the study area. Poorly-drained Pocomoke and Fallsington sandy loams constitute most of the soil except for a small area of Evesboro sandy loam. Visibility in the fields of corn stubble was good. The woods were too low and wet to allow subsurface testing. Six historical sites were identified on this extensive tract.

Locus 4.5A. Site 7S-F-91 is 2800 feet north of the U.S. Route 113 and State Route 244 intersection, 700 feet east of U.S. Route 113, in a fallow field with 20 to 60 percent visibility. Several fragments of window glass, three ceramic sherds (creamware, redware, and pearlware), and brick fragments were found in an area about 300 feet long and 150 feet wide. Beers' Atlas (1868) does not show houses or sites in this vicinity. Based on the few artifacts recovered from the fallow field, this could be the location of a historical site dating to the period 1770 to 1830 (De Cunzo and Catts 1990), a time period poorly represented in the archaeological record of the Sussex East-West project corridor.

Locus 4.5B. Site 7S-F-92 is 2400 feet north of State Route 244 and 1100 feet east of Route 113 within 200 feet of the railroad. Like Locus 4.5A, the site was in corn stubble and visibility was good. A pedestrian survey identified a concentration of brick fragments, window glass, molded container glass, whiteware, white granite stoneware, and redware sherds. The site probably dates to between 1880 and 1940.

Locus 4.5C. Site 7S-F-93 is 1200 feet north of State Route 244 and 1100 feet east of U.S. Route 113. A pedestrian survey recovered two nineteenth-century tobacco pipe bowls (one stoneware and one clay), molded container glass, window glass, milkglass, a stoneware sherd, and numerous brick fragments. The site probably dates to the period between 1880 and 1940.

Locus 4.5D. Site 7S-F-95 is in a corn field 2200 feet north of State Route 244 and 600 feet east of Route 113. The field was in stubble and visibility was good. The site is represented by a thin scatter of historical artifacts recovered during a pedestrian survey, including molded container glass, a porcelain insulator, and window glass. The site is east (to the rear) of some dwellings along Route 113, and could represent a previous structure, or a trash disposal area. One chert flake (with cortex) indicates some prehistoric activity in the area also.

Locus 4.5E. Site 7S-F-94 is 900 feet north of the intersection of Route 113 and State Route 244, and 300 feet east of Route 113, directly south and east of a dwelling complex, and west of a shallow drainage ditch. A pedestrian survey of the tract, in soybean stubble with good visibility, found a concentration of historical artifacts. Artifacts recovered included over forty fragments of molded container glass and window glass, milkglass, a porcelain insulator, and nine sherds of historic ceramics, including stoneware, redware, whiteware, white granite stoneware, and American porcelain. Like the previous site, 7S-F-94 could be the location of a 1880 to 1940 structure, or a trash disposal area.

Locus 4.5F. Site 7S-F-90 (also recorded as historic standing structure CRS S-8515) is 2400 feet south of the intersection of Route 113 and State Route 213, and 100 feet east of Route 113. A pedestrian survey of the site observed modern trash, and bricks associated with the structure. No subsurface testing was conducted. Beers' Atlas (1868) shows a house north of Mifflin ditch called "Dr. D. W. Maull" in the approximate location of this structure. Tabachnick and Keller (1992:178) describe the house as a two and one-half story, three bay I-house dating to the mid-nineteenth century.

**Baxter Farm, Inc. Property: Tract 4.6.** The Baxter Farm, Inc. property is at the eastern end of the southern prong of the study area. The Baxter Farm property consisted of two large fallow fields separated by a ditch reportedly excavated in the 1930s. Prior to that time the fields were swampy. The area between State Route 319 and the ditch was in soybean and weed stubble, and had about 10 percent visibility; the part of the field west of the ditch was also fallow, but had about 20 percent surface visibility. No sites were found in the field west of the ditch, but two historical sites were identified between State Route 319 and the ditch.

Locus 4.6A. Site 7S-F-109 is 2000 feet north of the intersection of State Route 319 and Route 404, and 200 feet west of State Route 319. The site extends south of the study area limits. A pedestrian survey of the site recovered stoneware and whiteware sherds, and window and container glass, along with brick fragments. Beers' Atlas (1868) shows a dwelling labeled "J. Dickerson" here. Also associated with this structure were a "W & B. S. shop" -- wheelwright and blacksmith shop. No subsurface testing was conducted at the site to confirm the presence or absence of smith-related debris or artifacts. The Harbeson U.S.G.S. quadrangle map (1955) shows a structure at this location, but it is no longer extant.

Locus 4.6B. Tract 4.6B is in a fallow field approximately 2600 feet north of the intersection of Route 404 and State Route 319, and 100 feet west of State Route 319. A historical artifact scatter (Site 7S-F-108) was identified during pedestrian survey. Artifacts recovered included molded container glass and American stoneware, whiteware, and white granite stoneware. The function

of the site is unknown, but it probably dates to between 1880 and 1940.

**B. Brittingham Property: Tract 4.10.** The Brittingham is located in the eastern end of the northern prong of the study area, just south of Black Savannah Ditch. Two sites, one historical and one prehistoric, were identified. Soils in the eastern end of the study area consist of Fallsington and Woodstown sandy loams. The Brittingham property was in soybean stubble with approximately 15 percent surface visibility. Both sites were identified through pedestrian survey.

Locus 4.10A. Site 7S-F-111 consists of a historical artifact scatter in a fallow field. The site is approximately 500 feet south of State Route 245 and 400 feet west of State Route 319, on the downslope side of a small rise separating the Brittingham property from the land to the south. Artifacts recovered included molded container glass, white granite stoneware, whiteware, and redware sherds in a concentration approximately 300 x 600 feet in area. The function of the site is unknown, but it probably dates to between approximately 1880 and 1940.

Locus 4.10B. Site 7S-F-110, 400 feet south of State Route 245 and 800 feet west of State Route 319, is centered on a low swampy area of the field. A quartz flake tool (with cortex) and two fragments of fire-cracked rock were surface collected from the site. Site 7S-F-110 is a prehistoric procurement site of an unknown age.

**M. Conoway Property: Tract 4.11.**

Locus 4.11A. Site 7S-F-107, associated with standing structure CRS S-3213, is 1200 feet east of the intersection of State Route 243 and State Route 244, and 50 feet north of State Route 244. A pedestrian survey of the tract recovered molded container glass, milkglass, whiteware, bone china, redware and brick fragments. All of the artifacts were found in the vicinity of the dwelling and from the field to the rear and east of the structure. The property owner recalled that the main section of the house was over 100 years old, and that several outbuildings had been razed from the site. Tabachnick and Keller (1992:152) describe this structure as a late nineteenth century, three bay I-house altered by an addition to the front.

**Owner Unknown: Tract 4.14.**

Locus 4.14A. Site 7S-F-100 is also associated with a standing structure, CRS S-8685. The site is 200 feet east of the intersection of State Route 114 and Route 113, approximately 50 feet northeast of State Route 114. The one and one-half story frame, twentieth-century structure measures approximately 20 x 30 feet on the first floor. To the rear of the dwelling was evidence of outbuildings, consisting of a pile of bulldozed bricks, and five 1 1/2 x 1 1/2 feet cement piers or supports.

Nearby was a well pump. No artifacts were recovered from the site, although considerable amounts of glass were spread around the dwelling. The site is overgrown in scrub woods.

**L. Mills Property: Tract 4.18.** The L. Mills property is 200 feet east of the intersection of State Route 527 and U.S. Route 113. Two sites, 7S-F-98 and 7S-F-99, were identified on the property. The sites are both on a small rise of moderately well-drained Evesboro sandy loam, surrounded by poorly-drained Pocomoke series soils. The 27-acre tract was both in woods and fallow field. The wooded area was on Pocomoke soils. In the fallow field, a change in vegetation revealed the contact between Pocomoke and Evesboro soils. Several shovel test pits were excavated in the wooded area, but no cultural materials were recovered from the water-logged soils.

**Locus 4.18A.** An historical artifact scatter, probably associated with a dwelling, was found at Site 7S-F-98. A mobile home presently occupies the site. Pedestrian and subsurface testing (shovel test pits) recovered molded container glass, window glass, table glass, milkglass, and a variety of whitewares, white granite stoneware, porcelain, and redware. Beers' Atlas (1868) shows the dwelling of "G. Torbert" in this vicinity. The trailer at the site may have replaced an 1830 to 1880 period structure.

**Locus 4.18B.** Located 250 feet east of the intersection of State Route 527 and U.S. Route 113, pedestrian survey identified a prehistoric site, 7S-F-99. Soil visibility was approximately 20 percent. Artifacts recovered included 12 quartz, chert, argillite, and jasper flakes (seven with cortex), a jasper core, a jasper Woodland I Period side-notched projectile point, fire-cracked rock, and a hammerstone. The artifact assemblage suggests that Site 7S-F-99 is a Woodland I Period procurement site.

**F. Craemer Property: Tract 4.23.**

**Locus 4.23A.** Site 7S-F-137 is approximately 900 feet east of the intersection of State Route 522 and State Route 527, and 100 feet north of State Route 527. Pedestrian survey of the fallow field, with about 5 percent visibility, identified a historical site. Artifacts recovered included molded container glass, a porcelain insulator, milkglass, whiteware and white granite stoneware sherds. Beers' Atlas (1868) does not show any structures in the vicinity, so the site is probably related to a later agricultural complex.

**E. Buck Property: Tract 4.25.**

**Locus 4.25A.** Site 7S-F-103 is on the Buck tract 1100 feet east of the railroad tracks and 50 feet north of State Route 244. The tract was both fallow field and horse pasture with about 80 percent surface visibility. Pedestrian survey of the tract found a surface scatter of historical artifacts including whiteware,

white granite stoneware, redware, porcelain, brick, sewer pipe, window glass, table glass, milkglass, and molded container glass. The scatter was concentrated in an area approximately 100 x 150 feet in size. A standing structure (the Buck House, CRS S-3218) is located several hundred feet east of the concentration. It is likely that the site is associated with the late nineteenth-century standing structure. Tabachnick and Keller (1992:148) describe the Buck House as a mid-nineteenth century three bay, I-house.

**W. Calloway Property: Tract 4.26.**

Locus 4.26A. Site 7S-F-104 is 2000 feet west of the intersection of State Route 243 and State Route 244, and 100 feet north of State Route 244. The surface scatter, identified during a pedestrian survey of a fallow field with 30 percent surface visibility, is located on Evesboro sand loam soils. Historical artifacts were recovered from a 75 x 75 foot area and consisted of molded container glass fragments, window glass, a ceramic drainpipe fragment, and several sherds of stoneware. The site is not directly associated with any standing structures, and dates to the 1880 to 1940 period.

**F. Conoway Property: Tract 4.27.**

Locus 4.27A. A historical site, 7S-F-106, in the northern prong of the eastern study area corridors, is 1600 feet east of the intersection of State Route 243 and State Route 244, approximately 200 feet south of State Route 244. Surface visibility was 100 percent on Tract 4.27, planted in winter wheat on Evesboro sandy loam soil. A pedestrian survey found a surface concentration of historical artifacts measuring approximately 300 x 150 feet. Artifacts recovered included molded container glass fragments, window glass, milkglass, redware, white granite stoneware sherds, whiteware sherds, and two buttons (one metal, one plastic). Beers' Atlas (1868) shows a dwelling labeled "K. Sharp" in this approximate vicinity; however, since the present road network was not in existence in 1868, this identification is tenuous.

**J. Clendaniel Property: Tract 4.34.** Two sites were identified on the Clendaniel property, one prehistoric (7S-F-102) and one historical (7S-F-101). The fallow field was in soybean stubble and surface visibility was approximately 50 percent. Soils in the fields were of the Fallsington sand loam and Berryland sand loam variety, with poorly-drained Pocomoke soils to the southwest and northeast of the sites.

Locus 4.34A. Site 7S-F-102 is approximately 1000 feet northeast of the intersection of State Route 114 and 243. The site is a large surface scatter of prehistoric artifacts ranging from the Archaic through Woodland I periods (Table 7). The artifacts were concentrated in an area approximately 1000 feet long and about 300 feet wide along the eastern woodline that marks the beginning of the Pocomoke soils. The majority of the

TABLE 7

## Summary of Prehistoric Artifacts from Site 7S-F-102

	Quartzite	Quartz	Chert	Jasper	Argillite	Total
Flakes	1(1)	2(1)	1(1)	5(3)	1	10(6)
Utilized flakes	---	1(1)	---	1(1)	---	2(2)
Flake tools	---	3(3)	---	2(1)	---	5(4)
Archaic points	---	---	1	---	---	1
Woodland I points	---	---	1	1	---	2
Other bifaces	1	---	---	1(1)	---	2(1)
Miscellaneous tools	---	---	---	1	---	1
Shatter	---	1	---	1(1)	---	2(1)
Cores	---	---	1(1)	3(3)	---	4(4)
<b>Total</b>	<b>2(1)</b>	<b>7(5)</b>	<b>4(2)</b>	<b>15(10)</b>	<b>1</b>	<b>29(18)</b>
1 bi-pitted Hammerstone						
( ) = cortex						

diagnostic artifacts were recovered from the northern section of the site. Artifacts included ten flakes, two utilized flakes, five flake tools, one Archaic bifurcate point, two Woodland I Period projectile points, one bi-pitted hammerstone, four cores (all with cortex), two bifaces, and quartz and jasper shatter (Plate 1). The setting and artifact assemblage from Site 7S-F-102 suggest a procurement site dating from the Archaic through Woodland I Periods. No subsurface testing was conducted.

Locus 4.34B. Also located on the J. Clendaniel property, Site 7S-F-101 is 600 feet east of the intersection of State Route 114 and State Route 243, and 400 feet south of State Route 243. A pedestrian survey of the tract found a historical artifact scatter approximately 700 x 300 feet in size, extending from close to Route 243 to the northeast. Artifacts recovered included molded container glass, lampglass, milkglass, a fragment of lead, one sherd of creamware, and a sherd of whiteware. The artifacts suggest an occupation beginning between approximately 1770 and 1830 through the late nineteenth century. No subsurface testing was conducted at the site.

**T. Conely and G. Wilson Properties: Tract 4.36.** Tract 4.36 is on the south side of Route 244, approximately 1200 feet east of the intersection of U.S. Route 113 and State Route 244. The two parcels that make up the study tract are on an approximately 10-acre fallow field of soybean, sorghum, and corn stubble, with varying surface visibility. Soils on the property are Evesboro sandy loams with Pocomoke series soils to the south. Two sites, one prehistoric and one historical, were identified during pedestrian survey of the property.

Locus 4.36A. Site 7S-F-97 is 1200 feet east of the U.S. Route 113 intersection with State Route 244, and 100 feet south of State Route 244. Two jasper Woodland I Period projectile points, fifteen flakes, utilized flakes and flake tools (ten with

*Example*

Prehistoric Artifact Assemblage from Site 7S-F-102

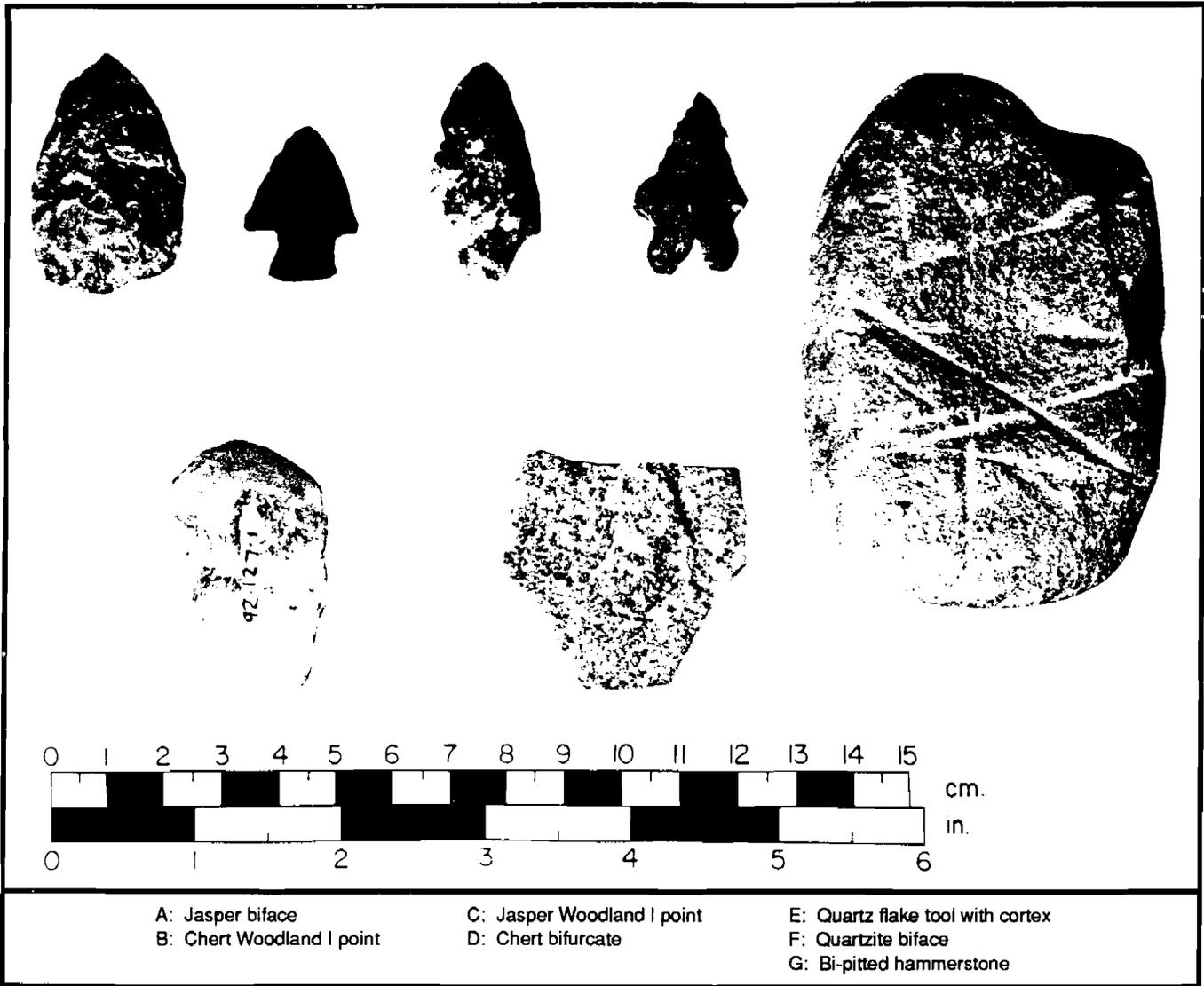


TABLE 8

Summary of Prehistoric Artifacts from Site 7S-F-97

	Quartzite	Quartz	Jasper	Chert	Total
Flakes	1(1)	2(1)	9(6)	---	12(8)
Utilized flakes	---	---	1	---	1
Flake tools	---	---	2(2)	---	2(2)
Woodland I points	---	---	2	---	2
Other bifaces	---	1(1)	---	1	2(1)
Shatter	1(1)	---	1(1)	---	2(2)
<b>Total</b>	<b>2(2)</b>	<b>3(2)</b>	<b>15(9)</b>	<b>1</b>	<b>21(13)</b>

1 Hammerstone  
 Fire-cracked rock = 75g  
 ( ) = cortex

cortex) were found during pedestrian survey of the fallow field (Table 8). The artifacts and the presence of fire-cracked rock suggest that Site 7S-F-97 is a Woodland I Period procurement site. No subsurface testing was conducted at the site.

Locus 4.36B. Site 7S-F-96 is 1300 feet east of the U.S. Route 113 intersection with State Route 244, and 100 feet south of State Route 244. A pedestrian survey recovered historical artifacts, including molded container glass, window glass, a porcelain insulator, American stoneware, whiteware, white granite stoneware, and transfer-printed pearlware sherds. Beers' Atlas (1868) shows no structures here, suggesting that the site post-dates the 1860s. A dwelling with associated outbuildings which could date to circa 1900 is on the tract. No subsurface testing was conducted at the site.

#### **J. Melvin Property: Tract 4.37.**

Locus 4.37A. Site 7S-F-105 is approximately 4000 feet south of the intersection of State Route 245 and State Route 246 (Black Savannah Ditch Road), 100 feet east of State Route 246. Although the soils maps of Ireland and Mathews (1974) show only poorly-drained Pocomoke sandy loam on the tract, the pedestrian survey of the site found a slight topographic rise with a concentration of historical artifacts. Artifacts recovered from the fallow field (0-2% surface visibility) included molded container glass, stoneware sherds, redware, milkglass, and a clay pigeon fragment. No structures are shown in this vicinity on Beers' Atlas (1868). No subsurface testing was conducted at the site.

#### **Segment 5: Cokesbury Church Study Area**

Eighteen archaeological sites, seventeen historical and one prehistoric, were identified in the Cokesbury Church study area (Figure 11 and Table 9). The prehistoric site, 7S-F-27, located around Cokesbury Church, had been identified prior to the planning survey (Custer and Mellin 1989). The study area extends approximately 17,600 feet, from just west of Hebron Church on State Route 18, crossing Deep Creek, and continuing to a point 2200 feet west of Cokesbury Church. Soil associations in the study area are dominated by two types: the Fallsington-Pocomoke-Woodstown association in the eastern section of the segment, and the Evesboro-Rumford association in the western section of the segment. The Evesboro-Rumford association consists of excessively-drained and somewhat excessively-drained soils with rapidly permeable sand or sandy loam subsoil. The Fallsington-Pocomoke-Woodstown association consists of very poorly-drained to moderately well-drained soils with moderately permeable sandy loam to sandy clay loam subsoils (Ireland and Matthews 1974).

#### **S. Isaac Property Tract 5.1.**

Locus 5.1A. Tract 5.1 was a newly-seeded wheat field with nearly 100 percent surface visibility. Soils consisted of

Evesboro sandy loam types. Pedestrian survey of the tract found a historical artifact concentration, designated as Site 7S-F-114, approximately 75 feet south of State Route 18 and 1500 feet west of the intersection of State Route 18 and State Route 529. Historical artifacts were concentrated in an area approximately 250 feet in diameter, and included molded container glass, window glass, ceramic drainpipe, American blue and gray stoneware, whiteware, white granite stoneware, bone china, porcelain, redware, and brick fragments. The function of the site is not yet known, but it dates to between approximately 1830 and 1880.

#### **F. Hudson Property: Tract 5.2.**

Locus 5.2A. Site 7S-F-115 is in a soybean field adjacent to Site 7S-F-114 discussed above. Surface visibility was generally good ranging from 5 to 30 percent. Soils at the site are Evesboro sandy loams. A pedestrian survey of the tract found a surface concentration of historical artifacts 25 feet south of State Route 18 and 300 feet west of the intersection of State Route 18 with State Route 529. Artifacts included several ceramic sherds (whiteware and bone china), and brick and concrete fragments were observed in a concentration on the surface. The site may represent the remains of 1880 to 1940 outbuilding.

TABLE 9

Summary of Archaeological Sites Identified in the Cokesbury Church Study Area, Segment 5

Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site	Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site
5.1 Stan Issac	5.1A 7S-F-114 S-8689	Pedestrian survey	Historic	5.8 Baxter Farms, Inc.	5.8C 7S-F-119 S-8700	Pedestrian survey	Historic
5.2 Floyd Hudson	5.2A 7S-F-115 S-8697	Pedestrian survey	Historic	5.8 Baxter Farms, Inc.	5.8D 7S-F-120 S-8517	Pedestrian survey	Historic
5.3 K. Fowler	5.3A 7S-F-123 S-5064	Pedestrian survey	Historic	5.9 N. Warren	5.9A 7S-F-128 S-8705	Shovel test pits/ Pedestrian survey	Historic
5.3 K. Fowler	5.3B 7S-F-124 S-8702	Pedestrian survey	Historic	5.9 N. Warren	5.9B 7S-F-129 S-8706	Pedestrian survey	Historic
5.5 G. Isaac	5.5A 7S-F-116 S-8698	Shovel test pits	Historic	5.10 J. Townsend	5.10A 7S-F-126 S-8703	Shovel test pits	Prehistoric
5.6 A. Isaac	5.6A 7S-F-112 S-8695	Pedestrian survey	Historic	5.11 D. Milburn	5.11A 7S-F-127 S-8704	Pedestrian survey	Historic
5.6 A. Isaac	5.6B 7S-F-113 S-5072	Pedestrian survey	Historic	5.12 John O'Day	5.12A 7S-F-125 S-5063	Pedestrian survey	Historic
5.8 Baxter Farms, Inc.	5.8A 7S-F-117 S-5070	Pedestrian survey	Historic	5.13 RBK, Inc.	5.13A 7S-F-121 S-8701	Pedestrian survey	Historic
5.8 Baxter Farms, Inc.	5.8B 7S-F-118 S-8699	Pedestrian survey	Historic	5.14 M. Rogers	5.14A 7S-F-122 S-5067	Visual (can be seen from road)	Historic

**K. Fowler Property: Tract 5.3.** Two historical sites (sites 7S-F-123 and 7S-F-124) were identified on the Fowler property, east of the intersection of State Route 528 with State Route 18, on the north side of the road. Soils are Evesboro and Fallsington sandy loams. The sites were identified during a pedestrian survey of a recently planted wheat field with approximately 50 percent visibility.

**Locus 5.3A.** Site 7S-F-123 is 1200 feet east of the intersection of State Route 528 and State Route 18, approximately 50 feet north of Route 18. Survey of the tract found the locations of several outbuildings associated with the landowner's dwelling. Artifacts recovered included molded container glass, a porcelain stopper, ceramic drainpipe, a sherd of stoneware, a sherd of porcelain, and brick fragments were observed. The artifacts were concentrated in an area extending from the rear of the Fowler dwelling approximately 100 to 125 feet west, north, and east. The owner of the property confirmed that there had been outbuildings associated with the house, but these had been removed at an earlier (unknown) date.

**Locus 5.3B.** Site 7S-F-124 was located on the western edge of the Fowler property, 800 feet east of the intersection of State Route 528 and State Route 18, and 300 feet north of State

Route 18. Pedestrian survey identified a historical artifact concentration consisting of brick fragments, molded container glass, milk glass, table glass, and one sherd of white granite stoneware. The site could represent the location of an early-twentieth century outbuilding(s) associated with the Fowler dwelling.

**G. Isaac Property: Tract 5.5.**

Locus 5.5A. Site 7S-F-116 is approximately 300 feet south of State Route 18 and 50 feet east of State Route 484. At the time of the survey the tract was a cornfield, so thirteen shovel test pits were excavated to augment the pedestrian survey. Soils at the site are Evesboro sandy loams on a terrace above the Deep Creek flood plain. The shovel test pits identified a historical site, and one of the shovel test pits uncovered a historical feature with brick in situ. Artifacts recovered included window glass, and a range of historical ceramics, including white salt-glazed stoneware, creamware, hand-painted pearlware, redware, American blue and gray stoneware, and whiteware. The surface survey of the tract also found brick and oyster shell fragments. Beers' Atlas (1868) does not show any structures here, and the recovered artifacts suggest a mean date of occupation circa 1809. The site is probably an agricultural complex, dating as early as perhaps 1730 to 1770.

**A. Isaac Property: Tract 5.6.** Two historical sites were identified on Isaac property, which is at the western end of the study area, on the north side of State Route 18. Soils at the sites are Evesboro and Rumford sandy loams. The investigation of the sites consisted of a pedestrian survey on a harvested cornfield with about 50 percent surface visibility.

Locus 5.6A. Site 7S-F-112 is located 1000 feet west of the intersection of State Route 18 and State Route 579, approximately 200 feet north of State Route 18. The site is a surface concentration of historical artifacts on a slight rise. Artifacts included large amounts of charcoal, coal, and brick (not collected), and molded container glass, milkglass, ceramic drainpipe, redware, bone china, whiteware, and white granite stoneware sherds. The site extends east along the rise for approximately 250 feet. The site dates to sometime between 1880 and 1940.

Locus 5.6B. Site 7S-F-113 is 600 feet west of the intersection of State Route 579 and State Route 18, and 100 feet north of State Route 18. Pedestrian survey of the tract found a concentration of brick fragments and some glass sherds in the corn field to the north of a standing structure on the Isaac property. The artifacts probably represent the remains of outbuildings for the structure.

**Baxter Farms, Inc. Property: Tract 5.8.** Four historical sites (7S-F-117, 7S-F-118, 7S-F-119, and 7S-F-120) were identified on the Baxter Farms property. Soils on the property

consisted of Evesboro sandy loams, with Woodstown soils to the north and south. The Baxter Farm fields on both sides of the road were harvested soybean fields with approximately 50 percent visibility.

Locus 5.8A. Site 7S-F-117 is 50 feet north of State Route 18 and 2500 feet west of the intersection of State Route 18 and State Route 528, in association with standing structure CRS S-5070. Pedestrian survey of the soybean field located a historical artifact concentration to the north and east of the structure. Artifacts recovered included window glass, molded container glass, milkglass, plastic, a light bulb base, bone china, whiteware, white granite stoneware, and American stoneware. Also observed were brick and cement fragments. The artifacts suggest an 1830 to 1880 occupation for the site. Tabachnick and Keller (1992:239) describe the standing structure (CRS S-5070) as a massive I-shaped house clad in vinyl siding with large additions.

Locus 5.8B. Site 7S-F-118 is south of State Route 18, approximately 150 feet from the road, and 2600 feet west of the intersection of State Route 528 and Route 18. The site survey observed brick fragments and recovered molded container glass, milkglass, cast metal fragments, bone china, American porcelain, American blue and gray stoneware, whiteware, and white granite stoneware sherds. The artifacts were found in a concentration approximately 250 feet in diameter. The site dates from the period 1880 to approximately 1940. The function of the site is unknown.

Locus 5.8C. Site 7S-F-119 was identified 475 feet south of State Route 18 and 2600 feet west of the intersection of State Route 18 and State Route 528. Pedestrian survey of the site found a brick concentration and one fragment of window glass. The artifacts may represent the location of an outbuilding, perhaps associated with Site 7S-F-118 discussed above.

Locus 5.8D. Site 7S-F-120 is 2000 feet west of the intersection of State Route 18 and State Route 528, and 150 feet south of State Route 18. Pedestrian survey of the site yielded brick fragments and molded container glass, window glass, American porcelain, bone china, whiteware and white granite stoneware sherds. The site is on the eastern edge of the property, and like Site 7S-F-118 discussed above, may represent the remains of a late-nineteenth to early-twentieth century structure.

**N. Warren Property: Tract 5.9.** The Warren property is near the eastern end of the study area, on the north side of State Route 18 and west of State Route 522. Soils on the property are Elkton sandy loam, a poorly-drained soil on uplands and in slight depressions. Vegetation on this type of soil consists of wetland hardwoods and loblolly pine (Ireland and Matthews 1974:13). At the time of the survey the Warren property fields were fallow corn fields with generally low surface visibility. Two

historical sites were identified on the property, through a combination of both pedestrian survey and subsurface testing (shovel test pits). Subsurface testing was conducted in locations of high site probability, such as areas of different vegetation or ground cover, and areas of higher ground.

Locus 5.9A. Site 7S-F-128 is 400 feet north of State Route 18 and 300 feet west of State Route 522. Excavation of shovel test pits and pedestrian survey of the area identified an approximately 250 feet diameter concentration of historical artifacts. Brick and concrete fragments were observed on the surface, and recovered artifacts included molded container glass, window glass, clam shell fragments, and a piece of leather. The site may represent the remains of an outbuilding or chicken house dating from between 1880 and 1940.

Locus 5.9B. Site 7S-F-129 is 200 feet north of State Route 18 and 1000 feet west of the intersection of State 522 and State Route 18. The site is on a slight rise on the western edge of the cornfield, near a large, dead tree. Surface visibility was excellent. The artifact concentration is about 200 feet in diameter, and artifacts included brick (observed), molded container glass, window glass, milkglass, copper wire, whiteware, white granite stoneware, roof shingle, and four pieces of abalone, probably the debris from a button factory (LeeDecker et al. 1989), dating to between 1880 and 1940.

#### **J. Townsend Property: Tract 5.10.**

Locus 5.10A. Site 7S-F-126, on the Townsend tract, is 100 feet south of State Route 18, and 1300 feet east of the intersection of State Route 18 and State Route 521. The site is on a slight rise of Evesboro sandy loam. The north branch of Layton-Vaughn Ditch lies nearby to the south. The tract was in pine woods at the time of the planning survey, so shovel test pits were excavated in high site probability areas. Seven shovel test pits were excavated; one recovered a jasper flake from an unplowed context. Some historical artifacts were recovered also, but they came from disturbed or surface contexts. A second, slight rise, closer to the north branch of Layton-Vaughn Ditch was also tested with four shovel test pits, but no artifacts were recovered. The presence of a jasper flake in situ suggests a possible prehistoric processing or procurement site of undetermined age.

#### **D. Milburn Property: Tract 5.11.**

Locus 5.11A. Site 7S-F-127 is 250 feet north of State Route 18, 900 feet east of the intersection of Route 18 and State Route 521. A pedestrian survey of the fallow field found a historical artifact concentration approximately 300 x 200 feet. Soils at the site are Evesboro sandy loam. Artifacts recovered included molded container glass, window glass, milkglass, copper and zinc fragments, a porcelain knob, a ceramic drainpipe fragment, a large number of whiteware sherds, bone china, American blue and

gray stoneware, a sherd of late nineteenth century majolica, and white granite stoneware. Brick fragments were also observed on the surface. The artifacts suggest that the site, possibly a dwelling or agricultural structure, dates from circa 1830 to 1880, but occupation extended into the period between 1880 and 1940. A mean date range for the site computed from the ceramic assemblage is circa 1870. No subsurface testing was conducted at the site.

**J. O'Day Property: Tract 5.12.**

Locus 5.12A. Site 7S-F-125 is 300 feet south of State Route 18, and 1300 feet west of the intersection of that road and State Route 521. A historical artifact concentration associated with standing structure CRS S-5063 was found in a harvested field with 100 percent surface visibility. The site is approximately 150 feet long (north-south) and 75 feet wide (east-west). Artifacts included brick fragments, window glass, molded container glass, milkglass, American blue and gray stoneware, redware, yellowware, white granite stoneware, and whiteware. The ceramic assemblage suggests a mean occupation date of circa 1864. The site may represent the remains of an outbuilding associated with CRS S-5063, described by Tabachnick and Keller (1992:244) as an agricultural complex represented by a two story, five bay wide, two bay deep I-house, a machine shed, a chicken house, and a concrete block garage.

**R. B. K., Inc. Property: Tract 5.13.**

Locus 5.13A. Site 7S-F-121 is on the R. B. K, Inc. property, approximately 400 feet south of State Route 18 and 3400 feet west of State Route 528. At the time of the survey the property was a recently harvested soybean field with good surface visibility. Soils at the site are Woodstown sandy loams. The site is approximately 200 feet in diameter. Artifacts recovered during pedestrian survey were molded container glass sherds, table glass, a ceramic drainpipe fragment, redware, white granite stoneware, and edged, decorated, and plain whiteware sherds. The site could be the location of a house or outbuildings associated with an existing farmhouse located closer to State Route 18. Although the ceramic assemblage is small, the computed mean date range for the site is circa 1850. Beers' Atlas (1868) shows the "Wm. McColley, Est." in the vicinity of Site 7S-F-121, but it is difficult to pinpoint the present location of the McColley, Est. accurately on the ground.

**M. Rogers Property: Tract 5.14.**

Locus 5.14A. Site 7S-F-122 is a historical family cemetery associated with standing structure CRS S-5067. The cemetery is approximately 700 feet west of State Route 528 and 300 feet north of State Route 18. Soils at the site consisted of Evesboro sandy loams. Tabachnick and Keller (1992:242) describe the standing structure as a two and one-half story, three bay wide and two bay deep I-house with a gabled roof. Permission to access the

property around the house and cemetery was denied to the archaeologists by the landowner, so no archaeological data could be obtained on the cemetery or house. The cemetery is not shown on the Georgetown U.S.G.S. quadrangle map (1954).

### **Segment 6: Cedar Corners Study Area**

The Cedar Corners Study Area is approximately 17,000 feet in length extending from the intersection of State Route 579 and State Route 527 to State Route 565, 3000 feet west of Chaplins Chapel (Figure 12). Segment 6 crosses several drainages, including Gravelly Branch, and Smith-Short and Willin ditches. Soils in the study area fall into the Evesboro-Rumford association, which is excessively drained to somewhat excessively drained sandy loam with rapidly permeable subsoils. Topography in the area is generally level, with occasional sandy dune-like ridges, some swampy sink holes, and some steep slopes bordering the major drainages (Cotnoir 1973:18; Ireland and Matthews 1974).

TABLE 10  
 Summary of Archaeological Sites Identified in the Cedar  
 Corners Study Area, Segment 6

Parcel/ Owner	Locus Number Site Number CRS Number	Type of testing	Type of site
6.1 Mary Messick	6.1A 7S-E-158 S-8645	Pedestrian survey	Historic
6.2 F. Russel	6.2A 7S-E-155 S-8642	Pedestrian survey	Historic
6.2 F. Russel	6.2B 7S-E-157 S-8644	Pedestrian survey	Prehistoric
6.2 F. Russel	6.2C 7S-E-156 S-8643	Pedestrian survey	Historic
6.2 F. Russel	6.2D 7S-E-154 S-8641	Pedestrian survey	Historic
6.8 A. Isaacs	6.8A 7S-F-83 S-5122	Pedestrian survey	Historic
6.11 E. Lauer	6.11A 7S-F-82 S-8674	Shovel test pits	Prehistoric
6.11 E. Lauer	6.11B 7S-F-81 S-5109	Pedestrian survey	Historic

At the time of the survey, the study area was a mix of agricultural fields and farming complexes, woodlots and larger stands of timber, and swampy areas. The study area does not follow any existing or previous road pattern. Eleven properties were field tested in the Cedar Corners Study Area. Eight archaeological sites were identified (Table 10).

**M. Messick Property: Tract 6.1.**

Locus 6.1A. Site 7S-E-158 is at the western end of the study area, approximately 1700 feet south of State Route 565 along the eastern edge of the Messick property. At the time of the survey the site was in a fallow soybean field with approximately 30 percent surface visibility on Evesboro sandy loam soils. Pedestrian survey of the tract identified a historical artifact concentration about 200 feet in diameter. Artifacts observed included brick fragments, and artifacts recovered were molded container glass sherds, window glass, milkglass, metal fragments, redware, whiteware, white granite stoneware, and American bone china sherds. The artifact assemblage suggests the location of an agricultural or dwelling complex dating between approximately 1880 and 1940.

TABLE 11

## Summary of Prehistoric Artifacts from Site 7S-E-157

	Quartzite	Jasper	Rhyolite	Total
Flakes	--	2(2)	1	3(2)
Utilized flakes	1	---	---	1
Flake tools	---	1(1)	---	1(1)
Total	1	3(3)	1	5(3)
Fire-cracked rocks - 556 grams				
( ) = cortex				

**F. Russel Property: Tract 6.2.** The Russel property consisted of several large fields located west and east of State Route 42. West of State Route 42 no sites were identified, but on the east side of the road four sites were found. Fields on the east side of State Route 42 at the time of the survey were planted in winter wheat, providing about 95 percent surface visibility. Soils consisted solely of Rumford sandy loams.

Locus 6.2A. Site 7S-E-155 is 1400 feet south of the intersection of State Route 565 and State Route 42, and 500 feet east of State Route 42. Located just beyond the northern edge of the study area, the site is a historical artifact concentration approximately 700 by 200 feet. Historical artifacts recovered during the pedestrian survey included window glass, metal fragments, whiteware, white granite stoneware, and redware sherds. The site may represent a habitation site, or it could be associated with Site 7S-E-154 (see below).

Locus 6.2B. Site 7S-E-157 is a large concentration of prehistoric artifacts on the edge of the cultivated wheat field and the surrounding woods 1800 feet south of State Route 565, and 2200 feet east of State Route 42. Pedestrian survey of the field identified a concentration of prehistoric artifacts approximately 900 feet (east-west) by 400 feet (north-south). No subsurface testing was conducted, but it is likely that the site extends into the woods to the north and east of the site. A small drainage (probably ditched) is within 100 feet of the northern edge of the site limits. Artifacts (Table 11) included two jasper flakes and one jasper scraper (all with cortex), one quartzite utilized flake (no cortex), one rhyolite flake (no cortex), and twenty fire-cracked rocks, fifteen of which were observed in a circular concentration approximately two feet in diameter. The age of this procurement site could not be ascertained.

Locus 6.2C. Site 7S-E-156 is 2200 feet east of State Route 42 and 1900 feet south of State Route 565. Pedestrian survey found a historical artifact concentration approximately 600 by 900 feet. Historical artifacts were so dense that in some places it was difficult to walk without stepping on ceramic sherds. Many of the ceramic fragments were large. The site overlaps the prehistoric Site 7S-E-157 to the north. Artifacts recovered from

the historical site included molded container glass (including a complete molded bottle), milkglass, a marble, a wire nail, metal fragments, ceramic drainpipe, redware, whiteware, white granite stoneware, American porcelain, and bone china sherds. The site dates to the period 1880 to 1940.

Locus 6.2D. Site 7S-E-154 is 500 feet east of State Route 42, and 2000 feet south of the intersection of State Route 565 and State Route 42. Pedestrian survey found a dense concentration of historical artifacts on a slight rise. Brick fragments were observed clustered in two discrete areas, and artifacts recovered from the site included molded container glass, table glass, window glass, milkglass, ceramic drainpipe fragments, porcelain insulator fragments, and forty-eight pieces of ceramic, including redware, American blue and gray stoneware, white granite stoneware, bone china, American porcelain, plain, edged, and transfer-printed whiteware, and pearlware sherds. Beers' Atlas (1868) shows a dwelling here labeled "C. Macklin" and named "Mt. Pleasant". The ceramic collection from the site provides a tentative mean occupation date of 1865, suggesting that the site dates from the 1830 to 1880 and 1880 to 1940 historical time periods. The site is probably the remains of an agricultural complex.

#### **A. Isaacs Property: Tract 6.8.**

Locus 6.8A. Site 7S-F-83 is along the southern edge of Segment 6, about 1200 feet northwest of State Route 527, and 3000 feet west of the intersection of State Route 527 and State Route 579. Soils at the site are Evesboro sandy loams. The property was partly fallow field with about 20 percent surface visibility and partly in early growth pines. A pedestrian survey of the tract identified a house foundation of cement and brick, and four standing outbuildings (a barn with attached lean-to, two corn cribs, and a third smaller structure). No artifacts were recovered from the site, and no subsurface testing was conducted. Approximately 900 feet north of the house, a historical trash dump was identified that could be associated with the site. Beers' Atlas (1868) records a structure at this approximate location, identified as "J. Isaac", and the Georgetown U.S.G.S. quadrangle map (1954) shows a farm complex at this location. The site is an agricultural complex that probably dates to the 1830-1880 and 1880-1940 historical time periods.

**E. Lauer Property: Tract 6.11.** The E. Lauer property is near the center of Segment 6, east of State Route 592 and west of Gravelly Branch. Soils on the property consisted of a broad expanse of Rumford sandy loams. Two sites were identified on the tract through both pedestrian survey and subsurface testing.

Locus 6.11A. Site 7S-F-82 is a prehistoric site 2000 feet east of State Route 592 and 2100 feet south of State Route 565. The site is a small rise approximately 200 feet west of Gravelly Branch in scrub woods. Modern trash (including junked automobiles, bottles, cans, furniture, etc.) were scattered

about on the surface, and a recent pig pen was located in the woods. Nineteen shovel test pits were excavated in the woods between the fallow field and Gravelly Branch. Two chert flakes (one with cortex) were recovered from a shovel test pit in an unplowed context. As no other prehistoric artifacts were recovered the function or date of the site is unknown.

Locus 6.11B. Site 7S-F-81 includes the remains of the abandoned farmstead (including house and outbuildings) on the E. Lauer property designated as standing structure CRS S-5109. The site is 1000 feet east of State Route 592 and 2100 feet south of State Route 565. Pedestrian survey of the winter wheat fields surrounding the farming complex found historical artifacts, including molded container glass, window glass, milkglass, nail fragments, household metals (buckles, round stock, etc.), a blue hand-painted marble, and redware, yellowware, bone china, American porcelain, whiteware, and white granite stoneware sherds. The modern trash found at prehistoric Site 7S-F-82 is probably associated with this site. No subsurface testing was undertaken. Beers' Atlas (1868) does not show structures here, so the site probably dates to the 1880 to 1940 historical time period. Tabachnick and Keller (1992:124) characterize the farmstead as a mid-nineteenth century farmstead with a two and one-half story I-house dwelling.

TABLE 12

## Summary of Archaeological Sites Identified in the Kings Crossroads Study Area, Segment 7

Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site
7.1 Redden State Forest	7.1A, B, C 7S-F-2 S-555	Shovel test pits	Prehistoric
7.1 Redden State Forest	7.1D 7S-F-130 S-8442	Shovel test pits	Historic
7.2 V.I. Ware	7.2A 7S-F-131 S-8444	Shovel test pits	Historic
7.3 F. Russel	7.3A 7S-F-132 S-8707	Pedestrian survey	Historic
7.3 F. Russel	7.3B 7S-F-133 S-8708	Pedestrian survey	Historic
7.6 M. Hallmand	7.6A 7S-F-133 S-8708	Pedestrian survey	Historic
7.3 F. Russel	7.3C 7S-F-134 S-8709	Pedestrian survey	Historic
7.4 Tatman	7.4A 7S-C-52 S-8670	Pedestrian survey	Historic
7.4 Tatman	7.4B, 7.4C 7S-C-53 S-8671	Pedestrian survey	Prehistoric
7.5 H. Webb	7.5A 7S-C-53 S-8671	Pedestrian survey/ Shovel test pits	Prehistoric

### Segment 7: Kings Crossroads Study Area

The Kings Crossroads study area extends approximately 8000 feet along State Route 40 from 200 feet east of the intersection of State Route 40 and State Route 40B across Gravelly Branch, to a point 400 feet west of the intersection of State Route 40 and State Route 593 (Figure 13). Eight archaeological sites (Table 12) were identified, six historical and two prehistoric, including one previously identified prehistoric Site 7S-F-2 (Custer and Mellin 1989). The Evesboro-Rumford soil association, which dominated the study area, consists of excessively drained and somewhat excessively drained soils with a rapidly permeable subsoil of sand to sandy loam (Ireland and Matthews 1974). Six large parcels made up the Kings Crossroads study area; the largest parcel is the densely wooded Redden State Forest. The remaining properties consisted mainly of agricultural fields and several small residential lots. Most of the parcels were surveyed, though several areas were avoided due to swampy conditions or modern residential development. Unsurveyed areas

include portions of Redden State Forest Tract 7.1 and the Tatman Tract 7.4.

**Redden State Forest: Tract 7.1.** The Redden State Forest tract contained one prehistoric site -- Site 7S-F-2, and one historical site -- Site 7S-F-130. The tract consisted of an evergreen forest with dense underbrush. Surface visibility was nearly zero, hence ninety shovel test pits were excavated.

Loci 7.1A, 7.1B, 7.1C. Site 7S-F-2 had been previously identified on elevated ground east of Gravelly Branch approximately 300 feet south of State Route 40. Our survey found that the site was larger than previously thought extending north and east of State Route 40 on two elevated areas. The first knoll is approximately 200 feet east of Gravelly Branch and bisected by State Route 40. The second newly identified portion of Site 7S-F-2 is approximately 700 feet east of the Gravelly Branch and 300 feet north of State Route 40. The three areas are considered parts of one large site. Prehistoric artifacts recovered include Woodland I Period ceramic sherds, two stemmed points, and numerous chert and jasper flakes, all found in an undisturbed context of Evesboro sandy loam (Table 13; Plate 2). The site probably represents a Woodland I Period base camp, based on the artifacts and the setting. Site 7S-F-2 is particularly significant because it has never been disturbed by plowing.

Locus 7.1D. Site 7S-F-130 is between State Route 40 and State Route 40A about 1200 feet east of the Gravelly Branch. The site consists of several twentieth century cement slab pilings and foundations. The slab foundations were clearly visible on the surface of the forest floor and shovel test pit excavations near the structures revealed no subsurface features and recovered only one small piece of window glass. The site most likely is the remnants of State Forest buildings, probably pavilions and privies.

#### **V. Ware Property: Tract 7.2.**

Locus 7.2A. Site 7S-F-131 is in recently harvested fields of soybeans which provide nearly zero percent surface visibility. Soils at the site consisted of Evesboro sandy loam. Shovel test pit excavation revealed a historical artifact concentration approximately 400 feet west of State Route 579 and 275 feet south of State Route 40 which included window glass, bottle glass, and brick and wood fragments. The site probably represents the remains of a nineteenth century outbuilding associated with standing outbuildings and a house on the Ware Property.

**F. Russel Property: Tract 7.3.** Three historical sites were identified on the Russel property, which runs east from the intersection of State Route 40 and State Route 579 for 1800 feet on the north side of State Route 40. Soils on this parcel were Evesboro sandy loam and Woodstown sandy loam. The sites were identified during a pedestrian survey of a harvested corn field with approximately 50 percent visibility.

PLATE 6

*Example*

Prehistoric Artifact Assemblage from Site 7S-F-2

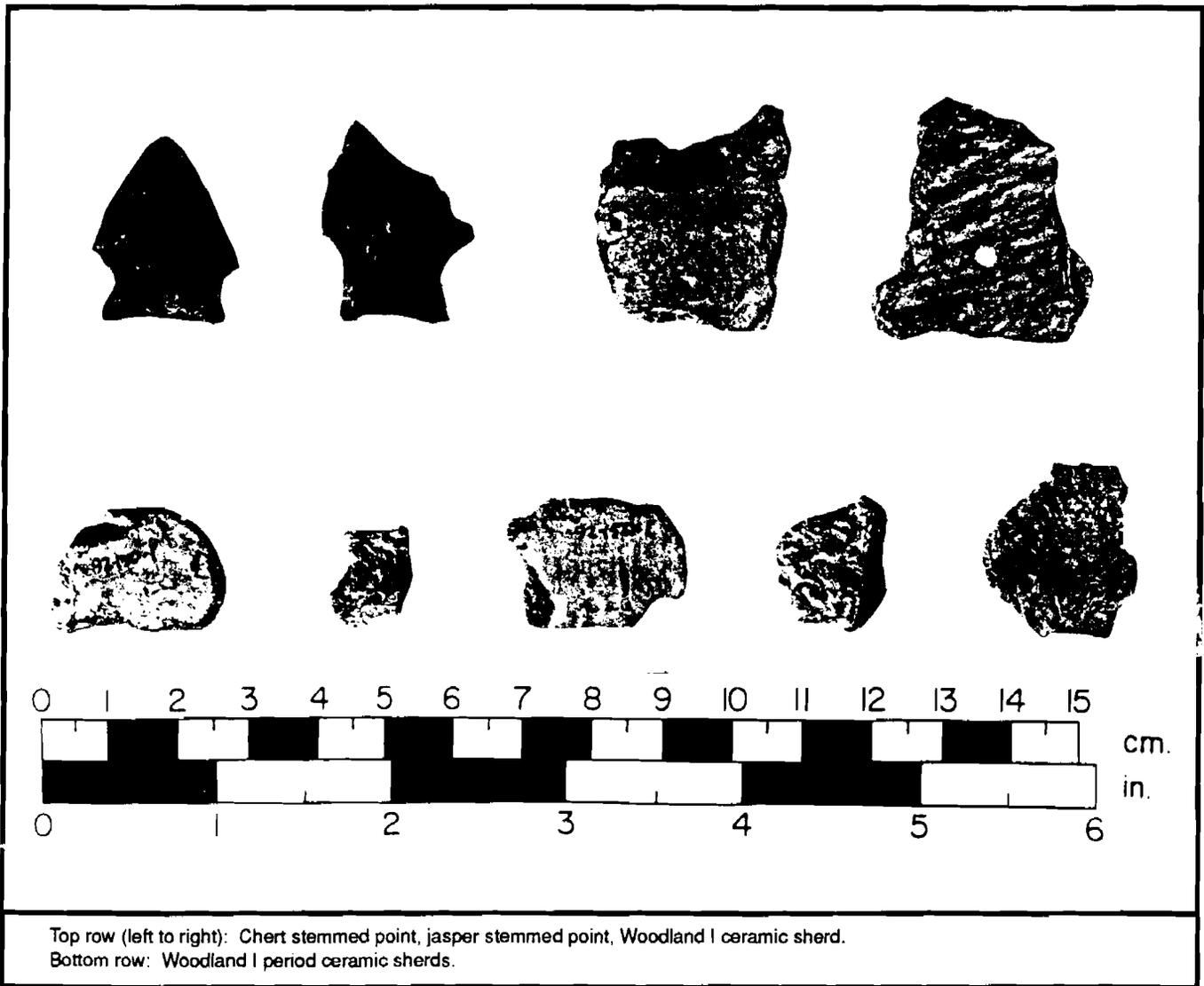


TABLE 13

Summary of Prehistoric Artifacts from Site 7S-F-2

	Jasper	Rhyolite	Chert	Quartz	Chalcedony	Total
Flake	6(5)	3	2	1	1	13(5)
Utilized flake	---	---	1	---	---	1
Stemmed points	1	---	1	---	---	2
<b>Total</b>	<u>7(5)</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>1</u>	<u>16(5)</u>

Ceramic sherds: Mockley = 8  
 Wolfe Neck = 1  
 ( ) = cortex

Locus 7.3A. Site 7S-F-132 is 300 feet west of the intersection of State Route 40 and State Route 40B, 150 feet north of State Route 40. Artifacts recovered include small quantities of late nineteenth to early twentieth century whiteware, white granite stoneware, porcelain, terra cotta brick, a metal hinge, and molded bottle glass. The site may be spoilage from an adjacent drainage ditch and does not appear to be associated with any standing structures.

Loci 7.3B, 7.6A. Site 7S-F-133 is located 800 feet west of the intersection of State Route 40 and 40B on both sides of State Route 40. On the north side of State Route 40, the site is on the F. Russel Property; on the south side of the road, the site is in Tract 7.6, owned by M. Hallmand. The main part of the site, on Tract 7.6, consists of an unplowed area in a field of Evesboro sandy loam soil. The area is approximately one acre in size and is covered by weeds, and several large deciduous trees are growing. No evidence of building foundations are present; however, an outhouse remains standing and overgrown at the rear of the area. No artifacts were visible in the overgrown area, but directly across the road was an artifact concentration. Artifacts included molded and window glass, white granite stoneware, whiteware, yellowware, redware and a ceramic drainpipe fragment. The site appears on the Georgetown U.S.G.S. quadrangle Map (1954), and is probably an agricultural complex dating to the period 1880 to 1940.

Locus 7.3C. Site 7S-F-134 is west of a lane 700 feet east of the intersection of State Route 40 and 579, and 100 feet north of State Route 40 on Evesboro sandy loam soil. The site is approximately 200 feet in diameter. Artifacts recovered include numerous brick fragments, several pieces of molded bottle and jar glass, a metal door hinge, and porcelain, whiteware, white granite stoneware, and yellowware ceramic sherds. The site appears to be related to a house and outbuilding shown on the Georgetown U.S.G.S. quadrangle map (1954) in the same area. Neither of the structures are extant. The site dates to the 1880 to 1940 historical time period.

**Tatman Property: Tract 7.4.** Two sites (one historical and one prehistoric) were identified on the Tatman property which extends from Gravelly Branch westwards approximately 1600 feet to the end of Segment 7 on the north side of State Route 40. The western end of the property is a soybean field, which had been recently harvested at the time of this survey; surface visibility was good, and pedestrian survey was possible. The eastern portion of the property was wooded and shovel test pit excavation was necessary.

Locus 7.4A. Site 7K-C-52, a historical site, is 400 feet north of State Route 40 and 400 feet west of State Route 593. The site, identified by pedestrian survey of the soybean field lay on Evesboro sandy loam soils. Artifacts, which were recovered from an area approximately 500 x 100 feet in size, included brick fragments, coal and ash, and redware, white

granite stoneware, and whiteware ceramics. The artifact concentration was light, and the site did not appear related to a standing structure or any previous structures. Thus, the site function is unknown, but the site dates to the 1880 to 1940 historical time period.

Loci 7.4B, 7.4C, and 7.5A. A prehistoric site, 7S-C-53, was identified in two loci on the Tatman property and one on the Horace Webb property. On Locus 7.4B, 700 feet north of State Route 40 and 700 feet west of State Route 593, pedestrian survey found a quartz flake on Evesboro sandy loam soil. At Locus 7.4C, a forested area at the northeast corner of the intersection of State Route 40 and State Route 593, shovel test pit excavations uncovered one quartz flake and three jasper flakes, including a flake tool. This area of Site 7S-C-53 is the first substantial high ground west of Gravelly Branch. The third portion of Site 7S-C-53 on Locus 7.5A of the H. Webb property, is on the west side of Gravelly Branch and on the south side of State Route 40. Pedestrian survey of the harvested soybean field found a chert middle-stage biface reject and a jasper flake. Surface visibility of the field was 10 percent and the site soils consisted of Evesboro sandy loam. Site 7S-C-53 may represent a procurement site or site complex, and may be associated with Site 7S-F-2, a base camp. The prehistoric site areas have been disturbed by plowing, and their age is unknown.

#### **H. Webb Property: Tract 7.5.**

Locus 7.5A. Tract 7.5 is part of Site 7S-C-53 and is discussed under Tract 7.4.

#### **M. Hallmand Property: Tract 7.6.**

Locus 7.6A. The M. Hallmand parcel extends 800 feet west of the intersection of State Route 40 and State Route 40B. The tract was a harvested soybean field with only 10 percent surface visibility. As mentioned above, Site 7S-F-133 was identified here (see discussion under F. Russel Property Tract 7.3B).

### **Segment 8: Mirey Branch Study Area**

The Mirey Branch Study Area extends along a 11,000 foot section of State Route 40 beginning just east of the crossing of Mirey Branch and runs approximately 2400 feet east of State Route 594 (Figure 14). The segment generally follows existing Route 40. Beers' Atlas (1868) shows that the portion of State Route 40 extending west from the intersection of present-day State Route 40 and State Route 42 was not in place by 1868. Soil associations in the area consist of the Evesboro-Rumford association in the eastern end of the segment, changing to the Fallsington-Sassafras-Woodstown association towards the western end of the segment. The Evesboro-Rumford association consists of excessively-drained and somewhat excessively-drained soils that have a rapidly permeable subsoil of sand to sandy loam. The Fallsington-Sassafras-Woodstown association consists of poorly-

TABLE 14

Summary of Archaeological Sites Identified in the Mirey Branch  
Study Area, Segment 8

<b>Parcel/ Owner</b>	<b>Locus Number Site Number CRS Number</b>	<b>Type of Testing</b>	<b>Type of Site</b>
8.2 P. Workman	8.2A 7S-B-34 S-8597	Shovel test pits	Historic
8.2 P. Workman	8.2B 7S-B-33 S-8596	Pedestrian survey	Historic
8.4 D. O'Day	8.4A 7S-B-35 S-8598	Pedestrian survey	Historic
8.5 M. Passwaters	8.5A 7S-B-36 S-5155	Pedestrian survey	Historic
8.6 P. Passwaters	8.6A 7S-C-54 S-5215	Pedestrian survey	Historic

drained to well-drained soils that have a moderately permeable subsoil of sandy clay loam or sandy loam. (Cotnoir 1973; Ireland and Matthews 1974). Eleven property tracts were investigated in the Mirey Branch segment during the planning survey, and five archaeological sites, all historical sites, were identified (Table 14). Several other tracts in Segment 8 were investigated both by shovel test pit tests and by pedestrian survey, but yielded no archaeological materials.

**P. Workman Property: Tract 8.2.** The P. Workman property is located along the south side of State Route 40, west of the intersection of State Route 40 and State Route 42. Two historical sites were found on the Workman property. At the time of the survey the recently harvested corn field offered very low to excellent visibility.

Locus 8.2A. Site 7S-B-34 is 200 feet south of State Route 40, and 1400 feet west of the intersection of State Route 40 and State Route 42. Soils at the site consisted of both Evesboro and Woodstown sandy loams. Six shovel test pits were excavated in a slight rise of the fallow field. The site dimensions are approximately 100 feet (north-south) by 150 feet (east-west). Brick fragments were observed in the shovel test pits, and artifacts recovered include window glass, table glass, container glass, and one sherd of white granite stoneware. The date and function of the site could not be determined.

Locus 8.2B. Site 7S-B-33 is at the western end of the P. Workman property, 150 feet south of State Route 40 and 4000 feet west of the intersection of State Route 40 and State Route 42. Pedestrian survey of the field on Fallsington sandy loam soil identified a historical artifact concentration approximately 600 feet long (east-west). Artifacts observed on the surface included brick and concrete fragments and modern roofing shingles; artifacts recovered included molded container glass and window glass. The site function is unknown, but it probably dates to the 1880 to 1940 historical time period.

**D. O'Day Property: Tract 8.4.**

Locus 8.4A. Site 7S-B-35 is at the northeastern corner of the intersection of State Route 40 and State Route 42. Pedestrian survey of the tract found a concentration of historical artifacts at the intersection on Rumford sandy loam soils. Artifacts observed included two concrete platforms extending to 0.5 feet above the ground, approximately 2 feet square and 15 feet apart; one of these was inscribed "EFE A.B.O. 1937". Artifacts recovered included molded container glass. Beers' Atlas (1868) shows no structures here, and the **1913 Farm Directory of Sussex County** (Sussex Prints n.d.) also shows no structures at the intersection, so it is likely that the site dates from the second quarter of the twentieth century.

### **M. Passwaters Property: Tract 8.5.**

Locus 8.5A. Site 7S-B-36 is on the north side of State Route 40, 3600 feet west of the intersection of State Route 40 and State Route 42, and 300 feet north of State Route 40. The crop cover consisted of both fallow field and soybean stubble, with surface visibility ranging from 30 to 50 percent. Pedestrian survey of the property found one historical site on a small rise of Kalmia sandy loam soil. Artifacts observed included brick, shingle, mortar, and cement fragments. Artifacts recovered included molded container glass, table glass, window glass, milkglass, wire nails, a horse shoe, a metal spring, a metal flange, a cast iron harness mount, ceramic drainpipe, three ceramic insulators, redware, American porcelain, white granite stoneware, and whiteware sherds. Beers' Atlas (1868) shows no structure here, nor does the **1913 Farm Directory of Sussex County** (Sussex Prints n.d.). The site probably represents an early twentieth century agricultural complex.

### **P. Passwaters Property: Tract 8.6.**

Locus 8.6A. Site 7S-C-54 is near the eastern end of the study area, on a slight rise west of Mirey Branch. The site is north of State Route 40, 1200 feet east of the intersection of State Route 40 and State Route 638. Site 7S-C-54 is associated with standing structure CRS S-5215, which is an agricultural complex consisting of a dwelling and five or six outbuildings. Pedestrian survey of the property recovered artifacts including porcelain and container glass; brick and concrete were observed. Beers' Atlas (1868) shows a structure marked "W. W. Sharp" here. Tabachnick and Keller (1992:162) describe the farm dwelling as a two and one-half story I-house.

### **Segment 9: Collins Pond Study Area**

The Collins Pond study area extends approximately 13,500 feet eastward from a point 2400 feet west of the intersection of State Route 18 and State Route 525 (Figure 15). Twenty archaeological sites were identified in and around the study area (Table 15): eighteen historical and two prehistoric. One of the historical sites has a prehistoric component, and an additional prehistoric site, 7S-E-61, was previously identified by Custer and Mellin (1989), as a Woodland I and Woodland II period procurement site. Fourteen property tracts were surveyed within Segment 9 mostly on the Evesboro-Rumford soil association, which consists of excessively drained and somewhat excessively drained soils that have a rapidly permeable subsoil of sand to sandy loam (Ireland and Matthews 1974). The western end of the segment, however, extends onto the Fallsington-Sassafras-Woodstown association of poorly-drained to well-drained soils that have a moderately permeable subsoil of sandy clay loam or sandy loam. Segment 9 is bisected by the Collins Mill Pond on Gravelly Branch. At the time of field survey the majority of tracts consisted of harvested soybean fields or recently planted winter wheat fields. Approximately one-fourth of the study area was

untested because of relatively dense forest and developed residential plots.

**Doug Corey Properties: Tracts 9.1 and 9.11.** Tract 9.1 is on the south side of State Route 18 and runs approximately 2800 feet from the intersection of State Route 18 and State Route 42 east to the west bank of the Gravelly Branch. Tract 9.1 contained two historical sites, but no evidence was found for Site 7S-E-61, a possible Woodland I/II procurement and processing site that was thought to extend into the alignment at the southeast corner of the Doug Corey property Tract 9.1. Areas of harvested soybeans fell on Rumford and Evesboro sandy loam soils, while the wooded area just west of Gravelly Branch fell on Evesboro and Klej sandy loam soils. Johnston silt loam type soils were associated with the low-lying ground adjacent to Gravelly Branch.

Tract 9.11 extends 400 feet from the northwest corner of the intersection of State Route 18 and State Route 42 on the

TABLE 15

Summary of Archaeological Sites Identified in the Collins Pond Study Area, Segment 9

Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site	Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site
9.1 Doug Corey	9.1 7S-E-177 S-8659	Shovel test pits	Historic (Collin's Forge)	9.3 M. Passwaters	9.3C 7S-E-175 S-8657	Pedestrian survey	Historic
9.1 Doug Corey	9.1A 7S-E-173 S-8656	Shovel test pits	Historic	9.4 Woods west of Collins Pond	9.4A 7S-E-185 S-8667	Shovel test pits	Historic
9.2 N. Corey	9.2 7S-E-178 S-8660	Shovel test pits	Historic (Collin's Mill)	9.5 P. Wright	9.5A 7S-E-182 S-8664	Pedestrian survey	Historic
9.2 N. Corey	9.2A 7S-E-179 S-8661	Pedestrian survey	Historic	9.5 P. Wright	9.5B 7S-E-184 S-8666	Pedestrian survey	Historic
9.2 N. Corey	9.2B 7S-E-180 S-8662	Pedestrian survey	Historic	9.5 P. Wright	9.5C 7S-E-183 S-8665	Pedestrian survey	Historic
9.2 N. Corey	9.2C 7S-E-181 S-8663	Pedestrian survey	Historic	9.7 Nora Issacs	9.7A 7S-F-136 S-8710	Pedestrian survey/ Shovel test pits	Prehistoric
9.2 N. Corey	9.2D 7S-E-188 S-4994	Pedestrian survey	Historic	9.9 Palmer Corey	9.9A 7S-E-165 S8648	Pedestrian survey/ Shovel test pits	Prehistoric
9.2 N. Corey	9.2E 7S-E-189 S-8669	Pedestrian survey	Historic/ Prehistoric	9.11 D. Corey	9.11A 7S-E-172 S-8655	Shovel test pits	Historic
9.3 M. Passwaters	9.3A 7S-E-176 S-8658	Pedestrian survey	Historic	9.13 J. Elliot	9.13A 7S-E-186 S-5086	Pedestrian survey	Historic
9.3 M. Passwaters	9.3B 7S-E-174 S-5085	Pedestrian survey	Historic	9.14 D. Givens	9.14A 7S-F-135 S-5075	Shovel test pits/ Pedestrian survey	Historic

north side of State Route 18. The soils of Tract 9.11 consist of Sassafras sandy loam. One historical site was found on Tract 9.11.

Locus 9.1. Site 7S-E-177 is approximately 150 feet south of State Route 18 and 300 feet west of Gravelly Branch in a wooded area. Artifacts recovered during shovel test pit excavation into Johnston silty loam soils include large amounts of iron slag, some redware and molded amber bottle glass. The artifacts may very well be associated with the Collins Forge Site, identified by Heite (1974) through historical research. Heite lists a date range of 1770-1830 for the site. The Collins Forge Site is part of an industrial complex that consisted of an iron forge, a mill, a mill dam, and several dwellings. The other sites, related to the forge, were identified on the N. Corey parcel, related to the east side of Gravelly Branch. Figure 16 shows the Collins Pond area at the time of the Sussex County Orphans Court valuation of Governor Collin's plantation in 1829 (see also Herman 1992).

Locus 9.1A. Site 7S-E-173 is located in a fallow field, 200 feet south of State Route 18 and 600 feet east of State Route 42. Shovel test pits revealed brick, stoneware, molded bottle glass, oyster shell, and a cut nail buried in the Rumsford sandy loam soils. The site is at the approximate location of the I. M.

Fisher house shown on Beers' Atlas (1868); however, Site 7S-E-173 is somewhat further west than the location indicated in the atlas (Catts, Custer, and Hoseth 1991). The site is tentatively dated to the later nineteenth century and may represent a structure of some type, perhaps a house.

Locus 9.11A. Site 7S-E-172 was identified in the fallow field, at the northwest corner of the intersection of State Route 18 and State Route 42. Twenty-seven shovel tests pits were excavated and numerous artifacts were recovered including brick, window glass, pearlware, redware, whiteware, and molded bottle glass. The site may represent a house with several outbuildings dating to the 1830 to 1880 historical time period.

**Nanette Corey Property: Tract 9.2.** The Nanette Corey parcel runs 2200 feet east from the bank of the Gravelly Branch on the south side of State Route 18 to the intersection of State Route 527 with State Route 18. Six archaeological sites were found on this tract by means of pedestrian survey and shovel test pit excavations. Soils on Tract 9.2 consist of Johnston silty loam adjacent to the stream, and Evesboro and Klej sandy loam, and Fallsington sandy loam in the field. The field was planted in winter wheat and visibility was good. None of the sites on the Nanette Corey parcel are associated with any standing structures.

Locus 9.2. Site 7S-E-178, identified by shovel test pit excavation in Evesboro sandy loam soils, is on the south edge of State Route 18 approximately 250 feet east of Collins Pond Dam. Six shovel test pits were excavated and revealed brick and window glass. The highly disturbed site lies on the edge of the woods that border the east side of Gravelly Branch, and the wheat field adjacent to the woodline. Though no intact foundation remains, it appears that this may be the Collins Mill Site which dates to the 1770 to 1830 historical time period. Beers' Atlas (1868) shows a grist mill in the approximate location of this site. This site is undoubtedly related to the Collins Industrial Complex.

Locus 9.2A. Site 7S-E-179, 50 feet south of State Route 18 and 800 feet east of Collins Pond Dam, was identified in a planted winter wheat field by pedestrian survey of Evesboro and Klej sandy loam soils. Surface visibility was good -- between 30-50 percent. Artifacts recovered include molded olive bottle glass, window glass, brick, coal/ash, redware, whiteware, stoneware, white granite stoneware, and one sherd of Staffordshire slipware. Though no clear concentrations were identified, the site may represent dwellings associated with the Collins Industrial Complex and farm. The site dates to the 1770 to 1830 historical time period.

Locus 9.2B. Site 7S-E-180 is 200 feet south of State Route 18 and 1000 feet east of Collins Pond Dam. Pedestrian survey of the field found numerous pieces of window glass, brick fragments, and ceramic sherds including white granite stoneware, porcelain, stoneware, and whiteware. Two clusters of artifacts were

separated by about 30 feet. The larger cluster measured approximately 100 x 50 feet, and the smaller cluster measured 30 feet in diameter. The artifact concentrations may represent a house and outbuilding, possibly associated with the Collins Industrial Complex or farm. Artifacts at the site date the occupation to the 1830 to 1880 historical time period.

Locus 9.2C. Site 7S-E-181, located 75 feet south of State Route 18 and 1300 feet east of the Collins Pond Dam on Fallsington sandy loam soils, was identified during a pedestrian survey of the same wheat field in which sites 7S-E-180 and 7S-E-179 were identified. Site 7S-E-181 measures 150 feet in diameter and contained molded bottle glass, brick, and ceramic sherds including porcelain, redware, white granite stoneware, stoneware, and whiteware. This site may represent a 1880 to 1940 period dwelling, and like the other sites on the Nanette Corey parcel, Site 7S-E-181 may be related to the Collins Industrial Complex and farm.

Locus 9.2D. Site 7S-E-188, the Collins family graveyard, is on a wooded rise east of Gravelly Branch, approximately 2500 feet west of the intersection of State Route 18 and 527 and 1000 feet south of State Route 18. The graveyard contained two table top graves: that of John Collins, former governor of Delaware (who died in 1822) and the grave of his son Theophilus Collins (who died in 1857). Both graves had been damaged and it appeared that the contents had been disturbed. A low brick wall surrounded the small graveyard, which was somewhat overgrown and unkempt. The Seaford East U.S.G.S. quadrangle map (1955) shows the approximate location of the site. Although the graveyard itself is outside the proposed highway alignment, it is a significant part of the Collins Complex.

Locus 9.2E. The final site to be identified on the Nanette Corey Tract -- Site 7S-E-189, is approximately 1700 feet west of the intersection of State Route 18 and State Route 527 and 800 feet south of State Route 18 on a knoll of Evesboro sandy loam soil in a winter wheat field east of Gravelly Branch. Pedestrian survey found a dense concentration of artifacts including brick fragments, molded bottle glass, window glass, whiteware, white granite stoneware, stoneware, creamware, pearlware, redware, and porcelain. The ceramics found here date between 1790 and 1900, with a mean ceramic date of 1850. At the main artifact concentration, remnants of brick foundation pillars are clear and visible indications of a house. This is most likely the location of the Collins' family house. Though the main artifact concentration was not within the proposed alignment, another less dense, associated artifact scatter did fall into the alignment. The larger scatter, measuring approximately 600 x 200 feet, fully encircled the house remains, which measured approximately 100 feet in diameter. The scatter around the house debris contained artifacts similar to those recovered from the house scatter. One quartz flake and a hammerstone were also found here, indicating a prehistoric occupation component. The site's relative proximity to Gravelly Branch and location on high ground

make the area a likely location for a prehistoric site as well; however, the two prehistoric artifacts do not suggest a site function or date of occupation.

**Marie Passwaters Property: Tract 9.3.** The Marie Passwaters parcel extends from the northeast corner of the intersection of State Route 18 and State Route 42, 1200 feet eastward of State Route 42. The tract consists of a fallow soybean field which surrounds a standing house and barn. The farm complex dates before 1868 and appears on Beers' Atlas (1868) and the **1913 Farm Directory of Sussex County** (Sussex Prints n.d.). Three historical archaeological sites were identified on Tract 9.3. Soils are primarily Rumsford sandy loams; but in the southwest corner of the property are Sassafras sandy loams.

Locus 9.3A. Site 7S-E-176, located 300 feet north of State Route 18 and 1200 feet east of State Route 42, was identified by pedestrian survey. Surface visibility was good -- over 50 percent -- in a fallow field on Rumsford sandy loam soils. The site consisted of two historical artifact concentrations separated by approximately 50 to 75 feet. The first concentration was a fairly dense cluster of brick fragments measuring 100 feet in diameter. Also found here were sherds of window and bottle glass (molded), whiteware, salt-glazed stoneware, pearlware, porcelain, and white granite stoneware sherds. The second concentration, just to the west of the first, measured approximately 200 feet in diameter and contained a much lower density of artifacts. The artifact types were exactly the same at both concentrations and it appears that the concentrations are related. The evidence suggests that the site is the remains of a structure or structures, possibly a dwelling and outbuilding. The site probably dates to the 1830 to 1880 historical time period.

Locus 9.3B. Site 7S-E-174 surrounds a standing house and barn approximately 200 feet north of State Route 18 and 600 feet east of State Route 42. Pedestrian survey of the site revealed mid-nineteenth century to twentieth century artifacts including brick, cement, bottle glass, and whiteware. The artifacts appear to be associated with the standing structures and are most likely the remains of demolished outbuildings. The Seaford East U.S.G.S. quadrangle map (1955) shows three outbuildings surrounding the dwelling. At the time of our survey only one outbuilding was standing. The dwelling also appears on Beers' Atlas (1868) and dates to the 1830 to 1880 historical time period. The outbuildings are probably contemporaneous with the dwelling.

Locus 9.3C. Site 7S-E-175 is at the northeast corner of the intersection of State Route 18 with State Route 42. Surface visibility of Sassafras sandy loam soil in the fallow field was fair to poor, but a significant quantity of mid-nineteenth century artifacts were recovered, including brick fragments, molded bottle glass, window glass, whiteware, stoneware, porcelain, and redware. Beers' Atlas (1868) shows a store here

at the highway intersection. Site 7S-E-175 is very likely the remains of the store, thus the sites dates to the period 1830 to 1880.

**Owner Unknown: Tract 9.4.**

Locus 9.4A. Tract 9.4 is in the woods west of Collins Mill Pond and north of State Route 18. Shovel test pit excavations into Evesboro sandy loam soils discovered a 1880 to 1940 period occupation -- Site 7S-E-185, 50 feet north of State Route 18 and 800 feet west of Collins Pond Dam. Artifacts from the site include brick fragments, window and molded bottle glass, whiteware, white granite stoneware, redware, and stoneware sherds. The site may represent a house or houses belonging to "Mrs. M. A. Collins" shown on Beers' Atlas (1868).

**Patricia Wright Property: Tract 9.5.** Tract 9.5 ran approximately 1350 feet west from the intersection of State Route 18 and State Route 527 on the north side of State Route 18. Three historical sites were identified on the Patricia Wright parcel during pedestrian survey of the recently plowed and disked field. Surface visibility was 100 percent. Soils consisted of Evesboro and Klej sandy loams.

Locus 9.5A. Site 7S-E-182 is approximately 75 feet north of State Route 18/404 and 900 feet east of Collins Pond Dam on Evesboro sandy loam soil. The primary artifact concentration of the site, approximately 100 feet in diameter, is surrounded by a lighter concentration of artifacts for an additional 175 feet. Artifacts recovered from the site include brick, molded bottle glass, window and table (stemmed) glass, milkglass, white granite stoneware, whiteware, bone china, redware, and American stoneware. The site dates to the 1880 to 1940 historical time period and may be the remnants of a dwelling.

Locus 9.5B. Site 7S-E-184 is approximately 250 feet west of State Route 527 and 175 feet north of State Route 18. The site consists of two large, connected concentrations of late nineteenth century historical artifacts on Evesboro sandy loam soils. The primary concentration is approximately 100 x 300 feet in size and the secondary scatter, at the north end of the primary area, measures 75 x 200 feet. Artifact types are the same for both areas and include brick fragments and ceramics, as well as hundreds of glass sherds, such as window, molded bottle, jar and milkglass fragments. The ceramic types are chiefly whiteware, white granite stoneware, and stoneware. A mean ceramic date of 1865 was calculated based on the sherd collection. The site may represent an 1830 to 1880 period house or houses, possibly with outbuildings. The Seaford East U.S.G.S. quadrangle map (1955) shows an outbuilding, probably a barn, in the vicinity of the site. The barn may be related to this site, or to Site 7S-E-183, located to the north.

Locus 9.5C. Site 7S-E-183 is approximately 450 feet west of State Route 527 and 400 feet north of State Route 18 on Evesboro

sandy loam soil. Late nineteenth century historical artifacts from the site include brick, jar and bottle glass, whiteware, and white granite stoneware. The site measures approximately 150 feet in diameter, and has a considerably lower artifact density than Site 7S-E-184 to the southeast. There is a clear break in artifact density between the two sites. Site 7S-E-183 may represent the remains of a late nineteenth century house or barn. As mentioned earlier, the Seaford East U.S.G.S. quadrangle map (1955) shows a barn in this vicinity.

**N. Isaacs Property: Tract 9.7.**

Locus 9.7A. Site 7S-F-136, a prehistoric site, is approximately 5000 feet east of the intersection of State Route 527 and State Route 18, and 50 feet south of State Route 18. Pedestrian survey of Kenansville sandy loam soils in a fallow field found a quartz flake tool, a quartz biface, and a chert biface. Shovel test pit excavations uncovered no additional artifacts. No water source or high ground is nearby and the function and date of the site is unclear.

**Palmer Corey Property: Tract 9.9.**

Locus 9.9A. Site 7S-E-165 is located in a harvested soybean field approximately 300' south of Route 18 and 1800' west of the intersection of Route 18 and State Route 42. One quartz flake was recovered in this field by means of pedestrian survey. Four shovel test pits were excavated in the vicinity of this surface find, but no subsurface artifacts were found. The site is not located on significantly high ground, nor is it near a currently running source of water. With only one artifact (non-diagnostic) recovered, no site function or age range can be determined. Soils at this site consist of Sassafras sandy loams.

**J. Elliot Property: Tract 9.13.**

Locus 9.13A. Site 7S-E-186 is 1200 feet west of the intersection of State Route 42 and State Route 18 and, 100 feet north of State Route 18. The site is a field scatter of late nineteenth century historical artifacts clearly associated with standing structure CRS S-5086, a late nineteenth century frame house and outbuilding complex. The predominant artifacts were brick fragments. Also found during pedestrian investigations were one sherd each of whiteware and white granite stoneware. No brick structures currently stand on the Elliot parcel. It is possible that the artifacts represent the remains of a demolished outbuilding dating to the 1880 to 1940 historical time period.

**D. Givens Property: Tract 9.14.**

Locus 9.14A. Site 7S-F-135 is approximately 2900 feet east of the intersection of State Route 18 and State Route 527, and 100 feet south of State Route 18. Shovel test pit excavations and pedestrian survey of Matawan sandy loam soils discovered the

remains of a house. Artifacts include brick fragments, nails (mainly cut), window glass, a clock gear, molded bottle glass, whiteware, white granite stoneware, redware, and stoneware ceramics. The current resident of the post-1930 frame house which stands adjacent to the site area, informed the survey crew that the house that stood on Site 7S-F-135 burned down in 1930, and many artifacts appear burnt. The house site dates to the 1880 to 1940 historical period.

### **Segment 10: Unity Forge Study Area**

The Unity Forge study area runs west approximately 7200 feet along State Route 18/404 to a point 1350 feet east of the intersection of State Route 18 with State Route 594 (Figure 17). The segment is bisected by the Nanticoke Branch of the Nanticoke River. Seven properties were surveyed in Segment 10. One multi-component, one prehistoric, and five historical sites were identified (Table 16). Several very small residential properties were not surveyed. One large tract on the William Perryman property was not surveyed because it was swampy. The remainder of the study area was mainly harvested fields with some wooded areas along Nanticoke Branch. In the western end of the Unity Forge study area the Sassafras-Fallsington association of well and poorly-drained soils with a moderately permeable subsoil of sandy loam to sandy clay predominates. The Evesboro-Rumsford association of excessively and somewhat excessively drained soils that have a rapidly permeable subsoil of sand to sandy loam

TABLE 16

## Summary of Archaeological Sites Identified in the Unity Forge Study Area, Segment 10

Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site
10.1 M. Merrick	10.1A 7S-E-170 S-8653	Pedestrian survey/ Shovel test pits	Historic
10.3 Elliot	10.3A 7S-E-168 S-8651	Pedestrian survey/ Shovel test pits	Historic
10.3 Elliot	10.3B 7S-E-169 S-8652	Pedestrian survey	Historic
10.3 Elliot	10.3C 7S-E-187 S-432	Shovel test pits	Historic/ Prehistoric
10.4 T. Messick	10.4A 7S-E-171 S-8654	Shovel test pits	Prehistoric
10.7 W. Perryman	10.7A 7S-E-166 S-8649	Pedestrian survey/ Shovel test pits	Historic
10.7 W. Perryman	10.7B 7S-E-167 S-8650	Pedestrian survey/ Shovel test pits	Historic

dominate the eastern section of the study area (Ireland and Matthews 1974).

### **M. Merrick Property: Tract 10.1.**

Locus 10.1A. Site 7S-E-170, located 300 feet south of State Route 18 and 2400 feet east of the Nanticoke Branch, was identified by pedestrian survey of a harvested corn field on Rumsford sandy loam soils. Shovel test pit excavations augmented surface collecting in areas with low surface visibility. Artifacts recovered from this site area include window glass, whiteware, white granite stoneware, and redware. The site was located approximately 150 feet southwest of a standing farm house and outbuilding complex, and most likely represents a refuse dump associated with the farm. Farm refuse, including bins and broken machinery, was found in the woods adjacent to the site area. The site is associated with standing structure CRS S-5089, a post-1941 frame house (Catts, Custer, Hoseth 1991). The artifacts found here date to the late nineteenth to early twentieth century. Site 7S-E-170 may be related to an older house that once stood in the location of standing structure CRS S-5089, although there is no historical documentation for this.

**Elliot Property: Tract 10.3.** The Elliot tract runs approximately 1050 feet east from the Nanticoke Branch south of

State Route 18. The property was wooded and low-lying east of the Nanticoke Branch, but rises abruptly to a farm and fields adjacent to the woods. The majority of the Elliot tract was harvested corn fields at the time of the survey. Three historical sites were found, including the site of the Unity Forge Industrial Complex.

Locus 10.3A. Site 7S-E-168 is 250 feet south of Route 18 and 200 feet east of the Nanticoke Branch. The site surrounds a modern farm dwelling and complex on Evesboro and Rumsford sandy loam soil types. Pedestrian survey and shovel test pit excavations found many artifacts from the late eighteenth to the late nineteenth centuries, such as molded bottle and jar glass, window glass, brick, coal and coal ash, iron slag, wrought and cut nails, a brass watch fob, a white clay pipe stem fragment, and many types of ceramic sherds. The ceramic types included Nottingham stoneware, American stoneware, creamware, pearlware, whiteware, porcelain, and white granite stoneware. The mean ceramic date is 1828. Site 7S-E-168 is probably the location of a farm and living complex dating to approximately 1770 -- 1830 and beyond. The site may very well be related to the Unity Forge Industrial Complex, which is just northeast, although the forge may be slightly older.

Locus 10.3B. Site 7S-E-169, 200 feet south of Route 18 and 600 feet east of the Nanticoke Branch, was identified during pedestrian survey of a harvested corn field on Rumsford sandy loam soils. Surface visibility was good at approximately 50 percent. The artifact scatter was fairly dense and measured approximately 200 feet in diameter. Artifacts found here include molded bottle glass, brick, milkglass, melted glass sherds, a thimble, and ceramic sherds. The ceramics include whiteware, stoneware, porcelain, and white granite stoneware. The mean ceramic date was 1861. Site 7S-E-169 appears to be the location of a 1830 to 1880 period farm dwelling, perhaps a tenant house. It is clearly separated from Site 7S-E-168, though it may be a component of the same agricultural complex.

Locus 10.3C. Multi-component Site 7S-E-187, is the location of the Unity Forge, a dam, and possibly a mill. The site is just south of State Route 18 on the east bank of the Nanticoke Branch on Evesboro sandy loam soils. A prehistoric occupation is also evident at the site. Eight shovel test pits were excavated and they revealed numerous brick and iron slag fragments, fragments of rusted iron, several sherds of bottle and window glass, and one sherd of iron stove. Heite (1974) identified the area as the approximate location of the Unity Forge, dating to the period between 1730 and 1770. No intact foundation was identified at the forge site, though it may have been overgrown or filled in during the construction of the modern concrete bridge where State Route 18 crosses the Nanticoke. Many artifacts found in the area directly relate to the activities of a forge and mill industrial complex, though almost no datable diagnostic artifacts were recovered.

There is also evidence of a mill and dam here. The mill site is south of the forge, and at the time of the survey, was mostly covered by high water in the Nanticoke River. Some indications of an intact foundation were observable at the mill site, but no excavations were possible in its vicinity due to the high water and swampy conditions.

One quartzite flake was recovered indicating some type of prehistoric occupation. The flake, however, was found in an area disturbed by the forge. More testing of the area is required to determine site integrity.

#### **T. Messick Property: Tract 10.4.**

Locus 10.4A. Site 7S-E-171, a possible prehistoric procurement site, is on a wooded knoll approximately 75 feet east of the Nanticoke Branch and 150 feet north of Route 18. The knoll is the first well-drained, high ground east of the stream. Three shovel test pits into the Evesboro sandy loam soil discovered only one quartz flake. The knoll, unlike most of the surrounding area, does not seem to have been disturbed. Shovel test pit excavations on higher ground to the west turned up no other archaeological materials. Though the evidence for site function is tenuous, setting is ideal for a procurement site.

**W. Perryman Property: Tract 10.7.** The Perryman tract is south of State Route 18 and runs approximately 750 feet east from the intersection of State Routes 18 and 404. Two historical sites were located on the parcel. Both were tested by means of pedestrian survey and shovel test pit excavations. The property is a fallow field with low surface visibility. Soils at both sites were Evesboro sandy loams.

Locus 10.7A. Site 7S-E-166 is located approximately 300 feet east of the intersection of State Route 404 and 18, and 200 feet south of State Route 18. The site comprises a large area of artifacts which include window and bottle glass, bricks, asbestos shingles, coal and coal ash, nails, shells, a metal toy gun, and whiteware. The artifacts represent demolished twentieth century dwellings. The Seaford East U.S.G.S. quadrangle map (1955) shows a house at this location, although no foundation was evident. The site probably dates to the period between 1880 and 1940.

Locus 10.7B. Site 7S-E-167 is at the southwest corner of the intersection of Route 404 and State Route 533. The site, a collapsed twentieth century house, is very similar to Site 7S-E-166 to the west, but here the structure has fallen into the basement foundation. Artifacts from the site include foundation materials, glass, plastic fragments, and one sherd each of whiteware, porcelain and stoneware. The site is shown on the Seaford East U.S.G.S. quadrangle map (1955), and probably dates to the period 1880 to 1940.

## **Segment 11: Nanticoke Branch Study Area**

Segment 11 consists of an 11,000 feet section of the proposed Sussex East-West Corridor alignment (Figure 18). It begins 1000 feet east of Gum Branch (also known as the East Branch of the Nanticoke), and runs westward along State Route 40. After crossing the Nanticoke River, the last 1000 feet of the study area turns northwest of State Route 40. Ten historical and prehistoric archaeological sites were identified in the Nanticoke Study Area (Table 17). Ten separate tracts were field investigated, using both pedestrian and subsurface techniques.

Soils in the study area consist predominantly of the Sassafras-Fallsington association in the Nanticoke drainage area, and the Evesboro-Rumford association along the Gum Branch drainage area. The former soils are a combination of well-drained and poorly-drained sandy loams with moderately permeable subsoils, and the latter are somewhat excessively to excessively drained sandy loams with rapidly permeable subsoils. Topography where the Sassafras-Fallsington association soils are found is generally sloping. Present settlement in the study area consists of dispersed agricultural complexes and well-managed farms, producing orchard crops, canning vegetables, corn and soybeans (Cotnoir 1973:17; Ireland and Matthews 1974). One parcel that

TABLE 17

## Summary of Archaeological Sites Identified in the Nanticoke Branch Study Area, Segment 11

Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site
11.1 E. Passwaters	11.1A 7S-E-161 S-8647	Pedestrian survey	Historic
11.1 E. Passwaters	11.1B 7S-E-159 S-5143	Pedestrian survey	Historic
11.1 E. Passwaters	11.1C 7S-E-160 S-8646	Pedestrian survey	Historic
11.1 E. Passwaters	11.1D 7S-B-38 S-8599	Pedestrian survey	Historic
11.3 C. Correll	11.3A 7S-E-163 S-5147	Pedestrian survey	Historic
11.3 C. Correll	11.3B 7S-E-164 S-8668	Pedestrian survey	Historic
11.4 T. S. Smith	11.4A 7S-E-162 S-5148	Pedestrian survey	Historic
11.5 A. Tatman	11.5A 7S-B-39 S-8600	Pedestrian survey	Historic
11.7 M. Messick	11.7A 7S-B-40 S-8601	Pedestrian survey	Prehistoric
11.8 M. Baker	11.8A 7S-B-41 S-8602	Pedestrian survey	Historic
11.9 M. Passwaters	11.9A 7S-B-40 S-8601	Shovel test pit	Prehistoric

was planted in apple trees was not tested, and almost one-third of the segment was not tested because access was denied.

**E. Passwaters Property: Tract 11.1.** The E. Passwaters property is on the south side of State Route 40, east of the Nanticoke River. Four historical archaeological sites were identified on the Passwaters property. Soils on the Passwaters tract are alternating bands of Sassafras, Rumford, and Woodstown sandy loams. At the time of the survey the Passwaters tract was in soybean stubble with approximately 50 percent surface visibility.

Locus 11.1A. Site 7S-E-161 is 150 feet south of State Route 40 and 1700 feet east of the Nanticoke River on Sassafras sandy loams. A pedestrian survey of the site identified a concentration

of historical artifacts approximately 100 by 200 feet in size. Artifacts recovered included a large amount of molded container glass sherds, window glass, milkglass, fragments of ceramic drainpipe, plaster, American porcelain, whiteware, and white granite stoneware sherds; brick and coal slag fragments were observed on the surface. The artifact assemblage from the site suggests a dwelling or agricultural complex dating from the period 1880 to 1940.

Locus 11.1B. Site 7S-E-159 is 300 feet south of State Route 40 and 1200 feet east of the Nanticoke River on Sassafras sandy loam soils. The archaeological site identified during the planning survey is associated with standing structure CRS S-5143. Artifacts observed included shell and brick, and artifacts recovered from the pedestrian survey included molded container glass, window glass, table glass, milkglass, a porcelain insulator, and sherds of redware, yellowware, bone china, whiteware, majolica, and white granite stoneware. The artifact concentration is within 100 to 150 feet of the standing structure. The artifact assemblage from the site suggests a site occupied during the period 1880 to 1940. Tabachnick and Keller (1992:116-118) describe standing structure CRS S-5143 as an abandoned T-plan, three bay I-house with a center cross gable.

Locus 11.1C. Site 7S-E-160 is 150 feet south of State Route 40, and 2100 feet east of the Nanticoke River. The site is on a slight rise in a fallow field of Sassafras sandy loam soils east of a farm lane. A pedestrian survey of the site found a concentration of historical artifacts, including brick, shell, and coal (observed), and window glass, lampglass, whiteware and stoneware sherds. The artifact assemblage suggests a historical site of unknown function dating from to between 1880 and 1940.

Locus 11.1D. Site 7S-B-38 is on the north side of State Route 40, 300 feet from the road, and 1100 feet east of the Nanticoke River. Pedestrian survey of the site found a concentration of historical artifacts on the eastern side of a slight rise. The fallow soybean field on Sassafras sandy loam soils had 30 percent surface visibility. Artifacts observed in the concentration included brick, and artifacts collected included molded container glass, window glass, a glass button, and sherds of redware, whiteware, and white granite stoneware. The artifact assemblage suggests a site dating from the period 1880 to 1940.

**C. Correll Property: Tract 11.3.** The C. Correll property is at the approximate center of the study area along the south side of State Route 40. At the time of the survey the tract was in soybean stubble with approximately 50 percent surface visibility. Soils consisted of Sassafras sandy loams. Two historical sites were identified through pedestrian survey.

Locus 11.3A. Site 7S-E-163 is 200 feet south of State Route 40, and 3300 feet west of Gum Branch. The artifact concentration is associated with standing structure CRS S-5147, which

Tabachnick and Keller (1992:118) describe as a massive combination of an existing I-house with Classical Box modification. In addition to the dwelling there are also two standing outbuildings; other outbuildings are no longer standing, but are represented by archaeological concentrations of brick, mortar, and glass on the surface. The artifacts recovered from 7S-E-163 include molded container glass, table glass, a wire nail, ceramic drainpipe fragments, sherds of yellowware, American porcelain, whiteware, and white granite stoneware. The artifact assemblage from the site suggests an occupation dating from between 1880 and 1940.

Locus 11.3B. Site 7S-E-164 is 200 feet south of State Route 40, and 2900 feet west of Gum Branch. The site consists of a concentration of historical artifacts in an area approximately 200 by 400 feet in size. Pedestrian survey of the site recovered molded container glass, window glass, milkglass, a plastic button, porcelain insulators, and sherds of white granite stoneware, bone china, and whiteware. The assemblage suggests a site occupied during the period 1880 to 1940.

#### **T. S. Smith Property: Tract 11.4.**

Locus 11.4A. Site 7S-E-162 is 300 feet south of State Route 40, and 1500 feet west of Gum Branch. The surface concentration of historical artifacts is associated with late nineteenth/early twentieth century standing structure CRS S-5148. Tabachnick and Keller (1991:120) describe the dwelling as two and one-half story I-house with a gabled roof. Pedestrian survey of the tract was conducted in a fallow field with 95 percent surface visibility. Artifacts recovered included molded container glass, window glass, American porcelain, and whiteware sherds.

#### **A. Tatman Property: Tract 11.5.**

Locus 11.5A. Site 7S-B-39 is situated 400 feet west of Gum Branch, and 150 feet north of State Route 40. At the time of the planning survey the tract was fallow field with poor surface visibility. Soils at the site are Sassafras sandy loams. The site is approximately 100 feet in diameter. Artifacts recovered included molded container glass, window glass, milkglass, American porcelain, redware, whiteware, and majolica sherds. The artifact assemblage suggests a site dating from the period 1880 to 1940.

#### **M. Messick Property: Tract 11.7.**

Loci 11.7A and 11.9A. Site 7S-B-40 is a prehistoric site situated on Rumford sandy loams, above the east side of Gum Branch's flood plain. Locus 11.7A was a soybean field, at the southeast corner of the intersection of State Routes 40 and 591, with 30 percent visibility. Pedestrian survey located several isolated historical artifacts and one fragment of prehistoric Mockley ceramic. Locus 11.9A was the wooded, northwest corner of the intersection. Eight shovel test pits recovered one jasper

flake. Special attention was given to Tract 11.8 at the southwest corner of the intersection, but the pedestrian survey recovered no more prehistoric artifacts. Despite the small amount of artifacts, the setting suggests a Woodland I Period macroband base camp.

**M. Baker Property: Tract 11.8.**

Locus 11.8A. Site 7S-B-41 is located 300 feet southeast of the intersection State Route 40 and State Route 591, on a slight topographic high rise above Gum Branch. Soils at the site are Rumford sandy loams. Pedestrian survey in 50 percent surface visibility found a historical artifact concentration. Artifacts recovered included molded container glass, milkglass, window glass, and sherds of redware, yellowware, American porcelain, bone china, whiteware, white granite stoneware, and plain and hand-painted pearlware. The artifact assemblage from the site suggests a range of occupation from perhaps 1830 to 1940.

**M. Passwaters Property: Tract 11.9.**

Locus 11.9A. Locus 11.9A is part of Site 7S-B-40, and is discussed under Tract 11.7.

**Segment 12: Bridgeville Branch Study Area**

The Bridgeville Branch study area is west of the town of Bridgeville, and extends 2000 feet northwest from State Route 18 across Bridgeville Branch to State Route 563 (Figure 18). Soils in the segment fall into the Fallsington-Sassafras-Woodstown association, and are poorly-drained to well-drained sandy loams. Two sites were identified in the Bridgeville Branch study area (Table 18). All of the property in the Bridgeville Branch study area was owned by R. Rider.

**R. Rider Property: Tract 12.1.**

Locus 12.1A. Site 7S-E-153 is on the southeast side of Bridgeville Branch, also south of State Route 563. At the time of the survey a portion of the site was in spinach and the remainder was fallow. Pedestrian survey and excavation of twelve shovel test pits identified a prehistoric site and a historical artifact concentration. The prehistoric site extends along Bridgeville Branch within 100 feet of the drainage. The site was bisected by a drainage ditch. Forty-six prehistoric artifacts were collected, including thirty-four flakes, three flake tools, one Woodland I Period, contracting stem, jasper projectile point, one quartz biface, quartz shatter and cores, and a fragment of Hell Island ceramic (Table 19). Based on the artifact assemblage and the topographic setting, the Bridgeville Branch Site is probably a Woodland I Period procurement site.

Historical artifacts were concentrated on a small rise approximately 300 feet east of Bridgeville Branch. Recovered artifacts include molded container glass, window glass, a wire

TABLE 18

## Summary of Archaeological Sites Identified in the Bridgeville Branch Study Area, Segment 12

Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site
12.1 Rider	12.1A 7S-E-153 S-8640	Pedestrian survey/ Shovel test pits	Prehistoric/ Historic
12.2 Rider	12.2A 7S-E-152 S-8639	Pedestrian survey	Historic

TABLE 19

## Summary of Prehistoric Artifacts from the Bridgeville Branch Site (7S-E-153)

	Quartz	Quartzite	Chert	Jasper	Rhyolite	Argillite	Chalcedony	Other	Total
Flake	14(9)	3	1(1)	8(4)	1	1	5(2)	1	34(16)
Flake tools	---	---	3(2)	---	---	---	---	---	3(2)
Woodland I points	---	---	---	1	---	---	---	---	1
Other bifaces	1	---	---	---	---	---	---	---	1
Shatter	4(3)	---	---	---	---	---	---	---	4(3)
Cores	2	---	---	---	---	---	---	---	2
Total	21(12)	3	4(3)	9(4)	1	1	5(2)	1	45(21)

1 Hell Island ceramic sherd  
( ) = cortex

nail, a fencing staple, a belt buckle, oyster shell, pearlware, whiteware, and white granite stoneware sherds. Brick and shell were observed on the surface. The artifact assemblage suggests a historical site dating from 1830 to 1880.

Locus 12.2A. Site 7S-E-152 is approximately one half mile southwest of Bridgeville on the northwest side of State Route 18. Pedestrian survey of the fallow field, with about 30 percent surface visibility, located a historical artifact concentration. Beers' Atlas (1868) shows a structure at the location, labeled "Hall", and the Seaford East U.S.G.S. quadrangle map (1955) shows a house here. Artifacts observed included large amounts of brick and shell, mortar and cement, as well as container glass, ceramics, and drainpipe fragments. Based on the artifact assemblage and maps, it appears that Site 7S-E-152 was occupied between approximately 1830 and 1940.

### **Segment 13: Scotts Corner Study Area**

The Scotts Corner study area is one of the largest in the Sussex East-West Corridor (Figure 19). The segment begins 1000 feet west of Scotts Corner and runs southeast along State Route 404 for 13,000 feet. The study segment then forks to the east and south, extending 5000 feet more in both directions (east towards Cocked Hat and south towards Bridgeville Branch). The study area falls exclusively on poorly-drained to well-drained sandy loams with moderately permeable subsoils of the Fallsington-Sassafras-Woodstown soil association (Cotnoir 1973; Matthews and Ireland 1974). The topography of the Scotts Corner

TABLE 20

Summary of Archaeological Sites Identified in the Scotts Corner Study Area, Segment 13

Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site	Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site
13.1 Kay Lewis	13.1A 7S-B-74 S-1664	Shovel test pits	Historic	13.9 W. Faulkner	13.9C 7S-B-64 S-8624	Pedestrian survey	Historic
13.2 Connoway	13.2A 7S-B-72 S-8631	Pedestrian survey	Historic	13.9 W. Faulkner	13.9D 7S-B-61 S-8622	Pedestrian survey	Prehistoric
13.2 Connoway	13.2B 7S-B-71 S-8630	Shovel test pits/ Pedestrian survey	Historic	13.9 W. Faulkner	13.9E 7S-B-65 S-8625	Pedestrian survey	Historic
13.2 Connoway	13.2C 7S-B-73 S-8632	Pedestrian survey	Historic	13.10 L. Showers	13.10A 7S-B-67 S-1734	Pedestrian survey	Historic
13.3 Newton	13.3A 7S-B-77 S-8636	Pedestrian survey	Historic	13.10 L. Showers	13.10B 7S-B-68 S-8627	Pedestrian survey	Historic
13.3 Newton	13.3B 7S-B-78 S-8635	Pedestrian survey	Historic	13.10 L. Showers	13.10C 7S-B-69 S-8628	Pedestrian survey	Historic
13.5 Vanderwende	13.5A 7S-B-50 S-8613	Pedestrian survey	Historic	13.11 P. Newton and G. Isaac	13.11A 7S-B-70 S-8629	Pedestrian survey	Historic
13.5 Vanderwende	13.5B 7S-B-49 S-8612	Pedestrian survey	Prehistoric	13.13 Dublin Hill Farms	13.13A 7S-B-76 S-8634	Pedestrian survey	Historic
13.6 Tatman	13.6A 7S-B-51 S-8614	Pedestrian survey	Historic	13.13 Dublin Hill Farms	13.13B 7S-B-75 S-8633	Pedestrian survey	Prehistoric
13.7 M. Fitano	13.7A 7S-B-52 S-8615	Pedestrian survey	Historic	13.15 Kelley	13.15A 7S-B-80 S-8637	Pedestrian survey	Historic
13.7 M. Fitano	13.7B, C, E 7S-B-53 S-8616	Pedestrian survey	Prehistoric	13.15 Kelley	13.15B 7S-B-79 S-8638	Pedestrian survey	Historic
13.7 M. Fitano	13.7D 7S-B-54 S-8617	Pedestrian survey	Historic	13.18 Loockerman	13.18A 7S-B-56 S-1757	Pedestrian survey	Historic
13.7 M. Fitano	13.7F 7S-B-55 S-8411	Pedestrian survey	Historic	13.18 Loockerman	13.18B 7S-B-57 S-8618	Pedestrian survey	Prehistoric
13.8 W. Vanderwende	13.8A 7S-B-59 S-8620	Pedestrian survey	Historic	13.19 Beauchamp	13.19A 7S-B-58 S-8619	Pedestrian survey	Historic
13.8 W. Vanderwende	13.8B 7S-B-60 S-8621	Pedestrian survey	Historic	13.19 Beauchamp	13.19B 7S-B-57 S-8619	Pedestrian survey	Prehistoric
13.8 W. Vanderwende	13.8C 7S-B-61 S-8622	Pedestrian survey	Prehistoric	13.20 Jones	13.20A 7S-B-66 S-8626	Pedestrian survey	Historic
13.9 W. Faulkner	13.9A 7S-B-62 S-1759	Pedestrian survey	Historic				
13.9 W. Faulkner	13.9B 7S-B-63 S-8623	Pedestrian survey	Historic				

study area is generally level, and the area is presently characterized by agricultural use, including pasture, woods, agricultural fields, dispersed farming complexes, produce stands, and dwelling complexes. Residential lots were the only areas not tested.

Twenty-three property tracts were investigated by pedestrian survey and subsurface testing during the planning survey, and 32 prehistoric and historical archaeological sites were identified (Table 20).

### **K. Lewis Property: Tract 13.1.**

Locus 13.1A. Site 7S-B-74 is located on the Lewis property which is situated west of the intersection of State Route 404 and State Route 582 on Sassafras sandy loam soil. The site is associated with standing structure CRS S-1664 -- the George Hill House which is no longer extant. The present property owner described the farmhouse as a two-story frame house that burned in the 1960s. Twenty-four shovel test pits were excavated at the location of the farmhouse (CRS S-1664) and in the vicinity of a second, smaller tenant house on the southern edge of the property, reputed to have been a slave quarters or dwelling of a black laborer (Plates 7 and 8). Artifacts recovered included molded container glass, milkglass, window glass, a whole clear glass molded bottle, cut and wire nails, lamp glass, metal fragments, a glass marble, coal and brick fragments, and sherds of whiteware, American porcelain, and white granite stoneware. The agricultural complex here dates to between 1880 and 1940.

**K. Conoway Farm Property: Tract 13.2.** The Conoway property is an extensive tract situated to the west of the intersection of State Route 404 and State Route 582, on the north side of State Route 404. Three historical archaeological sites were identified through both subsurface testing and pedestrian survey. The property owner was instrumental in directing the archaeologists to the locations of former structures and dwellings on the property, and informed the researchers that no prehistoric artifacts had been observed or collected from his property. Soils on the tract are Sassafras sandy loams.

Locus 13.2A. Site 7S-B-72 is 900 feet northeast of State Route 404, along a farm lane 225 feet east of the intersection of State Route 404 and State Route 31 that runs to the Conoway agricultural complex. The lane bisects the archaeological site. A pedestrian survey found a concentration of historical artifacts, including brick, coal, molded container glass, table glass, milkglass, nails, metal fragments (such as a thimble, a pitch fork, and a metal knob), and sherds of American porcelain, white granite stoneware, whiteware, and yellowware. The landowner recalled that the house at this location had burnt approximately seven years earlier (circa 1984), and that it had been about 75 years old. In addition to the dwelling, evidence was present of outbuildings associated with the farmhouse. The archaeological evidence and informant evidence suggest a farm complex dating to the period between 1880 and 1940.

Locus 13.2B. Site 7S-B-71 is 1050 feet northeast of State Route 404 and 600 feet northwest of the Conoway farm lane (the lane is 225 feet east of the intersection of State Route 404 and State Route 31). A pedestrian survey (surface visibility 0-50%) and excavation of five shovel test pits in the fallow soybean field found a historical artifact concentration approximately 100 by 150 feet in size on Sassafras sandy loam soil. Bricks were observed, and artifacts recovered include window glass, molded

PLATE 7

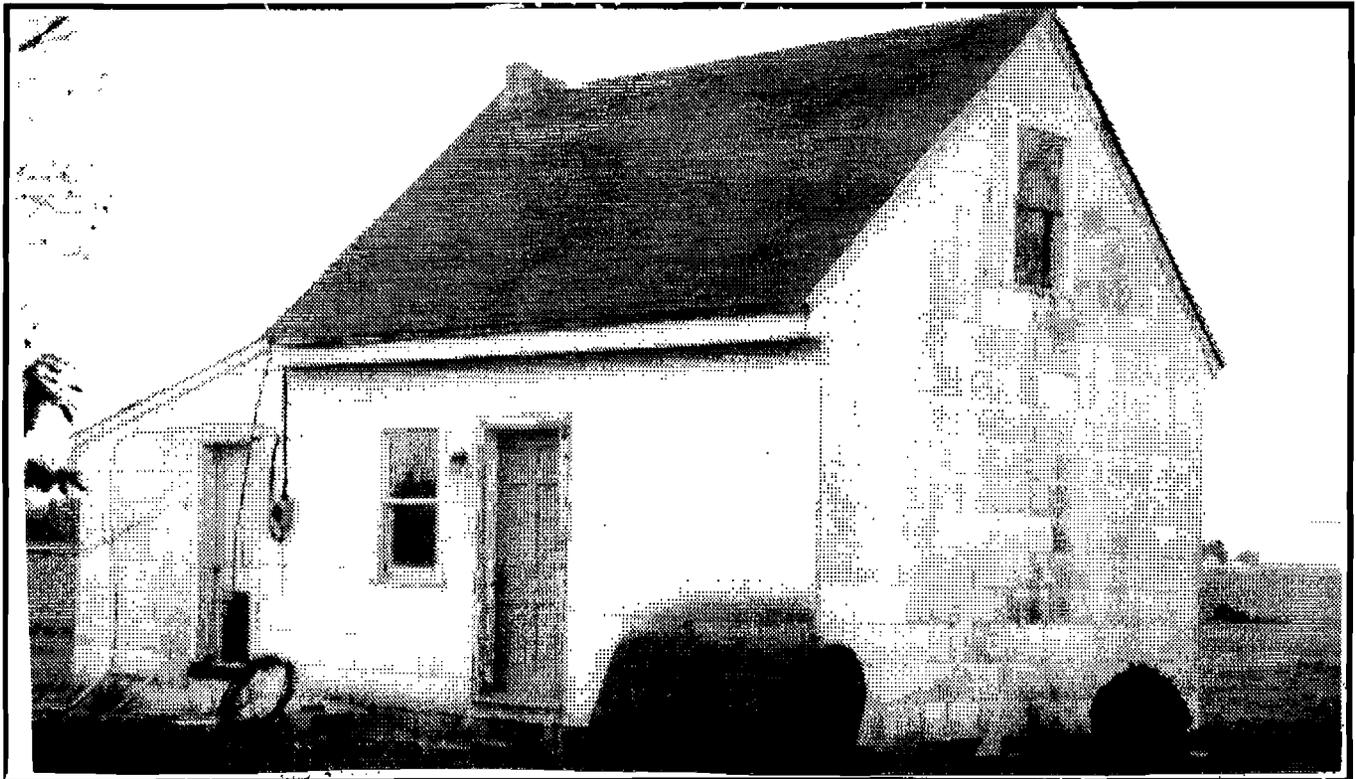
Shovel Testing on the Lewis Property - Site 7S-B-74

*Example*



PLATE 8

Lewis Property Tenant House



container glass, milkglass, metal fragments, and sherds of stoneware, creamware, and white granite stoneware. Beers' Atlas (1868) shows a structure labeled "N. W. McMillen" in this vicinity. The archaeological evidence suggests a site dating to the period 1830 to 1880.

Locus 13.2C. Site 7S-B-73 is 2400 feet northeast of the intersection of State Route 582 and State Route 404. The property owner informed us that several early twentieth century chicken houses had been present in the area. These were located by pedestrian survey of the field. Artifacts observed included terra cotta drainpipe fragments and brick sherds. Based on the landowner's recollections, three chicken houses dating from between 1880 to 1940 stood here.

**Newton Property: Tract 13.3.** The Newton property is at the eastern end of the northern prong of the study area. Two historical sites were identified on the Newton tract. Soils on the Newton farm are Sassafras sandy loams. At the time of the survey the field on the eastern side of State Route 582 had been recently plowed, providing excellent surface visibility. On the western side of State Route 582 the property was wooded and in scrub brush.

Locus 13.3A. Site 7S-B-77 is 100 to 400 feet southeast of State Route 582, and 1200 feet southwest of State Route 583. A pedestrian survey of the field found a historical artifact concentration consisting of brick fragments, molded container glass, window glass, a horse shoe, copper fragments, and sherds of redware, yellowware, bone china, whiteware, and white granite stoneware. The reconnaissance survey of the Sussex East-West Corridor (Catts, Custer, and Hoseth 1991:247) identified the location as a potential historical archaeological site dating from the period 1830 to 1880; the site was called the William Robinson Tenant House based on the evidence provided by a manuscript Sussex County Road Paper dated 1850 (Figure 20). The planning survey confirmed that a historical archaeological site, dating from the mid-nineteenth century, is present.

Locus 13.3B. Site 7S-B-78 is on the northwest side of State Route 582, 2000 feet southwest of the intersection of State Routes 582 and 583. Pedestrian survey of the overgrown lot located a cement block foundation and recent trash and debris. No artifacts were collected from the site. The Greenwood U.S.G.S. quadrangle map (1955) shows two structures at the location.

**W. Vanderwende Property: Tract 13.5.** The Vanderwende property is near the western end of the study area, on the north side of State Route 404 east of Scotts Corner. The Vanderwende property extends from the west side of Iron Mine Branch to the east side of State Route 580. At the time of the planning survey the tract was planted in winter wheat with approximately 5% surface visibility. Two archaeological sites were found on the parcel.

Locus 13.5A. Site 7S-B-50 is 500 feet west of Iron Mine Branch and 400 feet north of State Route 404. Pedestrian survey located a historical artifact concentration on Woodstown sandy loam soils. Artifacts at the site included brick fragments, molded container glass, window glass, milkglass, a glass button, a marble door knob, and over forty-five ceramic sherds, including American porcelain, bone china, white granite stoneware, redware, yellowware, and a variety of whitewares. A mean ceramic date for the occupation is circa 1869. Beers' Atlas (1868) does not show a structure at this location, so it is possible that the site dates to the later 1880 to 1940 period.

Locus 13.5B. Site 7S-B-49 is 750 feet west of Iron Mine Branch and 400 feet north of State Route 404. The soils of the site are Kenansville sandy loams. Pedestrian survey of the tract found a surface scatter of prehistoric artifacts on a small rise overlooking Iron Mine Branch to the east. Artifacts collected included one argillite flake (no cortex), fire-cracked rock, and one stemmed, jasper projectile point. The function of the site is unknown; however, it dates to the Woodland I Period.

**A. Tatman Property: Tract 13.6.**

Locus 13.6A. Site 7S-B-51 is 700 feet east of Iron Mine Branch and 500 feet south of State Route 404. Pedestrian survey of the tract found a historical artifact concentration along the edges of a shallow drainage ditch. Soils at the site are Fallsington sandy loams. Artifacts observed included brick fragments, and asbestos shingles; artifacts collected include molded container glass, window glass, milkglass, mirror glass, plaster, two spoons, a metal key, ceramic drainpipe fragments, and forty-five ceramic sherds, including redware, yellowware, American porcelain, white granite stoneware, whiteware, and majolica. Site 7S-B-51 may be associated with Site 7S-B-52 in Locus 13.7 (see below). Although it is difficult to be precise because of the alteration of State Route 404 over the last one hundred and fifty years, Beers' Atlas (1868) shows a building labeled "W. J. Coates" in this approximate location. The ceramic assemblage provides a mean date of circa 1869, corresponding closely with the Beers' date. The site therefore probably represents an occupation from the period ranging between 1830 and 1940.

**M. Fitano Property: Tract 13.7.** The Fitano property is east of Iron Mine Branch and west of State Route 562, along both sides of State Route 404. Four sites were identified on the property. At the time of the survey the tract was in various fields, and surface visibility, as well as soil type, varied from field to field.

Locus 13.7A. Site 7S-B-52 is 1200 feet east of Iron Mine Branch and 500 feet south of State Route 404, along the 50 feet elevation contour on Sassafras sandy loams soils. A pedestrian survey of the corn stubble field (80% surface visibility) found a small concentration (100 feet in diameter) of brick fragments. Site 7S-B-52 is situated above and to the east of Site 7S-B-51; and may also be related to the W. J. Coates building shown on Beers' Atlas (1868). However, no additional artifacts were collected, so there is no basis for assigning a function or date to the site.

Loci 13.7B, C, and E. These three loci comprise the surface collection of prehistoric artifacts identified as Site 7S-B-53. The three loci are along both sides of State Route 404, beginning 2400 feet west of the intersection of State Route 404 and State Route 562, and extending 1000 feet west towards Iron Mine Branch. The soils are Rumford and Elkton sandy loams. At Locus 13.7B a

TABLE 21

## Summary of Prehistoric Artifacts from Site 7S-B-53

	Quartz	Jasper	Chert	Total
Flakes	2(2)	---	---	2(2)
Utilized flakes	---	1(1)	---	1(1)
Woodland I points	1	1	---	2
Other bifaces	---	---	1	1
Shatter	1	---	---	1
Total	<u>4(2)</u>	<u>2(1)</u>	<u>1</u>	<u>7(3)</u>

( ) = cortex

small bay/basin depression is 500 feet south of State Route 404. Pedestrian survey of the bay/basin feature (winter wheat and bean stubble with 0-70% surface visibility), recovered a chert biface, a quartz flake, and a jasper utilized flake. Pedestrian survey (80% visibility) of Locus 13.7C, on the north side of State Route 404, recovered two projectile points (one quartz contracting stem and one jasper stem), and a quartz shatter. Finally, pedestrian survey of Locus 13.7E, in a soy bean field located 400 feet east of Iron Mine Branch (with 80% surface visibility) found one quartz flake with cortex. Between loci 13.7E and 13.7C (to the east) there was a field in tall winter wheat that could not be surveyed. It is likely that the site extends there also. The artifact assemblage from Site 7S-B-53 suggests a Woodland I Period occupation, but site function is presently unknown (Table 21).

Locus 13.7D. Site 7S-B-54 is 2000 feet west of the intersection of State Route 404 and State Route 562, and 400 feet north of State Route 404. The site is in an agricultural field on Rumford sandy loam soils. Pedestrian survey identified a small concentration of historical artifacts consisting of brick fragments, stemmed table glass, and a sherd of white granite stoneware. The site probably dates to the period from 1880 to 1940.

Locus 13.7F. Site 7S-B-55 is 400 feet east of Iron Mine Branch and 200 feet north of State Route 404. The Fallsington sandy loam soils of the field at the time of the survey were planted in soybeans and in tall winter wheat. Thus, surface visibility ranged from approximately 80 percent in the soybeans, to zero in the winter wheat. Artifacts at the site were brick fragments, molded container glass sherds, milkglass, and sherds of American porcelain, bone china, white granite stoneware, whiteware, and pearlware. Based on the artifact assemblage the occupation of the site dates from the period between 1880 and 1940. The Hickman U.S.G.S. quadrangle map (1955) shows a building here.

**W. Vanderwende Property: Tract 13.8.** The W. Vanderwende property is on the north side of State Route 404 and extends from the intersection of State Route 404 and State Route 562, 2200

feet to the east. A drainage ditch bisects the Sassafras sandy loam agricultural field which stood in corn stubble with approximately 70 percent surface visibility at the time of survey. Two historical sites were identified on the property, both located to the east of the drainage ditch. One prehistoric site identified at Loci 13.8C was included as part of Site 7S-B-61, on the Faulkner Property.

Locus 13.8A. Site 7S-B-59 is 100 feet north of State Route 404 and 1300 feet west of the intersection of State Route 404 and State Route 576. A small historical artifact concentration of brick fragments, melted container glass, and whiteware sherds, approximately 100 feet in diameter was identified in the corn stubble. The age and function of the site are unknown.

Locus 13.8B. Site 7S-B-60 is 300 feet north of State Route 404 and 900 feet west of the intersection of State Route 404 and State Route 576. The historical artifact concentration at the site is larger than at Site 7S-B-59, measuring approximately 200 by 150 feet. Artifacts present included brick fragments, molded container glass, and redware sherds. The age and function of this site are also undetermined.

**W. Faulkner Property: Tract 13.9.** The W. Faulkner property is located along the south side of State Route 404, west of the intersection with State Route 576. At the time of the planning survey the tract was planted in winter wheat with surface visibility of approximately 50 percent. Five archaeological sites were identified on the Faulkner property.

Locus 13.9A. Site 7S-B-62 is associated with standing structure CRS S-1759. The site is 1600 feet west of the intersection of State Route 404 and State Route 576, approximately 200 feet south of State Route 404 on Woodstown sandy loam soils. Pedestrian survey of the area around the house recovered molded container glass, window glass, milkglass, ceramic drainpipe fragments, a porcelain insulator, and sherds of yellowware, redware, white granite stoneware, a variety of whitewares, and stoneware. Tabachnick and Keller (1991:94) describe structure CRS S-1759 as an agricultural complex dating to the nineteenth century with a T-plan, I-house as the main dwelling.

Locus 13.9B. Site 7S-B-63 is 1200 feet west of the intersection of State Route 404 with State Route 576, 200 feet south of State Route 404. Pedestrian survey identified a 200 by 100 feet long concentration of historical artifacts on Sassafras sandy loam soil. Artifacts present included numerous brick fragments, molded container glass, and a tobacco pipe stem. The function and date of the site are unknown.

Locus 13.9C. Site 7S-B-64 is 900 feet west of the intersection of State Route 404 and State Route 576, and 100 feet south of State Route 404 on Sassafras sandy loam soil. Pedestrian survey of the tract found a small concentration of

TABLE 22

## Summary of Prehistoric Artifacts from Site 7S-B-61

	Quartz	Chert	Jasper	Chalcedony	Total
Flakes	8(2)	---	1(1)	1	10(3)
Flake tools	1(1)	---	---	---	1(1)
Other bifaces	---	1	---	---	1
Total	<u>9(3)</u>	<u>1</u>	<u>1(1)</u>	<u>1</u>	<u>12(4)</u>

( ) = cortex

historical artifacts on a small rise 100 feet east from the end of a ditch. Large numbers of bricks (many nearly complete), and molded container glass were present at the site. The function or date of the site could not be determined.

Loci 13.9D, 13.8C. Site 7S-B-61 is a prehistoric artifact concentration 1000 feet northwest of the intersection of State Route 404 and State Route 576, and 200 feet southwest of State Route 404. The site is on a slight rise of Sassafras sandy loam, and the landowner related that two bay/basin depressions (or "bottoms") had been recently filled west of the rise. Pedestrian survey of the rise found quartz, jasper, and chalcedony flakes, a quartz flake tool, and a chert biface (Table 22). The site extends north across State Route 404 and includes Tract 13.8C, where several quartz flakes were recovered. The date of the site cannot be determined due to the lack of any diagnostic artifacts. The location close to several bay basins suggests that the site functioned as a procurement site.

Locus 13.9E. Site 7S-B-65 is 100 feet west of State Route 576 and 300 feet south of State Route 404. Pedestrian survey identified a concentration of brick fragments, suggesting a structure or outbuilding. No other artifacts were recovered, so no date of occupation can be determined.

**L. Showers Property: Tract 13.10.** The L. Showers tract is located along the north side of State Route 404, north of the intersection of State Route 31 and the State Route 404. The Showers agricultural complex is approximately 1200 feet northwest of the intersection. Three historical archaeological sites were identified on the Showers property. At the time of the planning survey the agricultural fields of the property were fallow, or planted in winter wheat. A woodlot on the property was also investigated. Soils on the Showers tract are Woodstown and Sassafras sandy loams.

Locus 13.10A. Site 7S-B-67 encircles standing structure CRS S-1734, a house 400 feet north of State Route 404, and 1200 feet northwest of the intersection of State Route 31 and State Route 404. Pedestrian survey of the Sassafras sandy loam soils around the house (surface visibility approximately 70% in winter wheat) found molded container glass, ceramic drainpipe fragments, glazed

and unglazed bricks, a metal bracket, and sherds of redware, whiteware, and white granite stoneware. Beers' Atlas (1868) shows a building here labeled "N. W. McMillen", but the SHPO site files tentatively date the present building after 1900. Tabachnick and Keller (1992:100-103) describe the dwelling as a two story, three bay I-house with associated agricultural complex outbuildings. The material remains and documentary history suggest that the site dates from the 1830 to 1880 and 1880 to 1940 periods.

Locus 13.10B. Site 7S-B-68 is between standing structure CRS S-1734 and State Route 404, about 200 feet west of the farm lane leading to CRS S-1734, and 200 feet north of State Route 404. Pedestrian survey of the Sassafras sandy loam soils identified a concentration of historical artifacts including molded container glass, window glass, one complete amber bottle, a metal strap hinge, a shell button, and sherds of American porcelain, redware, yellowware, white granite stoneware, and whiteware. Like Site 7S-B-67, Site 7S-B-68 could be related to the McMillen dwelling shown on Beers' Atlas (1868). The small ceramic assemblage suggests an occupation dating from the period 1880 to 1940.

Locus 13.10C. Pedestrian survey identified Site 7S-B-69 in the winter wheat field north of standing structure CRS S-1734. Site 7S-B-69 is 800 feet north of State Route 404 and 1000 feet west of the Conoway and Showers property line on Sassafras sandy loam soils. Artifacts present at the site included large numbers of brick fragments, molded container glass, ceramic drainpipe fragments, metal fragments, and sherds of pearlware, whiteware, white granite stoneware, American porcelain, Fiesta ware, and other stonewares. Beers' Atlas (1868) shows a structure labeled "Mrs. W. Cannon" here. The ceramics from the site suggest an occupation beginning in the period 1830 to 1880 probably lasting into the 1880 to 1940 period. The landowner recalled that there had been a structure here within living memory. No structure is shown on the Hickman U.S.G.S. quadrangle map (1955).

#### **P. Isaac and G. Newton Property: Tract 13.11.**

Locus 13.11A. The Isaac and Newton property is at the intersection of State Route 404 and State Route 31. One historical archaeological site -- 7S-B-70 -- was identified, 300 feet south of State Route 404 and 400 feet east of State Route 31. At the time of the survey the tract was in winter wheat with approximately 70 percent surface visibility. Pedestrian survey of the site recovered molded container glass, window glass, table glass, milkglass, an iron shutter dog, plaster, brick, and over fifty-two sherds of ceramics, including redware, yellowware, bone china, American porcelain, whiteware, white granite stoneware, and American blue and gray stoneware. The reconnaissance survey of the original Sussex East-West Corridor (Catts, Custer and Hoseth 1991:253) identified this location as a potential archaeological site belonging to "Henry Smith", based on a manuscript Sussex County Road plat dated 1857 (Figure 21).

Beers' Atlas (1868) shows a structure here labeled "D. Brown". The ceramic assemblage from the site suggests a mean date of occupation of circa 1866, a date that coincides well with the documented dates provided by the maps. The site probably dates from between 1830 and 1880.

**Dublin Hill Farms Property: Tract 13.13.** The Dublin Hill Farms property is on the south side of State Route 404, east of its intersection with State Route 582. At the time of the planning survey the tract was in soybean stubble with approximately 50 percent surface visibility. Soils in the agricultural fields on the property are primarily Sassafras sandy loams, with small areas of Fallsington soils close to State Route 404. Two archaeological sites were identified on the Dublin Hills Farms property.

Locus 13.13A. Site 7S-B-76 is 500 feet southeast of the intersection of State Route 404 and State Route 582, and 600 feet southwest of State Route 404. Pedestrian survey of the tract found a concentration of brick fragments ranging in size from small fragments to large chunks in an area approximately 1000 feet long and 600 feet wide. The majority of artifacts surface collected came from within the brick concentration, in an area approximately 300 by 300 feet. Artifacts recovered included molded container glass, a brass architectural bracket, glazed and unglazed brick, ceramic drainpipe, milkglass, and sherds of redware, decal porcelain, bone china, whiteware, white granite stoneware, other stoneware, and pearlware. The artifact assemblage from the site suggests a date of occupation from between 1880 and 1940.

Locus 13.13B. Site 7S-B-75 is 500 feet southeast of the intersection of State Route 404 and State Route 582, and 1100 feet southwest of State Route 404. The site is on a slight topographic rise south of historical Site 7S-B-76 discussed above. Pedestrian survey found a jasper flake tool and several fragments of fire-cracked rock. The date of prehistoric site occupation and the site function are presently unknown.

**Kelley Property: Tract 13.15.** The Kelley property is east of the Dublin Hill Farms Tract, south of State Route 404. Two historical archaeological sites were identified. At the time of the planning survey the property was in winter wheat and/or corn and soy bean stubble. Surface visibility ranged from 40 to 70 percent. Soils on the tract are Sassafras sandy loams.

Locus 13.15A. Site 7S-B-80 is 900 feet southwest of State Route 404, and 1800 feet southeast of the intersection of State Route 404 and State Route 582. Pedestrian survey of the Kelley property identified a dense historical artifact concentration in a field planted in winter wheat (70% surface visibility). Artifacts included molded container glass, window glass, table glass, milkglass, a glass button, and twenty-eight sherds of ceramic, such as white granite stoneware, whiteware, yellowware, bone china, American porcelain, and decal porcelain. The ceramic assemblage suggests a site occupation dating to the period 1880 to 1940.

Locus 13.15B. Site 7S-B-79 is 2300 feet southwest of State Route 404 and 400 feet west of the Kelley property line, at the south end of the southern branch of the study area. Pedestrian survey identified a small historical artifact concentration partly in winter wheat and partly in corn stubble. Artifacts included molded container glass, a terra cotta pipe fragment, a sherd of sponge decorated stoneware, and a sherd of pearlware. The site may date from the period 1830 to 1880; however, the paucity of artifacts makes the site date tenuous.

**Loockerman Property: Tract 13.18.** The Loockerman property is on the south side of State Route 404, west of its intersection with State Route 562. At the time of the planning survey the

property was in soybean and wheat stubble, with approximately two percent surface visibility. Soils on the property are Sassafras sandy loam and Sassafras loam. Two sites, one historical and one prehistoric, were identified.

Locus 13.18A. Site 7S-B-56 is 300 feet south of State Route 404 and 250 feet west of State Route 562. The historical archaeological site is associated with standing structure CRS S-1757. The SHPO site files list the date for the building as prior to 1941. Tabachnick and Keller (1992:91-93) characterize post-1941 structure CRS S-1757 as a small one and one half story cottage with a rear addition and agricultural outbuildings. Pedestrian survey found small amounts of container glass and whiteware associated with standing structure CRS S-1757. The present house may originally have been a tenant house built around 1910.

Loci 13.18B and 13.19B. Site 7S-B-57 is 600 feet west of the intersection of State Route 404 and State Route 562, and extends along both sides of State Route 404 for approximately 100 feet north and south. Pedestrian survey of the Loockerman tract south of Route 404 recovered a quartz flake, and the pedestrian survey of the Beauchamp tract on the north side of State Route 404 (see below) recovered several quartz flakes and fire-cracked rock. The poor surface visibility on both tracts precluded the recovery of more artifacts. The date of prehistoric occupation and site function are presently unknown.

**P. Beauchamp Property: Tract 13.19.** The Beauchamp property is on the north side of State Route 404, west of its intersection with State Route 562. Soils on the tract are Sassafras sandy loams. At the time of the survey the property was covered in soybean stubble, with approximately 60 percent surface visibility. Two sites were identified on the Beauchamp tract; one has been included with prehistoric site 7S-B-57 listed above, on the Loockerman Tract.

Locus 13.19A. Site 7S-B-58 is 200 feet north of State Route 404 and 400 feet west of State Route 562. The pedestrian survey found a historical artifact concentration measuring approximately 200 by 500 feet. Artifacts recovered included molded container glass, milkglass, whiteware and white granite stoneware. Brick fragments were also observed. The paucity of artifacts makes dating the site difficult; a tentative date is the period 1880 to 1940.

**Jones Property: Tract 13.20.**

Locus 13.20A. One site was identified on the Jones property. Site 7S-B-66 is 2000 feet south of the intersection of State Route 404 and State Route 576, and 200 feet west of State Route 404. At the time of the survey the property was planted in winter wheat with 60 percent surface visibility. Pedestrian survey of the tract found a historical artifact concentration measuring approximately 300 by 300 feet on Woodstown sandy loam

soil. Artifacts collected include container glass, American blue and gray stoneware, and white granite stoneware. The date of Site 7S-B-66 is difficult to ascertain, but it was probably occupied during the period 1880 to 1940.

#### **Segment 14: Marshyhope Creek Study Area**

Segment 14 is at the western end of the Sussex East-West Corridor alignment (Figure 22). The segment is bisected by the Marshyhope Creek at Woodenhawk, and extends 4700 feet west and 2600 feet east, along State Route 404. The area is presently agricultural, with woods, fields, and pastures interspersed among farms, dwellings, and produce stands. Pastures and residential areas were not tested. The soil association dominating Segment 14 is Fallsington-Sassafras-Woodstown, which are poorly-drained to well-drained sandy soils with moderately permeable subsoils (Cotnoir 1973; Ireland and Matthews 1974). The topography of Segment 14 is nearly level, except for slopes above the flood plain of the Marshyhope Creek. However, Marshyhope Creek has been channeled and ditched. Ten property tracts were investigated during the planning survey, and seven new archaeological sites were identified (Table 23).

**Bailey and Sons, Inc., Property: Tract 14.1.** The Bailey and Sons, Inc. tract comprises nearly one-third of Segment 14. The property is located on both sides of State Route 404 extending

TABLE 23

## Summary of Archaeological Sites Identified in the Marshyhope Creek Study Area, Segment 14

Parcel/ Owner	Locus Number Site Number CRS Number	Type of Testing	Type of Site
14.1 Bailey & Sons, Inc.	14.1A 7S-B-42 S-8605	Pedestrian survey	Prehistoric
14.1 Bailey & Sons, Inc.	14.1B 7S-B-44 S-8607	Pedestrian survey	Historic
14.1 Bailey & Sons, Inc.	14.1C, D 7S-B-43 S-8606	Pedestrian survey	Historic/ Prehistoric
14.1 Bailey & Sons, Inc.	14.1E 7S-B-46 S-8609	Pedestrian survey	Historic
14.1 Bailey & Sons, Inc.	14.1F 7S-B-47 S-8610	Pedestrian survey	Prehistoric
14.3 W. Short	14.3A 7S-B-23 S-481	Pedestrian survey	Prehistoric
14.5 Doug Vanderwende	14.5A 7S-B-45 S-8608	Pedestrian survey	Prehistoric
14.6 Lare J. Palmer	14.6A 7S-B-48 S-8611	Pedestrian survey	Prehistoric

Note: 14.3A 7S-B-23 previously identified; Catts, Custer, and Hoseth 1991

east to State Route 571, with the exception of William Short's property containing Site 7S-B-23. East of State Road 571 the tract is on the south side of State Route 404, extending to Marshyhope Creek. Five sites were identified on Bailey and Sons, Inc. property.

Locus 14.1A. Site 7S-B-42 is at the extreme western end of Segment 14, 2500 feet west of the intersection of State Route 404 and State Route 571, and 200 feet south of State Route 404. Pedestrian survey (visibility 10%) of the tract identified a prehistoric site situated on Fallsington sandy loams. Artifacts recovered include three quartz flakes (all with cortex), and one jasper flake (no cortex). No date or function could be assigned to the site.

Locus 14.1B. Site 7S-B-44 is 2600 feet west of the intersection of State Route 404 and State Route 571, and 150 feet north of State Route 404. Soils are Woodstown sandy loam. Pedestrian survey of a fallow field (visibility 30%), found a historical artifact concentration, consisting of brick, molded container glass, milkglass, a metal castor, window glass, and fragments of whiteware and white granite stoneware. The Hickman U.S.G.S quadrangle map (1955) shows a structure here, but the

TABLE 24

Summary of Prehistoric Artifacts from Site 7S-B-47

	Quartz	Chert	Jasper	Total
Flake	13(7)	1(1)	1	15(8)
Utilized flakes	---	---	2(2)	2(2)
Flake tools	2(2)	---	---	2(2)
Shatter	4(3)	---	---	4(3)
Cores	---	---	1(1)	1(1)
Total	<u>19(12)</u>	<u>1(1)</u>	<u>4(3)</u>	<u>24(16)</u>

1 Wolfe Neck Ceramic Sherd  
( ) = cortex

building is no longer extant. The artifact concentration identified here may represent the structure, and based on the artifact assemblage the occupation dates to the 1880 to 1940 period.

Loci 14.1C, and 14.1D. Site 7S-B-43 is 1500 feet west of the intersection of State Route 404 and State Route 571, and 150 feet north of State Route 404. Pedestrian survey (visibility 30%) located a historical artifact concentration approximately 200 feet in diameter on Woodstown sandy loam. Artifacts included brick fragments, molded container glass, window glass, white granite stoneware, and other stoneware fragments. A piece of fire-cracked rock was also observed, suggesting a prehistoric component for the site. The date and function of Site 7S-B-43 are unknown.

Locus 14.1E. Site 7S-B-46 is 500 feet east of State Route 571, and 200 feet south of State Route 404. Soils on the site consisted of Kenansville sandy loam. Catts, Custer, and Hoseth (1991) identified this location as a potential historical archaeological site, and standing structure CRS S-357 stood here, but is no longer extant. Beers' Atlas (1868) shows a structure labeled "Adams" at this location. Pedestrian survey of the fallow field with about two percent surface visibility recovered molded container glass, large amounts of window glass, milkglass, and sherds of yellowware, white granite stoneware, and whiteware. A local informant recalls a three-story brick house on the tract within living memory. Thus, the artifact assemblage and the historical background research suggest a site dating from the period 1830 to 1880, and from the 1880 to 1940 period.

Locus 14.1F. Site 7S-B-47 is 500 feet south of State Route 404, 700 feet west of Marshyhope Creek along the terraced bluff above the flood plain. Surface visibility ranged from 40 to 70 percent. Pedestrian survey of the tract found a large prehistoric site situated on Sassafras sandy loam soils. Artifacts collected include 19 flakes, utilized flakes, and flake tools, a jasper core, and a large fragment of Wolfe Neck ceramic (Table 24). The artifact assemblage and site setting suggest a Woodland I Period procurement site.

TABLE 25

## Summary of Prehistoric Artifacts from Site 7S-B-48

	Quartzite	Quartz	Jasper	Total
Flakes	2	2(1)	---	4(1)
Flake tool	---	---	1	1
Shatter	---	1	---	1
Total	<u>2</u>	<u>3(1)</u>	<u>1</u>	<u>6(1)</u>

( ) = cortex

**W. Short Property: Tract 14.3.**

Locus 14.3A. Site 7S-B-23 had been previously identified as a Woodland I Period site of unknown function (Catts, Custer, and Hoseth 1991:179). The site is 800 feet west of the intersection of State Route 404 and State Route 571, on the north side of State Route 404, in a fallow field on Woodstown sandy loam soil. An earlier surface collection of the site recovered Wolfe Neck ceramics, and the pedestrian survey (surface visibility approximately 75%) recovered a quartz flake. The age and function of the site could not be further refined.

**D. Vanderwende Property: Tract 14.5.**

Locus 14.5A. Site 7S-B-45 is 200 feet east of State Route 571 and 300 feet north of State Route 404. Pedestrian survey of the winter wheat and corn stubble field on Evesboro sandy loam (surface visibility approximately 60%) identified a prehistoric site of undetermined age or function. One quartz flake was recovered.

**L. Palmer Property: Tract 14.6.**

Locus 14.6A. Site 7S-B-48 is at the northeast corner of the intersection of State Route 404 and State Route 569, east of Marshyhope Creek in a field of Evesboro sand. Pedestrian survey of the winter wheat field (surface visibility 95%) found a small prehistoric site close to State Route 404. Artifacts consisted of six quartzite, quartz, and jasper flakes and flake tools (only one with cortex) (Table 25). The age and function of the site could not be determined.

## **MANAGEMENT CONSIDERATIONS**

The planning survey of the fourteen selected segments of the proposed Sussex East-West Corridor identified 162 archaeological sites including prehistoric sites, historical archaeological sites, and archaeological deposits associated with standing structures. Before proceeding with an analysis of the survey and an assessment of the sites, several biases in the archaeological testing should be pointed out. First, the majority of sites identified during the planning survey were found by pedestrian

TABLE 26

Prehistoric Sites and Site Significance in the Sussex East-West Corridor Study Areas

Segment/ Study Area	Site Number	Paleo	Archaic	Woodland I	Woodland II	Unknown	Function	Significance
1. Five Points	G-134			X			Procurement	Low
2. Beaverdam Creek	F-79			X			Procurement	High
3. Gravel Hill	---							
4. Georgetown	F-88					X	Procurement	High
	F-89			X			Base Camp	High
	F-86					X	Procurement	Low
	F-110					X	Procurement	Low
	F-99			X			Procurement	High
	F-102		X	X			Procurement	High
5. Cokesbury Church	F-97			X			Procurement	High
	F-126					X	Procurement	Low
	F-27			X			Macro-band Base Camp	High
6. Cedar Corners	F-157					X	Procurement	Low
	F-82					X	Procurement	Low
7. Kings Crossroads	F-2			X			Macro-band Base Camp	High
	C-53					X	Procurement	High
8. Mirey Branch	---							
9. Collins Pond	E-61			X	X		Procurement	Medium
	E-189					X	Procurement	Medium
	F-136					X	Procurement	Low
	E-165					X	Procurement	Low
10. Unity Forge	E-187					X	Procurement	High
	E-171					X	Procurement	High
11. Nanticoke Branch	B-40			X			Macro-band Base Camp	High
12. Bridgeville Branch	E-153			X			Procurement	Medium
13. Scotts Corner	B-49			X			Procurement	Low
	B-53			X			Procurement	High
	B-61					X	Procurement	High
	B-75					X	Procurement	Low
	B-57					X	Procurement	Low
	B-42					X	Procurement	Low
14. Marshyhope	B-43					X	Procurement	Low
	B-47			X			Procurement	High
	B-23			X			Procurement	High
	B-45					X	Procurement	High
	B-48					X	Procurement	High
	<b>Totals</b>	<b>34</b>	<b>0</b>	<b>1</b>	<b>15</b>	<b>1</b>	<b>19</b>	

TABLE 27

Summary of Prehistoric Sites within Sussex East-West Corridor Probability Zones

	High %	Medium %	Low %
Surface Area	3.3	15.7	81
Prehistoric Sites	14.7	38.2	47

survey, and few of the sites were found through subsurface testing; therefore, the presence of intact subsurface features is generally unknown. Thus, archaeological site integrity or National Register eligibility cannot be determined without further field investigations. Second, archaeological investigations were only conducted in portions of the proposed corridor that were deemed "problem areas" due to a large number of anticipated cultural resources; thus, the survey may be biased towards areas of high site density. Third, although some subsurface testing was conducted in wooded areas and areas of low surface visibility, the majority of the areas investigated were agricultural fields or plowed fields. In addition, those areas that were the most "likely" site locations were investigated, and swampy or poorly-drained ground was avoided. The survey, thus, may have missed sites associated with interior wetlands (although the results of the prehistoric testing suggest that this is not the case). None-the-less, with these caveats in mind, questions about the archaeological resources of the proposed Sussex East-West Corridor can be addressed based on the results of the planning survey.

### **Analyses of Prehistoric Sites**

The analysis of prehistoric site settlement presented in the original Route 404 reconnaissance and planning report (Catts, Custer, and Hoseth 1991:110-111, and Attachment VI) defined high, medium, and low probability values to areas of the Sussex East-West Corridor. In general, for all prehistoric periods, the high probability zones are likely to contain prehistoric base camps that have the greatest potential for nomination to the National Register of Historic Places and would be the most expensive sites to mitigate (generally proceeding to data recovery investigations). Medium probability zones would contain mainly micro-band base camps that are likely to be eligible for the National Register of Historic Places, but would be smaller in size and less expensive to mitigate. Low probability zones would contain mainly procurement sites that are less likely eligible for the National Register of Historic Places, and less likely to be intact or well-preserved, and less expensive to investigate (probably investigated only to the Phase I or II level). The original reconnaissance planning study of the Route 404 Corridor pointed out that the low probability zones would not be devoid of archaeological sites. Instead, sites would be present, but in significantly lower frequencies in comparison with the medium and high probability zones (Catts, Custer, and Hoseth 1991:110).

The results of the investigations of selected portions of the Sussex East-West Corridor have supported the prehistoric predictive model (Table 26). Five of thirty-four prehistoric sites were found in high probability zones, thirteen sites were found in medium probability zones, and sixteen sites were found in low probability zones. More significantly, 14.7 percent of the identified prehistoric sites were discovered in high probability zones, while only 3.3 percent of the area investigated was classified as high probability (Table 27).

**TABLE 28**  
**Historical Site Significances for the**  
**Sussex East-West Corridor**

Segment	Site Number	Period	Function	Significance	Segment	Site Number	Period	Function	Significance
1	G-135	1830-1880	Unknown	Low	9	E-177	1730-1770	Forge	High
	G-136	1830-1880	Unknown	Low		E-173	1830-1880	Agricultural complex	High
2	F-80	1880-1940	Dump	Low	E-172	1830-1880	Unknown	High	
	F-74	1830-1880	Agricultural complex	High	E-178	1770-1830	Mill	High	
3	F-75	unknown	Cemetery	High	E-179	1770-1830	Unknown	High	
	F-76	1830-1880	Agricultural complex	High	E-180	1830-1880	Unknown	High	
4	F-78	1880-1940	Agricultural complex	High	E-181	1880-1940	Unknown	High	
	F-87	1880-1940	Agricultural complex	High	E-188	1830-1880	Cemetery	High	
	F-84	1880-1940	Agricultural complex	High	E-189	1730-1770	Agricultural complex	High	
	F-85	1880-1940	Agricultural complex	High	E-176	1830-1880	Agricultural complex	High	
	F-91	1770-1830	Unknown	High	E-174	1830-1880	Agricultural complex	High	
	F-92	1880-1940	Unknown	Low	E-175	1830-1880	Store/Dwelling	High	
	F-93	1880-1940	Unknown	Low	E-185	1880-1940	Unknown	Medium	
	F-95	1880-1940	Unknown	Low	E-182	1880-1940	Unknown	Medium	
	F-94	1880-1940	Unknown	Low	E-184	1830-1880	Unknown	Low	
	F-90	1830-1880	Agricultural complex	High	E-183	1880-1940	Unknown	High	
5	F-109	1830-1880	Agricultural complex/ Blacksmith shop	High	E-186	1880-1940	Agricultural outbuilding	High	
	F-108	1880-1940	Unknown	Low	F-135	1880-1940	Unknown	Medium	
	F-111	1880-1940	Unknown	Low	E-170	1880-1940	Unknown	High	
	F-107	1880-1940	Agricultural complex	High	E-168	1770-1830	Agricultural complex	High	
	F-100	1880-1940	Agricultural complex	Low	E-169	1830-1880	Unknown	High	
	F-98	1830-1880	Agricultural complex	High	E-187	1730-1770	Forge	High	
	F-137	1880-1940	Unknown	Low	E-166	1880-1940	Dwelling	Low	
	F-103	1880-1940	Agricultural complex	High	E-167	1880-1940	Dwelling	Low	
	F-104	1880-1940	Unknown	Low	E-161	1880-1940	Unknown	Low	
	F-106	1880-1940	Unknown	Low	E-159	1880-1940	Agricultural complex	High	
6	F-101	1770-1830	Unknown	High	E-160	1880-1940	Unknown	Low	
	F-96	1880-1940	Agricultural complex	High	B-38	1880-1940	Unknown	Low	
	F-105	unknown	Unknown	Low	E-163	1880-1940	Unknown	High	
	F-114	1830-1880	Unknown	Medium	E-164	1880-1940	Unknown	Low	
	F-115	1880-1940	Unknown	Low	E-162	1880-1940	Unknown	High	
	F-123	1880-1940	Agricultural outbuilding	Medium	B-39	1880-1940	Unknown	Low	
	F-124	1880-1940	Agricultural outbuilding	Medium	B-41	1830-1880	Unknown	Medium	
	F-116	1730-1770	Agricultural complex	High	E-153	1830-1880	Unknown	Medium	
	F-112	1880-1940	Unknown	High	E-152	1830-1880	Agricultural complex	Medium	
	F-113	unknown	Unknown	Low	B-74	1880-1940	Agricultural complex	High	
7	F-117	1830-1880	Agricultural complex	High	B-72	1880-1940	Agricultural complex	High	
	F-118	1880-1940	Unknown	Medium	B-71	1830-1880	Agricultural complex	High	
	F-119	1880-1940	Unknown	Medium	B-73	1880-1940	Agricultural outbuilding	Low	
	F-120	1880-1940	Unknown	Medium	B-77	1830-1880	Agricultural/ tenant	High	
	F-128	1880-1940	Agricultural outbuilding	Low	B-78	1880-1940	Dwelling	Low	
	F-129	1880-1940	Button manufactory	High	B-50	1880-1940	Unknown	High	
	F-127	1830-1880	Agricultural complex	High	B-51	1830-1880	Agricultural complex	High	
	F-125	1830-1880	Agricultural complex	High	B-52	unknown	Unknown	Low	
	F-121	1830-1880	Agricultural complex	High	B-54	1880-1940	Unknown	Low	
	F-122	unknown	Cemetery	High	B-55	1880-1940	Unknown	Low	
8	E-158	1880-1940	Agricultural complex	Medium	B-59	unknown	Unknown	Low	
	E-155	1880-1940	Unknown	Low	B-60	unknown	Unknown	Low	
	E-156	1880-1940	Unknown	High	B-62	1880-1940	Agricultural complex	High	
	E-154	1830-1880	Agricultural complex	High	B-63	unknown	Unknown	Medium	
	F-83	1830-1880	Agricultural complex	High	B-64	unknown	Unknown	Medium	
	F-81	1880-1940	Agricultural complex	High	B-65	unknown	Unknown	Low	
	F-130	1880-1940	Forestry outbuilding	High	B-67	1830-1880	Agricultural complex	High	
	F-131	unknown	Unknown	Low	B-68	1880-1940	Unknown	Medium	
	F-132	1880-1940	Unknown	Low	B-69	1830-1880	Agricultural complex	High	
	F-133	1880-1940	Agricultural complex	Medium	B-70	1830-1880	Agricultural complex	High	
9	F-134	1880-1940	Agricultural complex	Medium	B-76	1880-1940	Unknown	High	
	C-52	1880-1940	Unknown	Low	B-80	1880-1940	Unknown	Medium	
	B-34	unknown	Unknown	Low	B-79	1830-1880	Unknown	Medium	
	B-33	1880-1940	Unknown	Low	B-56	1880-1940	Unknown	High	
	B-35	1880-1940	Unknown	Medium	B-58	1880-1940	Unknown	Low	
	B-36	1880-1940	Unknown	High	B-66	1880-1940	Unknown	Low	
	C-54	1830-1880	Agricultural complex	High	B-44	1880-1940	Agricultural complex	High	
					B-43	unknown	Unknown	Low	
					B-46	1830-1880	Agricultural complex	High	

Medium probability areas accounted for 15.7 percent of the study area, and 38.2 percent of the sites. Low probability areas accounted for 81 percent of the study area, but less than half of the sites (47%). Placed into the perspective of highway corridor segments, in high probability zones a prehistoric site is likely to occur every 1,800 feet, in a medium zone once every 3,200 feet, and in a low zone once every 13,500 feet.

Within the surveyed portions of the corridor, the majority of prehistoric sites were found on excessively to somewhat well-drained soils, such as Evesboro and Rumford loams (twenty sites, 59%). Well-drained soils (Sassafras and Kenansville) accounted for nine sites (24%), moderately drained soils (Woodstown) for three sites (9%), and poorly-drained soils (Fallsington) for only two sites (6%). Custer and Mellin (1989:22) found similar correlations between site locations and soil types for the Nanticoke drainage survey. Although the majority of prehistoric occupations identified during the planning survey are on relatively well-drained soils, many of the sites are in close proximity to surface water in the form of streams and inland swamps and wetlands. Several of the sites in Segment 13 (Scotts Corner) are near bay/basin depressions or ponds, which earlier investigations have shown were preferred settings for prehistoric settlement during all time periods (Bachman 1987; Custer and Bachman 1986b:145-149).

Excluding sites without diagnostic artifacts that would aid in dating the occupation, fifteen Woodland I Period components were identified during the planning survey, confirming the expectations of the original reconnaissance and planning study (Catts, Custer, and Hoseth 1991:77). It is probable that the nineteen sites of unknown date were occupied during the Archaic and Woodland I periods, thus adding to the number of Woodland I sites in the region. Only one site was attributable to the Archaic Period, and only one Woodland II Period component was identified. No Paleo-Indian Period sites were identified, although the sites located in the drainage divide area (Segment 4, Georgetown) could conceivably have Paleo-Indian Period components. Overall, the majority of identified sites (30) probably functioned as resource procurement camps. Only one site is a base camp, and three are macro-band base camps.

### **Analyses of Historical Archaeological Sites**

As expected from analysis in the earlier Route 404 reconnaissance and planning study (Catts, Custer, and Hoseth 1991), the largest number of sites date from the Suburbanization Period between 1880 to 1940 (71 sites, or 55.5% of the total) (Table 28). Thirty-five sites date from the Industrialization and Capitalization Period -- 1830 to 1880 (27.3%), five from the Transformation from Colony to State Period -- 1770 to 1830 (3.9%), four from the Intensified and Durable Occupation Period -- 1730 to 1770 (3.1%), and thirteen were not datable (10.2%). No sites within the selected portions of the Sussex East-West

# TABLE 29

## Density of Historical Archaeological Sites in the Sussex East - West Corridor

Study Area	Size (feet)	Number of Identified Historical Archaeological Sites	Sites/ Linear foot
1. Five Points	2,600	2	1/1300
2. Beaverdam Creek	7,200	2	1/3600
3. Gravel Hill	7,000	3	1/2300
4. Georgetown	135,000	22	1/6100
5. Cokesbury Church	17,400	17	1/1000
6. Cedar Corners	17,000	6	1/2800
7. Kings Crossroads	8,000	6	1/1300
8. Mirey Branch	11,600	5	1/2300
9. Collins Pond	12,800	18	1/710
10. Unity Forge	7,000	6	1/1200
11. Nanticoke Branch	9,600	9	1/1100
12. Bridgeville Branch	2,600	2	1/1300
13. Scotts Corner	21,200	27	1/800
14. Marshyhope Creek	8,600	3	1/2900

Corridor dated from the earliest Exploration and Frontier Settlement Period -- 1630 to 1730.

The largest number of sites, twenty-seven, were in the Scotts Corner study area (Segment 13), followed by the Georgetown study area (Segment 4) with twenty-two sites. The Cokesbury Church and Collins Pond study areas (Segments 5 and 9) contained seventeen and eighteen sites respectively. The remaining study areas all had fewer than ten sites.

The number of sites that occurred in a particular study segment provides planners with a general assessment of the impact of highway construction in the Sussex East-West Corridor on cultural resources in "problem" areas (Table 29). For the entire study area investigated, one historical archaeological site can be expected every 2000 linear feet on the average. Within the selected portions of the corridor with the highest densities of historical archaeological sites (Segment 9 -- Collins Pond, and Segment 13 -- Scotts Corner), one historical site occurs every 710 to 800 linear feet.

A comparison of the areas that were identified by Catts, Custer, and Hoseth (1991:111-136) as high, medium, and low in potential as historical site locations with the actual numbers of

TABLE 30

Summary of Potential Site Locations and Actual Historical Sites for the Sussex East-West Corridor

Time Period	Potential Location of Identified Sites			Total
	High	Medium	Low	
1730 - 1770	4	---	---	4
1770 - 1830	5	---	---	5
1830 - 1880	31	4	---	35
1880 - 1940	57	14	---	71
<b>Total</b>	<b>97 (84%)</b>	<b>18 (16%)</b>		<b>115</b>

Excludes unknown period sites (N = 13)

TABLE 31

Summary of Historical Archaeological Sites within the Sussex East-West Corridor Potential Zones

	High %	Medium %	Low %
<b>1730-1770</b>			
Surface Area	87	---	---
Sites	100	---	---
<b>1770-1830</b>			
Surface Area	30	---	---
Sites	100	---	---
<b>1830-1880</b>			
Surface Area	89	11	---
Sites	88	12	---
<b>1880-1940</b>			
Surface Area	87	13	---
Sites	80	20	---

sites identified is shown in Table 30. Overall, 84 percent of the identified historical archaeological sites fell in high potential areas, 16 percent of the sites were in medium potential areas, and no sites were in low potential areas.

The high, medium, and low potential zones can also be examined chronologically (Table 31). For the period 1730 to 1770, all of the sites were located in high potential areas, which account for 87 percent of the surface area within the surveyed segments. For the period 1770 to 1830, all of the sites were in high potential areas, but the reconnaissance and planning

study suggested that high potential locations accounted for only 30 percent of the surface area of the total study area. For the period 1830 to 1880, high potential areas accounted for 88 percent of the sites and 89 percent of the surface area, and medium potential areas accounted for 12 percent of the sites and 11 percent of the surface area. During the most recent historical period (1880 to 1940), 80 percent of the sites were located in high potential areas, which accounted for 87 percent of the surface area of the segments, and 20 percent of the identified sites were located in medium potential areas, which accounted for 13 percent of the surface area. Overall, the probability zones identified for historical occupations by the reconnaissance and planning study (Catts, Custer, and Hoseth 1991:124-128) accurately reflect the historical cultural record in the segments investigated during the present research.

### **Assessment of Site Significance**

The original reconnaissance and planning study of the Sussex East-West Corridor (Catts, Custer and Hoseth 1991:137-152) used a basic interpretive framework for the assessment of prehistoric and historical archaeological site significance that was adapted from the cultural resource planning study of the Route 13 corridor (now State Route 1) (Custer et al. 1984:113-129). For the Sussex East-West Corridor study, all sites noted on the maps included in the first report received a preliminary significance assessment based on the information available at the time of publication. The present report mainly provides refined assessments for the sites within the problem areas that comprised the fourteen segments. The refined assessments are based on the site-specific data compiled during the field survey. For the most part, the original framework established by the reconnaissance study of the East-West Corridor and by similar studies of problem areas along Route 13 (Custer and Bachman 1986a; Custer, Bachman and Grettler 1986) for determining site significance was followed; however, in a few cases, the framework was altered following the results of the field investigations. The present report does not address the significance of standing structures, except when they are associated with archaeological components. The significance and National Register eligibility of architectural resources within the Sussex East-West Corridor was addressed by Tabachnick and Keller (1992).

**Prehistoric Site Significance.** For prehistoric sites discovered during the field survey of the study areas (Table 26), all unplowed sites were considered as potentially of high significance. As with the findings of the Route 13 study (Custer and Bachman 1986a:192), sites located in forest lands, along drainages, and on well-drained knolls surrounded by poorly-drained wetlands contained undisturbed and intact sites that are likely to yield important archaeological data. Within the Sussex East-West Corridor, Site 7S-F-2, in the Redden State Forest, and the series of sites on the Bailey Tract, northwest of Georgetown, represent sites in such settings.

Sites with Archaic or late Paleo-Indian Period components are potentially of high significance and may be eligible for nomination to the National Register of Historic Places even if plowed. Sites dating from the Paleo-Indian and Archaic periods are considered highly significant because they are rare in Delaware and any site may provide important archaeological information. However, a site that has been plowed and then subjected to extensive erosion, is not considered to be of high significance.

All plowed or unplowed base camp sites from all prehistoric time periods were also considered to be of high significance with a high probability of being eligible for listing on the National Register of Historic Places. Macro-band, micro-band, and generalized base camps are sources of data on a wide range of prehistoric activities. As discussed above, plowed sites are included as high significance unless they are also badly disturbed by surface erosion.

All of the sites in the high significance category would require at least Phase II archaeological testing to determine their eligibility for listing on the National Register. In some cases, particularly the plowed sites in the high significance category, Phase II testing may be sufficient to mitigate any adverse effects of highway construction on the site. However, all of the unplowed sites would most likely require Phase III data recovery investigations.

Prehistoric sites within the Mid-peninsular Drainage Divide, and sites associated with bay/basin features, whether plowed or unplowed, were placed in the high significance category. The majority of such sites were in the Georgetown study area, and are considered significant because so little is known about resource use and prehistoric settlement patterns in this area of Sussex County. Sites of this type could be considered eligible for listing on the National Register, and may require data recovery investigations.

Two additional categories of sites encountered during the field survey were discovered and recognized. The first consists of sites that are plowed, disturbed, or eroded. Such prehistoric sites are generally small procurement sites and are considered to be low in historical significance and archaeological potential. Procurement sites would probably not require Phase II determination of eligibility testing. The second, low significance category comprises sites of unknown function or date because they are also generally plowed and disturbed.

**Historical Site Significance.** Historical archaeological site significance was based on the assessments presented in the original report (Catts, Custer, and Hoseth 1991: Appendices II and III), but also included data from the field checks of the planning survey (Table 32). The level of investigation at sites (pedestrian survey with limited, if any, subsurface testing) makes the definitive assessment of site significance problematic.

TABLE 32

## Summary of Historical Archaeological Sites within the Sussex East - West Corridor Study Areas

Study Area/ Segment	Period*					Unknown	Total
	1630 - 1730	1730 - 1770	1770 - 1830	1830 - 1880	1880 - 1940		
1. Five Points	---	---	---	2	---	---	2
2. Beaverdam Creek	---	---	---	1	1	---	2
3. Gravel Hill	---	---	---	1	1	1	3
4. Georgetown	---	---	2	3	16	1	22
5. Cokesbury Church	---	1	---	5	9	2	17
6. Cedar Corners	---	---	---	2	4	---	6
7. Kings Crossroads	---	---	---	---	5	1	6
8. Mirey Branch	---	---	---	1	3	1	5
9. Collins Pond	---	2	2	8	6	---	18
10. Unity Forge	---	1	1	1	3	---	6
11. Nanicoke Branch	---	---	---	1	8	---	9
12. Bridgeville Branch	---	---	---	2	---	---	2
13. Scotts Corner	---	---	---	7	14	6	27
14. Marshyhope	---	---	---	1	1	1	3
<b>Total</b>	<b>0</b>	<b>4</b> (3.1%)	<b>5</b> (3.9%)	<b>35</b> (27.3%)	<b>71</b> (55.5%)	<b>13</b> (10.2%)	<b>128</b> (100%)

\* Categorized by earliest date of occupation based on documentary and archaeological data.

However, the same categories of significance used for the Route 13 survey (Custer and Bachman 1986a:194) were applied for the assessments herein, and the categories were modified to fit the specific historical conditions of the Sussex East-West Corridor. The categories used to assess significance consisted of:

- 1) **Preservation:** Sites containing well-preserved structural, faunal, floral, or skeletal remains are more significant.
- 2) **Multi-function** (Number and type of outbuildings): Sites exhibiting a range of well-defined activity/functional loci are more significant.
- 3) **Size and Density** (Number and type of archaeological features): Larger sites and those containing dense deposits of material culture are more significant.
- 4) **Duration of Occupation:** Sites exhibiting discrete temporal loci whether in the context of long-term or short-term occupations are more significant.

In addition to the above criteria, there were several project-specific assessments for significance. As with prehistoric sites, any historical archaeological sites that are unplowed were considered to be of high significance. For the later periods of history (1830-1880 and 1880-1940) sites with good levels of documentation (such as photographs, written records, oral

histories, etc.) are considered to be of higher significance because of the multiple levels of data available for site interpretation and the provision of historical context. Sites dating from the earliest periods of historical occupation in the region, specifically from the 1730-1770 and 1770-1830 periods were considered to be of high significance also, because there are relatively few in the project area, and little is presently known about the archaeology of these periods in Sussex County. In the Sussex East-West Corridor study segments, 1730-1770 and 1770-1830 period sites were most common in the Collins Pond, Unity Forge, and Georgetown study areas. All of the sites would require Phase II investigations to determine National Register eligibility, and, depending on the quality and integrity of the archaeological remains, many of the sites would likely require Phase III data recovery excavations.

Historical archaeological sites associated with Sussex County industry, artisans, or technology are considered highly significant. Iron forges, furnaces, blacksmith shops, and button manufactories and other home manufactories all played a crucial and significant role in the development and economic growth of central Sussex County, but such sites have not been archaeologically investigated. The series of historical archaeological sites located in the Collins Pond and Unity Forge segments offer the best opportunities to investigate the early iron industry in Sussex County, not just at iron forges and furnaces, but at the dwellings, tenant houses, and associated agricultural complexes. Such sites would require at least Phase II determination of eligibility investigations, and some, depending on the quality and integrity of the archaeological remains, would require data recovery investigations.

For historical archaeological sites dating to the 1830 to 1880 and 1880 to 1940 periods, sites associated with extant buildings or outbuildings are considered to be more significant, because the architectural resources can provide additional data useful in interpreting the archaeological remains. Oral and documentary records for sites associated with standing structures make the sites more significant because also they provide additional sources of data. Phase II investigations would be required for all of such sites; only those with the best multiple resource bases (architectural, archaeological, oral, documentary, etc.) would be strong candidates for data recovery investigations.

Cemeteries, such as the Collins' family graveyard and the family burial ground identified in the Gravel Hill study segment, are considered highly significant. Family cemeteries, which are fairly common in Sussex County, are best avoided if possible because they would be expensive to excavate, and are socially sensitive. If necessary, cemeteries can provide archaeological data that could be used to address issues of past lifeways, burial practices, medicine, and health. Such information can not generally be gathered from other sources.

## **Future Research Issues**

The issues considered in this section of the report are beyond the scope of the more general management considerations already presented. Preliminary archaeological investigations of selected portions of the Sussex East-West Corridor have provided an opportunity to formulate and refine research questions that could be addressed during future archaeological projects in the region.

Research on prehistoric settlement and adaptation through time could be particularly significant in the Sussex East-West Corridor, because the highway corridor crosses a series of environmental zones in traversing the state. Although the majority of the previously-known and newly-identified sites date to the Woodland I Period, there are several geographic zones where archaeological knowledge of the Woodland I and other periods of prehistory is lacking. For example, the Sussex East-West Corridor survey has provided information on the Mid-peninsular Drainage Divide area that is crucial for understanding the adaptive strategies of social groups during the Paleo-Indian, Archaic, and Woodland I periods. Also, large sites, containing a variety of ceramic wares and lithic artifacts, were found in the drainage divide area during the planning survey, and could be used to study paleoenvironmental change, the lithic and ceramic technologies, subsistence strategies, settlement patterns, and population mobility on the lower Delmarva Peninsula.

In the western portion of the project area, west of Bridgeville and east of Marshyhope Creek, several prehistoric procurement sites were found in association with bay/basin features. Previous studies along the Route 13 (State Route 1) corridor have shown that such Coastal Plain environmental settings were important for human adaptations during the Archaic and Woodland I periods. Archaeological study of the Sussex East-West Corridor could provide further insights into the prehistoric use of bay/basin features and Coastal Plain environments.

The large number of historical archaeological sites identified in the Sussex East-West Corridor significantly increases the information available for historical research. Research focused on the period between 1880 to 1940 can use the data to examine Sussex County farm life at the end of the nineteenth century and beginning of the twentieth century, a period of change and reorganization within the region. The value of the sites, especially those associated with extant buildings and farmsteads, is that they can provide more social, cultural, archaeological, documentary, and oral information about Sussex County, than sites with only archaeological components. A historical context for farms dating from the period 1880 - 1940 has been prepared for New Castle and Kent counties (De Cunzo and Garcia 1992), and a similar plan for Sussex County will be forthcoming. The plan will accommodate the data gathered during the planning survey of the Sussex East-West Corridor.

The archaeological sites dating to the early historical periods can be used to examine the general research questions outlined in the State Plan for historical archaeological resources (De Cunzo and Catts 1990). Research questions aimed at aspects of domestic economy, landscape, social group identity and behavior, and manufacture and trade can be studied at the sites in the Sussex East-West Corridor. For example, the numerous archaeological resources of the Collins Pond setting offer a unique opportunity to investigate the early iron industry in Sussex County, not only from the standpoint of manufacturing, but also its impacts on the surrounding tenant "out plantations", the Collins mansion and farm, the community that grew up around the Pond, and the ways that the iron industry changed the local economy.

The importance of viewing the archaeological resources as not simply isolated sites, but interdependent and interrelated locations or nodal points, can provide researchers with a broader understanding of regional change through time. From this perspective, all of the historical sites in the project area (both standing structures and archaeological sites) can be studied at various levels, from site specific, to community, to local, to regional and national. The relationships between outlying farmsteads and the towns of Bridgeville or Georgetown, or even smaller communities such as Gravel Hill, need to be investigated for archaeologists and other researchers to gain a fuller understanding of the growth and development of the region.

The earlier studies of the Sussex East-West Corridor (Catts, Custer, and Hoseth 1991) suggested that, for the historical period, access to transportation routes, whether water or overland, were crucial considerations in selecting sites for historical occupations. The role of changing methods and routes of transportation in determining settlement and economic development can be addressed by future archaeological studies in the project area. The sites dating to between 1830 and 1880, and between 1880 and 1940 would be especially useful in studying transportation, because the arrival of the railroad provided the catalyst for "truck" farming and market gardening, which in turn spurred the growth of the canning industry in several of the project area's communities. The economic and social effects of these events are incompletely understood, and investigations of archaeological sites from the nineteenth century could provide answers to questions involving material culture.

The important and changing roles that African Americans played in the economic and social development of the Sussex East-West Corridor region could be addressed in future archaeological projects. Long a slave holding region of Delaware, Sussex County had relatively large numbers of both slave and free blacks throughout the eighteenth and nineteenth centuries. In some cases, as in Belltown, free African Americans settled in small communities; in other cases, isolated farmsteads were rented and farmed by slaves or free blacks as tenants. The early iron and logging industries used slaves for labor. The archaeological

remains of the homes and work places of Sussex County's African Americans can provide unique and significant data about the lifeways of this ethnic group -- data that often cannot be gathered from more traditional (e.g., documentary) sources. Indeed, because of the vagaries of written historical sources, the past lives of the average person in Sussex County, whether white, black, or Native American, can often be examined only through archaeological and material culture studies.

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## **APPENDICIES**

**APPENDIX I**  
**EXPLANATION OF SITE NUMBERING SYSTEM**

## APPENDIX I

# Explanation of Site Numbering System

Two numbering systems are used to identify archaeological sites in Delaware. The site number is a variant of the Harvard numbering system with the addition of lettered blocks within each county. The Cultural Resource Survey number is unique to Delaware and is applied to all cultural resources in the state, including prehistoric and historical archaeological sites, and architectural and engineering structures (standing structures).

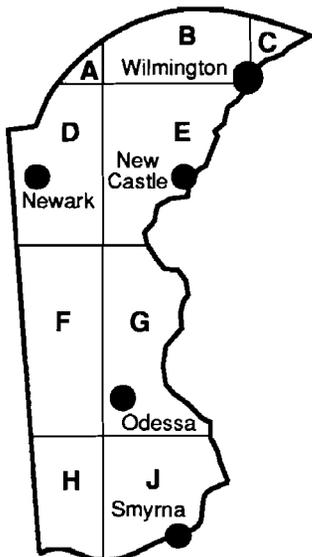
### 7S-F-102

- 7S-F-102 = State Site Number
- 7 = Numerical prefix identifying the state of Delaware
- S = Sussex County; K = Kent County; NC = New Castle County
- F = Each county is divided into lettered divisions; letter F indicates the block in which the site is found in Sussex County, Delaware
- 102 = The 102nd site recorded in block F, Sussex County, Delaware

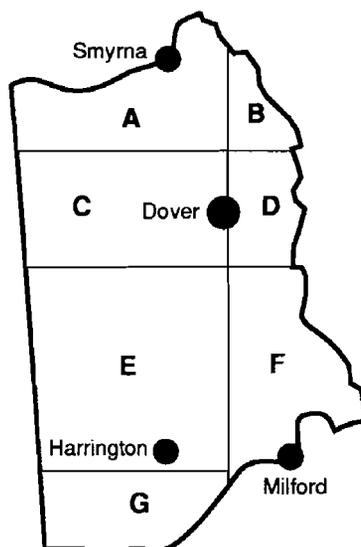
### S-8687

- S-8687 = Cultural Resource Survey Number (CRS number)
- S = Sussex County; K = Kent County; N = New Castle County
- 8687 = The 8687th cultural resource inventoried in Sussex County. Each cultural resource number ties into the aerial photos and management files on repository with the Delaware Division of Historical and Cultural Affairs, Dover, Delaware and/or The Island Field Museum and Research Center, South Bowers, Delaware.

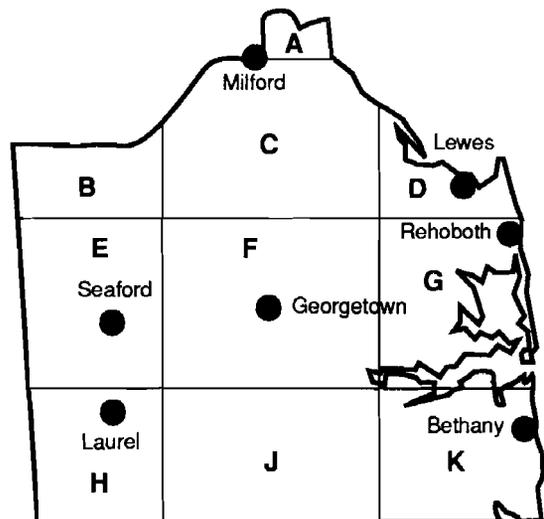
New Castle County -- 7NC



Kent County -- 7K



Sussex County -- 7S



**APPENDIX II**  
**PUBLIC INFORMATION HANDOUT**

APPENDIX II: PUBLIC INFORMATION HANDOUT



STATE OF DELAWARE  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

OFFICE OF THE  
DIRECTOR

P.O. BOX 778  
DOVER, DELAWARE 19903

TELEPHONE: 736-4644

SUSSEX COUNTY PROJECTS  
RTS. 404-18-9  
AND  
DE-MD BEACH ACCESS ROUTE  
CULTURAL RESOURCES PLANNING



A historic and prehistoric cultural resource planning survey is being conducted by the Delaware Department of Transportation, Division of Highways, and the Federal Highway Administration in conjunction with the University of Delaware, Center for Archaeological Research. The planning is necessitated by the above mentioned projects in Sussex County.

The Route 404 corridor study area (approximately 5 miles N-S by 30 miles E-W) traverses some of the oldest and most important prehistoric and historic settlement areas in the State of Delaware. The earliest known prehistoric peoples lived during the **Paleo-Indian Period**, from about 12,000 B.C. - 6500 B.C. This period overlapped and immediately followed the last great glaciation of North America. These peoples probably lived a nomadic existence, collecting wild vegetal foods and hunting now extinct large game animals such as bison, mastadons, sloths, etc. The project area contains no known sites from this period, but they have been found nearby and may be located during the survey.

The **Archaic Period** (6500 B.C. - 3000 B.C.) saw the establishment of oak and hemlock forests over the landscape, with the peoples adapting to present day plant and animal forms. The adaptation was one of a more generalized hunting and gathering pattern in which plant food resources would have played an increasingly important role. The settlement pattern consisted of large base camps and outlying hunting sites, reflective of a social organization characterized by the seasonal waxing and waning of band groups. Archaic Period sites in the project area include major base camps and hunting and gathering sites.

## APPENDIX II: PUBLIC INFORMATION HANDOUT (Continued)

The Woodland I Period (3000 B.C. - A.D. 1000) saw a flourishing of tool types and a large increase in the number of known sites within the project area. In addition, large sedentary base camps were established, such as the Robbins Farm, Barker's Landing, and Coverdale sites in southern Kent County, and the Hell Island site near Odessa. The intensive harvesting of wild plant foods that may have approached the efficiency of agriculture, and the introduction of broadbladed, knife-like chipped stone tools were important developments during this period. Also seen was the addition of stone, and later ceramic, containers, which allowed for the efficient cooking and storing of foods. Major trade networks are evident from the presence of exotic raw materials utilized for the manufacture of utilitarian and ceremonial objects.

The Woodland II Period (A.D. 1000 -A.D. 1650) contains many similar resource procurement methods and the large base camp settlement system of the Woodland I Period. However, there was an increasing reliance on plant foods and coastal resources, such as shellfish. Social organization changes were evidenced by a collapse of the trade and exchange networks and the end of elaborate cemeteries.

The Contact Period (A.D. 1650 - A.D. 1750) is that period when European settlers entered the area and first made contact with the native peoples. These sites are characterized by a mixing of Indian and European lifeways and artifacts and have much to tell about the acculturation process experienced by the Indians. Unfortunately, no documented Contact Period sites have ever been found in Delaware, although they have been found in Pennsylvania and other surrounding states.

The Historic Period, although only about 350 years in length, is equally as complex. The first permanent settlement in Delaware was the Dutch settlement of Zwaanendael, established as a whaling colony near present-day Lewes in 1629. However, relatively little settlement took place in the project area for the remainder of the seventeenth century. The land was sparsely settled, with scattered subsistence farms and logging, milling, and fur trading operations along the principal water courses, which were the major transportation routes.

The Delmarva Peninsula has long been primarily an agricultural region and its historic development is closely tied to farming practices. When William Penn assumed proprietary rights over the "three colonies on the Delaware" in 1682, settlement was strongly encouraged through the granting of land patents. Most prime agricultural land along the principal transportation routes (navigable streams and a few early cart roads) were occupied by the middle of the 18th century. Also at this time, many marshes were drained to provide for more farmland.

## APPENDIX II: PUBLIC INFORMATION HANDOUT (Continued)

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Most early farm production was of a "subsistence" nature, where products were grown and consumed at the same location. However, toward the end of the 18th century, wheat and timber came to be grown as "cash" crops.

The first three-quarters of the 19th century saw tremendous expansion and development on the Delmarva Peninsula. The increasing demand of large, domestic markets for the agricultural products of the hinterland and the establishment of reliable transportation facilities, including the construction of turnpikes, cartroads, canal and railroad lines, spurred the development and productivity of the "spine" of the Peninsula. The pattern of dispersed farmsteads continued, but extensive local road systems connected farmsteads to transport facilities and towns. Wheat and peaches were the market-oriented crops and many of the wealthy peach growers mansions still stand in the project area.

The late 19th century was characterized by a solidification of previous land use patterns, with small but steady growth in the agrarian towns accompanied by the introduction of light manufacturing, such as tanneries and carriage makers. Also notable within the project area was the growth of numerous black communities. Major technological developments, including advances in agricultural machinery, home construction techniques, and the introduction of gas, electricity, central heat, and indoor plumbing, profoundly affected the lifeways of the time.

The 20th century has seen the shift away from wheat and peaches to the production of soybeans and feed corn to support the lower Delmarva chicken industry. The small farming communities lost their economic importance as storage and redistribution facilities, businesses, and service providers became concentrated in the major population centers outside the project area. New homes were constructed in once predominantly rural areas and new commercial-industrial-service employers supplied jobs to the growing non-agricultural suburban populations.

The systematic survey of the study area is designed to gather information on patterns of prehistoric and historic occupation. The study area encompasses diverse environmental zones and should yield significant new data on a variety of past Delaware lifeways through time as well as refining the concepts of prehistoric and historic cultural development outlined above.

If you request any further information or particulars concerning this cultural resource project, please contact Kevin Cunningham, DelDOT Archeologist at 736-4644 or Jay Custer, Assistant Professor of Anthropology, University of Delaware at 451-2821.

**APPENDIX II: PUBLIC INFORMATION HANDOUT (Continued)**

OFFICE OF THE  
DIRECTOR

**STATE OF DELAWARE  
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P.O. Box 778  
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**SUSSEX COUNTY CORRIDOR STUDIES**

**ARCHAEOLOGY FROM 900 KILOMETERS UP IN THE SKY**

Most people associate archaeology with excavations below the earth's surface, but new research by the Delaware Department of Transportation and the University of Delaware Center for Archaeological Research has found ways to use satellites circling the earth at an altitude of more than 900 kilometers to look for prehistoric archaeological sites. Archaeologists have used aerial photographs to look for ruins, mounds, and other signs of prehistoric archaeological sites since the 1920s when Charles Lindberg photographed many Indians of the Southwestern United States. However, use of satellite imagery is a new application in archaeology.

The Delaware Department of Transportation's interest in applying satellite technology to archaeology began when it was faced with the planning and development of a large highway corridor which traversed an area known to have a high potential for prehistoric archaeological sites. In order to minimize the impact of the highway on prehistoric archaeological sites and to minimize excavation and mitigation costs, it was necessary to develop accurate predictions of archaeological sites. These predictions would then be used to guide highway design studies.

## APPENDIX II: PUBLIC INFORMATION HANDOUT (Continued)

Over the past few years, the University of Delaware Center for Archaeological Research had been studying applications of LANDSAT satellite data to archaeological survey techniques. The LANDSAT satellite circles the earth at an altitude of 900 kilometers and records various types of energy reflected from the earth's surface. The data recorded by LANDSAT can then be used to map out various types of environments. In Delaware, LANDSAT data have been used to map out various types of marshes, woodlands, and soil types.

LANDSAT data can then be applied to archaeology by correlating the environments mapped by LANDSAT with known archaeological site locations. After patterns of association between site locations and environments mapped by LANDSAT are noted, other similar environmental zones with high potential for archaeological sites can be noted. Research at the University of Delaware Center for Archaeological Research developed the computer programs needed to analyze the LANDSAT and archaeological data and to map out areas with high probabilities of archaeological site locations.



Delaware Department of Transportation

**APPENDIX III**

**GLOSSARY**

## APPENDIX III

### GLOSSARY

**Aquatic** - Of, or in water; living or growing in water.

**Archaeology** - The study of the people of the past through the recovery and analysis of the artifacts and other material left behind and context of the finds.

**Artifact** - Any object shaped or modified by humans, or as a result of human activity.

**Assemblage** - The contemporaneous objects and associations found at an archaeological site.

**Band-level organization** - Small, confederations of family groups who subsist by hunting and gathering. Bands do not usually have a formal political organization, and their composition is often fluid, or seasonal.

**Base camp** - A prehistoric, hunter-gatherer dwelling site from which resource procurement forays are made.

**Bay/basin feature** - Also known as whale wallows, these shallow ponds, thought to have been formed at the end of the Pleistocene, were favored locations for prehistoric settlement.

**Biface** - A stone tool that has been flaked on both sides.

**Boreal** - Northern forests and tundra.

**Brackish** - Slightly salty; a mixture of fresh and sea water as in an estuary.

**Chalcedony** - Cryptocrystalline quartz or chert; for example, agate.

**Cobble** - A water-worn, or rounded stone, frequently used as raw material for stone tool manufacture by prehistoric people.

**Component** - The occupation of an archaeological site that dates to a particular time period in the past; for example, the Archaic component.

**Core** - A piece of stone from which other pieces of stone are flaked off to make artifacts.

**Cortex** - The weathered exterior of a piece of lithic material, may be either vein or water-worn cortex.

**Culture** - The non-biological mechanism of human adaptation, and rules, traditions, and customs of a particular society.

## GLOSSARY (continued)

- Cultural resources** - Prehistoric or historical structures, archaeological sites, places, or other evidence or material relating to human cultural activities.
- Data recovery investigations** - Excavation to recover the artifacts and record the features and context of cultural material on an archaeological site. The archaeological data are, thus, preserved for the future.
- Deciduous** - Leaf-bearing trees that shed in autumn.
- Diagnostic** - Artifacts with traits that are distinctive of a particular time period.
- Biface discard** - A biface that was used in the early stages of manufacture and then discarded before being more finely finished.
- Early stage biface reject** - A biface that never passed beyond the initial steps of stone tool production due either to flaws in the raw material or manufacturing errors.
- Ecotone** - The transition zone between ecological communities; for example, the border between grassland and forest.
- Edaphic factors** - Environmental factors due to the physical, chemical, and biological characteristics of the soil.
- Estuary** - A semi-enclosed body of water where fresh and salt water mix due to the action of currents and tides.
- Estuarine** - Of, or pertaining to an estuary.
- Extant** - Still in existence.
- Fallow Field** - A plowed but unplanted field.
- Feature** - Any soil disturbance or discoloration that reflects human activity or an artifact that is too large remove from an archaeological site; for example, a house, storage pits, or fire place. A feature may also be a very dense cluster of artifacts; for example, a lithic chipping feature.
- Fire-cracked Rock** - A rock that has fractured and/or discolored due to exposure to heat.
- Flake** - A piece of waste material produced during the manufacture of stone tools.
- Flake tool** - A flake that has been modified for use as a tool by the removal of very small flakes along one or more edge.
- Fluvial** - Produced by the action of flowing water.

## GLOSSARY (continued)

- Formation** - A distinctive unit of rock or sediment, often named by the geologist that first describes it, e.g., the Columbia Formation.
- Gallery forest** - A forest made up of large mature trees, with little underbrush and scrub vegetation.
- Hammerstone** - A rounded stone to be used as a hammer. Sometimes grooved for hafting to a handle. Usually ungrooved, however, it has a variety of forms ranging from a crudely shaped sphere to a finely ground ovoid with a battered end.
- Historical** - The time period after the appearance of written records. In the New World, historical generally refers to the time after the beginning of European settlement at approximately A.D. 1600.
- Historical archaeology** - The study of material culture in an historical perspective.
- Holocene** - The latest epoch of the Quaternary geological period, that began 10,000 B.P. The Holocene epoch is preceded by the Pleistocene epoch and includes the present.
- Hundred** - A subdivision of some English and American counties.
- Hydrophytic** - A plant that grows in, and is adapted to, an aquatic or very wet environment.
- I-house** - A form of dwelling that is two rooms wide and one room deep, and two to two and one-half stories high.
- In situ** - In the original place of deposition.
- Jasper** - Impure, slightly translucent cryptocrystalline quartz. Often red, brown, or green in color.
- Late stage biface reject** - A biface which was either broken during the later stages of manufacture, or which had been reduced improperly, so that further reduction would not produce a usable tool.
- Lithic** - Pertaining to, or consisting of stone.
- Loam** - A loose soil composed of roughly equal parts of silt, clay, and sand, often containing organic matter, as well. Usually very fertile and conducive to plant growth.
- Locus** - A defined archaeological site or testing location.

## GLOSSARY (continued)

- Macro-band base camp** - For a hunter-gatherer society, an archaeological site one hectare or larger in area characterized by a wide variety of tool types, abundant ceramics, semi-subterranean house structures, storage pit features, and abundant debitage from tool manufacture and reduction.
- Material culture** - That segment of the human physical environment that is purposely shaped according to cultural dictates.
- Mean occupation date** - A date obtained from the study of historic ceramics recovered from a site that approximates the median occupation date of the site.
- Megafauna** - Large extinct mammals, including mammoths and mastodons, that lived during the last ice age.
- Mesic forest** - A forest of trees adapted to relatively, wet conditions and a mild climate.
- Mesophytic** - Plants adapted to mesic (mild) conditions of climate and moisture.
- Micro-band** - A component of macro-band, perhaps one or two extended families, that periodically operates independently of the macro-band group.
- Mitigate** - To take care of (through data recovery investigations), or lessen the impacts of construction on cultural resources.
- Mitigation** - In archaeology, refers to minimizing the destruction or disturbance of an archaeological site by a construction project, erosion, farming practices or the like, through excavation of the site and recovery of the information about past life that it contains.
- Orphans Court records** - The County Court responsible for the welfare of orphans when a father died without a will. The Orphans Court watched over the estate until the children came of age. A guardian for the estate was appointed by the Court. When the youngest heir came of age, then the property could be divided among the heirs. The court records are filled with information on income, property, education, repairs of houses and outbuildings, contracts, and other useful material about eighteenth and nineteenth century life.
- Outbuilding** - A building other than the principal building on a property; for example, on an eighteenth or nineteenth century Delaware farm: smokehouses, dairies, stables, and corn-cribs were typical outbuildings.

## GLOSSARY (continued)

- Paleoenvironment** - An environment of the past (which may have no modern analog).
- Pedestrian survey** - The walking and collecting of an archaeological site without the excavation of subsurface units.
- Phase I** - Archaeological research to determine the presence or absence of sites.
- Phase II** - Further archaeological investigation of a site to define its limits and condition, and to determine the site's eligibility for the National Register of Historic Places.
- Phase III** - See **Data recovery investigations** and **Mitigation**.
- Physiographic zone** - Regions or areas that are characterized by a particular geography, geology, and topography.
- Pleistocene** - One of two divisions of the Quaternary geological period, which began 1.6 million years ago. The Pleistocene is characterized by the "Ice Ages" in which large ice sheets covered high latitudes of the earth. Followed by the Holocene epoch.
- Plow zone** - In a plowed field, the upper layer of organic soil which is continually reworked by plowing. In the Middle Atlantic region, plow zones are about 8-12 inches thick.
- Prehistoric** - The time before the appearance of written records. In the New World prehistoric generally refers to indigenous, non-European societies.
- Procurement site** - A place that is visited because there is a particular item to acquire in the vicinity; i.e., lithic outcrops.
- Projectile point** - Strictly speaking, a biface attached to the head of an airborne item of weaponry, like an arrow or a thrown dart. In general usage, refers to any biface.
- Rejects** - Stone tools which have been thrown away due to manufacturing or material flaws.
- Riverine** - Of, or pertaining to a river.
- Scraper** - A form of unifacial stone tool with a steep convex edge used for scraping the flesh from hides, and other such activities.
- Sediment** - Particles of rock and mineral material laid down through the action of wind and water.

## GLOSSARY (continued)

- Shatter** - Small random pieces of stone produced during stone tool making.
- Sherd** - A piece of broken pottery.
- Shovel test pit** - A test hole, about two shovel blades in diameter, excavated to investigate the nature of subsurface deposits, and establish the presence or absence of buried cultural material or artifacts. Shovel test pits are often excavated where ground visibility is low.
- Site** - A place with evidence of human occupation.
- Stemmed point** - A projectile point that has an obvious hafting element for attachment to a shaft.
- Subsoil** - Sterile, naturally occurring soils, or sediments, not changed by human occupation.
- Surface collection** - Collecting artifacts seen on the surface of the ground, such as in an open or plowed field.
- Susquehannock Indians** - Iroquoian people living along the lower reaches of the Susquehanna River during the Woodland II and Contact periods.
- Tool kit** - A collection of artifacts interpreted as being designed for a specific task.
- Topography** - The surface physical features and configuration of land.
- Utilized flake** - A waste flake from stone tool manufacture used, without modification, as a tool for cutting or scraping. Utilization often damages the sharp edges of a flake.
- Wetland** - Marshes, swamps, bogs, or other wet ecosystems characterized by plants adapted to growth in saturated soils or standing water.
- Xeric forest** - A forest characterized by plants adapted to dry conditions, such as grasslands and forests of oak and hickory.