

## IX. EVALUATION OF INVENTORIED HISTORICAL ARCHAEOLOGICAL RESOURCES ASSOCIATED WITH THE HISTORIC CONTEXT

Cultural resource surveys of proposed federally funded or licensed construction project areas (mostly road and highway construction), of Delaware's state parks, and of portions of the St. Jones River drainage have located virtually all the inventoried archaeological sites of New Castle and Kent county farms, tenant farms, and farm laborer houses dating between 1830 and 1940. In addition to the twelve data recovery investigations discussed separately (see V. D. HISTORIC CONTEXT NARRATIVE: Contributions of Previous Archaeological Research on Farmsteads, 1830-1940; VII. ARCHAEOLOGICAL RESEARCH QUESTIONS: Previous; VIII. CRITERIA FOR EVALUATION OF ARCHAEOLOGICAL RESOURCES), Planning and Management studies, Phase I surveys (location and identification of sites), and Phase II surveys (determination of sites' boundaries and National Register eligibility) comprise these cultural resource studies. (Appendix 2 contains the abstracts of these studies.)

Fourteen Planning and Management studies in the two counties (Table 83) provide background historical research on the study area, analyze, and often evaluate known and potential historical archaeological sites. In the cases of the state parks studies, select Phase I surveys were also completed (Blume, Clark, and Dunn 1990; Wise 1983, 1984, 1985, 1986, 1987). Though comparatively few in number, these studies have covered large areas of Delaware's northern counties. In particular, the Planning and Management studies of the initial Route 13 By-Pass project area (Custer et al. 1984) and of the Route 301 project area (Kellogg 1992) have examined portions of White Clay Creek, New Castle, Pencader, Red Lion, St. Georges, Appoquinimink, Blackbird, Kenton, Duck Creek, Little Creek, East Dover, West Dover, and North Murderkill hundreds (Figure 3). These studies are significant for several reasons, and are discussed in greater depth below. For the purposes of this context, their most important contribution consists in their consideration of inventoried historic buildings and of potential historical archaeological sites identified through documentary research in addition to previously inventoried historical archaeological sites.

The 29 Phase I cultural resource surveys that located historical archaeological sites associated with this historic context (Table 83) include those completed subsequent to the Planning and Management Study of the Route 13 By-Pass project area (Bachman, Grettler, and Custer 1988; Custer and Bachman 1986; Custer, Bachman, and Grettler 1986; Hodny, Bachman, and Custer 1989). Overall, archaeologists have completed more than twice the number of Phase I surveys in New Castle County than have been undertaken in Kent County. They cluster principally in the western Piedmont and in a band between the Route 95, northern Route 13, and Route 2 corridors in the northern Upper Peninsula, areas of intense

TABLE 83

SURVEY PROJECT AREAS, HISTORICAL ARCHAEOLOGICAL RESOURCES,  
NEW CASTLE AND KENT COUNTIES

NEW CASTLE COUNTY

NUMBER OF PROJECT AREAS

<u>GEOGRAPHICAL ZONE</u>	<u>PLANNING/ MANAGEMENT STUDIES</u>	<u>PHASE I - LOCATION</u>	<u>PHASE II - EVALUATION</u>
PIEDMONT	6	12	7
UPPER PENINSULA	2	13	10
COASTAL	1	1	1
TOTAL	9	26	18

KENT COUNTY

NUMBER OF PROJECT AREAS

<u>GEOGRAPHICAL ZONE</u>	<u>PLANNING/ MANAGEMENT STUDIES</u>	<u>PHASE I - LOCATION</u>	<u>PHASE II - EVALUATION</u>
UPPER PENINSULA	4	8	6
LOWER PENINSULA	0	1	1
COASTAL	1	3	1
TOTAL	5	12	8

NOTES: Project Areas Counted Twice (Extended into more than one County/Geographical Zone):

Coleman et al. 1988, Custer et al. 1984,  
Grettler et al. 1991, Varisco & Custer 1992,  
St. Jones River Survey, Custer et. al. 1980,  
Basalik et. al 1987, Barse 1985, Dunn 1979.

Project Areas with Phase I Survey Incomplete:  
Custer and Bachman 1986, Custer, Bachman &  
Grettler 1986, Rappleye & Gardner 1978,  
Varisco & Custer 1992, Blume 1990, Wise 1986,  
Wise 1985, Wise 1984, Wise 1983.

Coastal Zone includes Urban Zone (Wilmington)

development in the past decade and thus the subject of numerous road improvement projects (see U. S. G. S. topographic maps).

In addition to these 29 Phase I surveys, seven others, all but one in New Castle County, located no archaeological sites associated with this historic context (Table 84). That one-half of these surveyed areas lay in the City of Wilmington further points up the ubiquity of archaeological sites formerly the location of nineteenth and early twentieth-century farms, tenant farms, and farm worker housing.

Twenty-two reported Phase II cultural resource surveys have tested and evaluated sites located by the Phase I surveys (Table 83). More than one-half of these have studied project areas in the Upper Peninsula, mostly in New Castle County. (See also VIII. **CRITERIA FOR EVALUATION OF ARCHAEOLOGICAL RESOURCES** for further discussion of these projects).

These cultural resource surveys and a few other studies have to date identified 234 archaeological agricultural sites in New Castle and Kent counties occupied between 1830 and 1940, based on the inventory files of the Delaware State Historic Preservation Office (see Appendix 1). This total does not include the archaeological remains potentially associated with inventoried (or not yet inventoried) standing buildings; it includes only those sites with identified archaeological components associated with this historic context.

Almost two-thirds of these archaeological sites lie in the Upper Peninsula Zone (145 or 62%), with another one-quarter in the Coastal Zone (63 or 27%), and the remaining 11% in the Piedmont (26). No archaeological sites associated with this historic context have yet been located in the Lower Peninsula in Mispillion Hundred, Kent County. Nevertheless, just over one-half (53.4%) of the sites are in Kent County (Table 85).

A total of 63 sites in New Castle and Kent counties have been subject to either Phase I, II, or III levels of investigation (Table 86). The majority of these lie in Blocks D, E, and J in New Castle County, reflecting the concentration of highway improvement projects undertaken by DelDOT in these areas. Considerably smaller numbers of sites (only 19% of the total) associated with this historic context have been excavated in Kent County.

In New Castle County, 57% of the sites subjected to some level of subsurface examination have been only surface collected (or 29 of 51) (Table 86). These are distributed fairly evenly across the county. In Kent County, however, 68 sites have been surface collected only (and most in Blocks D and F), or 5.7 times the number that have been excavated. The St. Jones River Survey, which consisted only of surface collecting plowed fields, accounts for this difference in site treatment between the two counties.

TABLE 84

PHASE I SURVEY PROJECT AREAS, NEW CASTLE AND KENT COUNTIES  
 1) LOCATED ARCHAEOLOGICAL SITES ASSOCIATED WITH HISTORIC  
 CONTEXT, AGRICULTURE AND FARM LIFE, 1830-1940  
 2) LOCATED NO ARCHAEOLOGICAL SITES ASSOCIATED WITH HISTORIC  
 CONTEXT, AGRICULTURE AND FARM LIFE, 1830-1940

NEW CASTLE COUNTY

PHASE I SURVEYS

<u>GEOGRAPHICAL ZONE</u>	<u>LOCATED SITES</u>		<u>LOCATED NO SITES</u>		<u>TOTAL</u>
PIEDMONT	12	(92.3%)	1	( 0.7%)	13
UPPER PENINSULA	13	(86.7%)	2	(13.3%)	15
COASTAL	1	(25.0%)	3	(75.0%)	4
TOTAL	26		6		32

KENT COUNTY

PHASE I SURVEYS

<u>GEOGRAPHICAL ZONE</u>	<u>LOCATED SITES</u>		<u>LOCATED NO SITES</u>		<u>TOTAL</u>
UPPER PENINSULA	8	(88.9%)	1	(11.1%)	9
LOWER PENINSULA	1	(100.0%)	0	( 0.0%)	1
COASTAL	3	(100.0%)	0	( 0.0%)	3
TOTAL	12		1		13

NOTES: AS TABLE 83

TABLE 85

GEOGRAPHICAL LOCATIONS OF AGRICULTURAL SITES,  
NEW CASTLE AND KENT COUNTIES, 1830-1940

<u>COUNTY</u>	<u>GEOGRAPHICAL ZONE</u>	<u>NUMBER OF SITES</u>	<u>PERCENT OF TOTAL</u>
NEW CASTLE	PIEDMONT	26	23.9
	UPPER PENINSULA	82	75.2
	COASTAL/URBAN	<u>1</u>	<u>0.9</u>
	TOTAL	109	100.0
KENT	UPPER PENINSULA	63	50.4
	LOWER PENINSULA	0	0.0
	COASTAL/URBAN	<u>62</u>	<u>49.6</u>
	TOTAL	125	100.0

GRAND TOTALS BY:

<u>GEOGRAPHICAL ZONE</u>	<u>NUMBER OF SITES</u>	<u>PERCENT</u>
PIEDMONT	26	11.1
UPPER PENINSULA	145	62.0
LOWER PENINSULA	0	0.0
COASTAL/URBAN	<u>63</u>	<u>26.9</u>
GRAND TOTAL	234	100.0

TABLE 86

LEVELS OF SITE TREATMENT, AGRICULTURAL SITES,  
NEW CASTLE AND KENT COUNTIES, 1830-1940

NEW CASTLE COUNTY

<u>BLOCK</u>	<u>EXCAVATED</u>	<u>SURFACE COLLECTED</u>	<u>COLLECTED</u>	<u>NOT EXCAVATED</u>	<u>REMOTE SENSING</u>
A	4	4	-----	-----	-----
B	5	4	-----	-----	-----
C	-----	-----	-----	-----	-----
D	17	4	-----	3	-----
E	11	3	-----	2	-----
F	2	1	-----	1	-----
G	3	5	-----	2	-----
H	1	4	-----	-----	-----
J	8	8	-----	-----	-----
<b>TOTAL</b>	<b>51</b>	<b>29</b>	<b>0</b>	<b>8</b>	<b>0 = 88</b>

KENT COUNTY

<u>BLOCK</u>	<u>EXCAVATED</u>	<u>SURFACE COLLECTED</u>	<u>COLLECTED</u>	<u>NOT EXCAVATED</u>	<u>REMOTE SENSING</u>
A	6	-----	-----	-----	-----
B	-----	3	-----	7	-----
C	4	8	1	-----	-----
D	1	30	-----	-----	1
E	-----	-----	-----	-----	-----
F	1	27	-----	2	-----
G	-----	-----	-----	-----	-----
<b>TOTAL</b>	<b>12</b>	<b>68</b>	<b>1</b>	<b>9</b>	<b>1 = 91</b>
<b>GRAND TOTAL</b>	<b>63</b>	<b>97</b>	<b>1</b>	<b>17</b>	<b>1 = 179</b>

NOTE: With the exception of the John Dickinson Plantation site, where remote sensing techniques were employed in conjunction with excavation, sites are counted here only once. Each site has been counted in the category of its "highest" level of site treatment, e.g., if a site has been both surface collected and excavate, it is only counted as "Excavated".

Only one site in Kent County has produced an assemblage collected through unknown methods (Table 86). Sites in the 'Not Excavated' category have been identified but have not yet been the subject of further archaeological investigations. Historical archaeologists working on land sites in New Castle and Kent counties have not employed remote sensing techniques to locate sites, although such techniques were used at the John Dickinson Plantation to locate archaeological resources and features within the larger site. Finally, the level of site treatment remains unknown for 56, or 24%, of the inventoried archaeological sites associated with this historic context.

The inventoried archaeological sites have been arranged into property types following those defined in the **Comprehensive Historic Preservation Plan** (Ames et al. 1989), adapted following Delaware State Historic Preservation Office guidelines. These same property types are employed in the **Management Plan for Delaware's Historical Archaeological Resources** (De Cunzo and Catts 1990), and do not correspond to the new property types proposed in VI. **Proposed Archaeological Property Types**. Five archaeological property types have been included in the data base of identified archaeological sites associated with this historic context: agricultural complexes, tenancies, dwellings (these may include the homes of Delawareans engaged in agriculture), residential tenancies (these may also include the homes of agricultural workers), and unknown (these sites date to the historic context time period, and until their function is known, they will be considered potentially associated with this historic context) (Table 87 and Appendix 1). These unknown sites include 81 or 65% of those located in Kent County. Again, these represent sites located during the St. Jones River Survey that yielded collections dating from the 1830-1940 period. Agricultural complexes account for over 42% of the sites in the two counties together, and over 52% in New Castle County. These presumably represent owner-occupied farms. Based on the results of the Agricultural Tenancy Historic Context research (Siders et al. 1991) and of several historical archaeological investigations of such sites, however, many likely housed tenant farmers during at least a portion of their history. The result is a probable underrepresentation of Tenancy sites in the current data base.

The current level of site condition constitutes one of the most incomplete data sets in the site inventory data base (Table 88). The current condition of over one-half (52.3% or 122) of the sites remains uncertain. Almost three-quarters of these (72% or 88) are in Kent County, mostly in Blocks C, D, and F, in areas covered by the St. Jones River Survey. Construction and other activities have definitely destroyed only 15% of the 234 sites since their recordation, three-fourths of these in New Castle County. Many of those recorded as 'Extant but Threatened' in addition to many of the 'Unknown' sites may have since been

TABLE 87

PROPERTY TYPES, AGRICULTURAL SITES,  
NEW CASTLE AND KENT COUNTIES, 1830-1940

<u>PROPERTY TYPE</u>	<u>NEW CASTLE</u>	<u>KENT</u>	<u>TOTAL</u>
AGRICULTURAL COMPLEX	57 (52.8%)	42 (33.6%)	99 (42.3%)
TENANCY	11 (10.2%)	1 ( 0.8%)	12 ( 5.1%)
DWELLING (POSSIBLY AGRICULTURAL)	14 (13.0%)	1 ( 0.8%)	15 ( 6.4%)
RESIDENTIAL TENANT (POSSIBLY AGRICULTURAL)	2 ( 1.8%)	0 (0.0%)	2 ( 0.9%)
UNKNOWN (POSSIBLY AGRICULTURAL)	25 (22.2%)	81 (64.8%)	105 (45.3%)
TOTAL	109 (100.0%)	125 (100.0%)	234 (100.0%)

TABLE 88  
 SITE CONDITIONS,  
 AGRICULTURAL SITES, NEW CASTLE AND KENT COUNTIES,  
 1830-1940

NEW CASTLE COUNTY

<u>BLOCK</u>	<u>DESTROYED</u>	<u>PRESERVED NOT THREATENED</u>	<u>UNKNOWN</u>	<u>EXTANT BUT THREATENED</u>
A	3	0	0	1
B	1	4	2	3
C	0	0	0	0
D	10	8	2	6
E	10	2	11	3
F	1	2	1	1
G	0	1	10	0
H	0	4	3	1
J	1	10	6	3
<b>TOTAL</b>	<b>26</b>	<b>31</b>	<b>35</b>	<b>18</b>

KENT COUNTY

<u>BLOCK</u>	<u>DESTROYED</u>	<u>PRESERVED NOT THREATENED</u>	<u>UNKNOWN</u>	<u>EXTANT BUT THREATENED</u>
A	3	2	3	2
B	0	8	2	0
C	0	3	15	7
D	2	1	34	0
E	0	0	6	0
F	3	5	26	0
G	0	0	2	0
<b>TOTAL</b>	<b>8</b>	<b>19</b>	<b>88</b>	<b>9</b>

<b>GRAND TOTAL</b>	<b>34</b>	<b>50</b>	<b>123</b>	<b>27</b>
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destroyed also. Less than one-quarter of the sites are apparently not threatened; these are mostly those located in Delaware's state parks.

Of the 109 archaeological sites associated with this historic context in New Castle County, the occupation of most spans portions of both the context's time periods, 1830-1880 and 1880-1940 (Table 89). A distinct bias appears against late nineteenth and twentieth-century sites, however, as only three of the recorded New Castle County sites were originally occupied after 1880. In addition, only a small number (5) represent short term occupations in the early, 1830-1880 period. A substantial number, in comparison, housed farmers, tenants, or farm laborers for long periods. Twelve percent had been occupied originally between 1730 and 1770.

A slightly different pattern emerges in the Kent County data (Table 89). There, only 13% (16) of the sites' dates span parts of both time periods. As in New Castle County, however, late period sites have been consistently underrecorded. Only one site originally occupied after 1880 has been inventoried in Kent County. Further, an even smaller number (2) than in New Castle County represent short term occupations in the 1830-1880 period. Larger numbers, in contrast, first housed farmers, tenants, or their laborers beginning before 1830: 52 (41.6%) between 1770 and 1830, 24 (19.2%) between 1730 and 1770, and one before 1730.

Overall, the inventoried historical archaeological sites associated with this historic context represent a distinct bias in survey and recording. First, the State Historic Preservation Office, following National Park Service guidelines, includes inventoried standing buildings in the archaeological site inventory only when the presence of associated archaeological remains has been demonstrated. Furthermore, many of the sites identified and subsequently excavated were treated directly in response to transportation and development pressures, and not as part of an overall survey or research plan. This lack of an all-encompassing plan to guide site identification, evaluation, and treatment has resulted in an imbalance in the sites identified. The locations of known sites tend to cluster in areas of intense development activities, and few sites have been inventoried on less pressured lands. Even here, representation is biased towards highway corridor and sewer line locations, where Federal laws require cultural resource surveys, while private development of adjacent lands proceeds with little or no consideration given to cultural resources, especially archaeological sites. The River Surveys and the surveys of state park lands form important exceptions that warrant continuation and extension. Finally, the State inventory itself requires updating to include information about current site conditions (see also De Cunzo and Catts 1990: 118).

TABLE 89

DATE RANGES, AGRICULTURAL SITES,  
NEW CASTLE AND KENT COUNTIES,  
1830-1940

NEW CASTLE COUNTY

<u>DATE RANGE</u>	<u>NUMBER OF SITES</u>
A,B,C,D (1630-1880)	0
<u>A,B,C,D,E (1630-1940)</u>	<u>1</u>
TOTAL	1
B,C,D (1730-1880)	1
<u>B,C,D,E (1730-1940)</u>	<u>12</u>
TOTAL	13
C,D (1770-1880)	3
<u>C,D,E (1770-1940)</u>	<u>23</u>
TOTAL	26
D (1830-1880)	5
<u>D,E (1830-1940)</u>	<u>33</u>
TOTAL	38
E (1880-1940)	3
? (UNKNOWN)	28
=====	
GRAND TOTAL	109

KENT COUNTY

<u>DATE RANGE</u>	<u>NUMBER OF SITES</u>
A,B,C,D (1630-1880)	0
<u>A,B,C,D,E (1630-1940)</u>	<u>1</u>
TOTAL	1
B,C,D (1730-1880)	11
<u>B,C,D,E (1730-1940)</u>	<u>13</u>
TOTAL	24
C,D (1770-1880)	20
<u>C,D,E (1770-1940)</u>	<u>32</u>
TOTAL	52
D (1830-1880)	2
<u>D,E (1830-1940)</u>	<u>16</u>
TOTAL	18
E (1880-1940)	1
? (UNKNOWN)	29
=====	
GRAND TOTAL	125

As discussed at other points in this document, research in two large highway project study areas in New Castle and Kent counties has begun to redress the bias in the State archaeological site inventory caused by the exclusion of standing buildings and documented site locations that have not been tested for the presence of archaeological remains. The **Cultural Resources Reconnaissance Planning Study of the Proposed Route 13 Relief Corridor** (Custer et al. 1984) documented 1,183 potential historical archaeological sites in the corridor occupied between 1803 and 1950 that represented property types associated with this historic context: Agricultural Complexes (Peaches), Agricultural Estates, Agricultural Tenant Dwellings/ Farms, Slave Quarters, Migrant Worker Houses, Agricultural Complexes, Agricultural Outbuildings, and Agricultural and Mill Complexes (Figure 3 and Table 80). This compares to only 234 inventoried historical archaeological sites for all of both counties as of 1992; the initial Route 13 study dates to 1983-1984. This study of only selected portions of New Castle and Kent counties thus identified five times more potential archaeological sites associated with this historic context (with the exception that the time period extends back to 1803 and forward to 1950) than are currently listed in the State inventory. The researchers compiled this data base from several sources: the existing (as of 1983) inventory of standing buildings in the State Historic Preservation Office, the existing (as of 1983) inventory of historical archaeological sites in the State Historic Preservation Office, and nineteenth-century atlases and maps that identified buildings present at the time. They plotted the locations of all sites and buildings onto U. S. G. S. maps. Those sites associated with this historic context have been transferred to the U. S. G. S. maps produced as part of the current project. They also recorded the building/site's date of initial or relative date of construction and its function, assessed the potential National Register eligibility of associated archaeological remains, and evaluated the archaeological potential and significance of the associated archaeological remains based on existing information (Custer et al. 1984: 18, 22-24; see also Appendices II and III).

Table 80 summarizes the historical archaeological sites from the Route 13 Planning study that are associated with this historic context. Following Custer and his associates' analysis (1984: 36-43), the sites are organized by hundred, date, and property type. The sites' uneven distribution among the hundreds mostly reflects the unevenness in the proportions of the hundreds' area falling within the project corridor. For this historic context, the most important information relates to the distribution of sites among the property types and the three study time periods: 1803-1868, 1869-1910, and 1911-1950. Delawareans engaged in agriculture first occupied ninety percent of the documented sites between 1803 and 1868. Most of the rest date before 1910, still reflecting the bias against the twentieth century, both by archaeologists and architectural historians working before the mid-1980s.

Neither are the sites evenly distributed among the property types (Table 80). The researchers categorized over 62% as 'Agricultural Complexes', compared to 33% identified as 'Agricultural Tenant Dwellings/ Farms.' In light of the Agricultural Tenancy research (Siders et al. 1991), many of the former likely also housed tenants for at least a part of their history. Peach orchards and farms, decedents' estate farms, slave quarters, migrant workers' houses, agricultural outbuilding complexes, and farm and mill complexes together account for only 5% of the identified sites. Clearly these figures underestimate these property types' original distribution on the landscape, but the extent to which they do remains uncertain.

In studies subsequent to the original Planning Study, archaeologists conducted Phase I surveys of distinct study areas within the larger project area (Custer and Bachman 1986; Custer, Bachman, and Grettler 1986). Three study areas lay in New Castle County: St. Georges, Appoquinimink, and Blackbird (Table 90; Custer and Bachman 1986). Nine from Kent County were selected for study: Smyrna, Leipsic, Dyke and Muddy Branches, Hughes Crossing, Chestnut Grove, Little River/Pipe Elm Branch, Wyoming Lake, Derby Pond, and Double Run/ Spring Creek (Table 91; Custer, Bachman, and Grettler 1986). In both studies, a

survey was made of standing structures and potential historic site locations indicated in the original report (Custer et al. 1984: Attachment II and III). The object of the additional visiting of structures was to see if any of the recorded standing structures has been destroyed since their recording and to ascertain if any historical archaeological resources might be associated with these standing structures. Similarly, potential historical archaeological site locations, which were noted in the original planning study on the basis of analyses of Beers' and Baist's atlases, were visited to see if ruins or other indications of possible historical archaeological sites were present. Field methods for this portion of the study consisted of augering, probing, checking for surface indications of modern disturbance, and simple surface inspection of the terrain looking for artifacts and ruins or foundations (Custer and Bachman 1986: 23).

In addition, project archaeologists undertook a program of pedestrian survey of agricultural fields and subsurface testing of wooded areas. While designed primarily to locate prehistoric sites, the team did record the locations of any historical archaeological sites encountered.

Testing at the historic building and potential historical archaeological sites thus aimed to preliminarily evaluate integrity. Based on the testing, project archaeologists ranked the "archaeological potential" of each site as "high", "medium", or "low" (Tables 90 and 91). Of the 134 sites associated with this

TABLE 90

ARCHAEOLOGICAL POTENTIAL OF TESTED SITES ASSOCIATED WITH THIS  
HISTORIC CONTEXT, SELECTED PORTIONS OF PROPOSED ROUTE 13  
CORRIDOR, NEW CASTLE COUNTY

(Source: Custer and Bachman 1986: 98, 103-104, 108-109)

<u>PROJECT AREA</u>	<u>SITE TYPE</u>	<u>SITE POTENTIAL</u>			<u>TOTALS</u>
		<u>HIGH</u>	<u>MEDIUM</u>	<u>LOW</u>	
ST. GEORGES	AGRICULTURAL COMPLEX	2	1	4	7
	AGRICULTURAL TENANCY	1	1	5	7
		3	2	9	14
APPOQUINIMINK	AGRICULTURAL COMPLEX	11	10	4	25
	AGRICULTURAL TENANCY	1	1	17	19
	AGRICULTURAL COMPLEX, PEACHES	3	0	0	3
	AGRICULTURAL OUTBUILDINGS	1	0	0	1
		16	11	21	48
BLACKBIRD	AGRICULTURAL COMPLEX	27	17	10	54
	AGRICULTURAL TENANCY	3	10	5	18
		30	27	15	72
GRAND TOTAL		49	40	45	134

TABLE 91

ARCHAEOLOGICAL POTENTIAL OF TESTED SITES ASSOCIATED WITH THIS  
 HISTORIC CONTEXT, SELECTED PORTIONS OF PROPOSED ROUTE 13  
 CORRIDOR, KENT COUNTY  
 (Source: Custer, Bachman, & Grettler 1986: 135, 142, 145, 149,  
 153, 157, 160, 164, 168)

<u>SITE</u>	<u>SITE TYPE</u>	<u>SITE POTENTIAL</u>			<u>TOTALS</u>
		<u>HIGH</u>	<u>MEDIUM</u>	<u>LOW</u>	
SMYRNA	AGRICULTURAL COMPLEX	11	3	1	15
	AGRICULTURAL TENANCY	2	4	1	7
	AGRICULTURAL COMPLEX, PEACHES	1	0	0	1
		14	7	2	23
LEIPSIC	AGRICULTURAL COMPLEX	12	3	0	15
	AGRICULTURAL TENANCY	2	4	1	7
	ESTATE	3	0	1	4
	AGRICULTURAL & MILL COMPLEX	1	1	0	2
		18	8	2	28
DYKE & MUDDY BRANCHES	AGRICULTURAL COMPLEX	11	3	0	14
	AGRICULTURAL TENANCY	1	0	1	2
		12	3	1	16
HUGHES CROSSING	AGRICULTURAL COMPLEX	14	6	2	22
	AGRICULTURAL TENANCY	1	3	4	8
	AGRICULTURAL COMPLEX & STORE	1	0	0	1
		16	9	6	31

TABLE 91 (cont.)

<u>SITE</u>	<u>SITE TYPE</u>	<u>SITE POTENTIAL</u>			<u>TOTALS</u>
		<u>HIGH</u>	<u>MEDIUM</u>	<u>LOW</u>	
CHESTNUT GROVE	AGRICULTURAL COMPLEX	4	6	2	12
	AGRICULTURAL TENANCY	0	0	0	0
		4	6	2	12
LITTLE RIVER/ PIPE ELM BRANCH	AGRICULTURAL COMPLEX	5	3	4	12
	AGRICULTURAL TENANCY	2	11	3	16
		7	14	7	28
WYOMING LAKE	AGRICULTURAL COMPLEX	5	2	0	7
	AGRICULTURAL TENANCY	2	1	0	3
	AGRICULTURAL & MILL COMPLEX	1	0	0	1
	AGRICULTURAL COMPLEX, PEACHES	1	0	0	1
			9	3	0
DERBY POND	AGRICULTURAL COMPLEX	9	1	1	11
	AGRICULTURAL TENANCY	0	0	0	0
	AGRICULTURAL & MILL COMPLEX	1	0	0	1
		10	1	1	12
DOUBLE RUN/ SPRING CREEK	AGRICULTURAL COMPLEX	9	7	0	16
	AGRICULTURAL TENANCY	0	2	0	2
		9	9	0	18
GRAND TOTAL		99	60	21	180

historic context tested in the three New Castle County study areas, 36.5% were assigned high potential, 30% medium potential, and the remaining 33.5% low potential (Table 90). Potential did not distribute evenly among the three study areas or between property types, although the reasons for this are not clear. In the St. Georges study area, 64.2% of the sites were considered to have low archaeological potential, while in Appoquinimink sites were more evenly distributed among the three ranks, and in Blackbird 41.7% were assigned a high potential. Overall, 46.5% of the Agricultural Complexes were considered to have high archaeological potential, 32.6% medium potential, and only 21% low potential. Conversely, only 11.6% of the Agricultural Tenancies were ranked high in archaeological potential, 25.6% medium, and fully 62.8% were considered to have little potential to yield significant cultural-historical information.

Both similarities and differences appear between the New Castle and Kent county study area site rankings. Of the 180 sites associated with this historic context tested in the nine Kent County study areas, 55% were assigned high potential, 33.3% medium potential, and the remaining 11.7% low potential (Table 91). Potential did not distribute evenly among the nine study areas, however, as in New Castle County. More than one-half of the sites were assigned a high potential in six study areas, ranging from 51.6% in Hughes Crossing to 83.3% in Derby Pond. In the other three study areas, in contrast, 50% were ascribed medium potential. As in New Castle County, though, Agricultural Complexes were consistently ranked higher in potential than Agricultural Tenancies. Of the 124 Agricultural Complexes, the researchers assigned 64.5% a high potential, 27.4% medium potential, and only 8.1% low potential. Of the much smaller number of Agricultural Tenancies tested (45), 22.2% received high and low potential ratings, and the middle 55.6% a medium potential.

These data suggest that in both counties, nineteenth and first half of the twentieth-century Agricultural Tenancies exhibit lesser archaeological integrity than Agricultural Complexes, and that they are fewer in number. As for the latter conclusion, the project researchers recognized that the sources employed to initially identify sites were biased against the smaller, poorer, and more ephemeral of the tenancies. Subsequent research has also brought into question the former conclusion. The often limited archaeological remains associated with these very tenancies (e.g., few subsurface features and low artifact densities) has now been interpreted as a function of their original material circumstances, not a product of post-occupation disturbance (see especially Grettler et al. 1991; Grettler et al. 1993).

The preliminary project area for the Route 301 corridor encompasses all of Pencader Hundred, and portions of White Clay Creek, New Castle, Red Lion, St. Georges, and Appoquinimink hundreds (Figure 3). To identify the historical archaeological

sites, inventoried historic buildings, potential standing buildings, and potential historical archaeological sites in the project area (Table 82), the project archaeologist gathered data from several sources: the State Historic Preservation Office's inventories of standing buildings and archaeological sites, nineteenth and early twentieth-century maps and atlases, and road papers. All sites were mapped onto U. S. G. S. Topographic maps; these have been transferred to the current project's maps. In Table 82, "historical archaeological sites" have no standing buildings, have been either tested or excavated, and have mostly been destroyed by subsequent construction (Kellogg 1992: 38). "Inventoried standing buildings" are those listed in the State's inventory. "Potential standing buildings" and "potential archaeological sites" do not appear in the State inventories; they were identified by "comparing published historic maps, manuscript surveys, road papers, and historical references to the latest USGS 7.5' quadrangle maps..." (Kellogg 1992: 40-41).

Table 82 summarizes the numbers of Agricultural Complexes and Agricultural Tenancies identified for each study time period of this historic context (1830-1880, 1880-1940), each hundred, and each of the four resource categories described above. Only the category Historical Archaeological Sites distinguishes Agricultural Complexes from Tenancies. These data highlight several striking points. First, 91% of the resources were first occupied prior to 1880, a function principally of the sources employed to identify them (Kellogg 1992: 57). Thus, twentieth-century agricultural sites remain underrepresented. Many probably appear in the Unknown category, however, as they were identified from the 1906 U. S. G. S. map, which does not indicate function. Second, of the total 296 resources, only six, or 2%, appear in the State archaeological site inventory. This compares to the inventoried standing buildings, which account for 21% of the resources, dramatically demonstrating the incompleteness of the State archaeological site inventory. Finally, as noted, only one hundred, Pencader, lies totally within the project area. Nevertheless, it can serve as an index of the potential number of archaeological sites associated with this historic context in a single hundred. As discussed, the figures for 1830-1880 are much more reliable than those for the succeeding period. The Route 301 research identified 126 potential archaeological sites of agricultural complexes or agricultural tenancies established between 1830 and 1880 in Pencader Hundred alone. They represent 42.6% of all resources identified in the study area associated with this historic context.

In conclusion, this evaluation of inventoried historical archaeological resources associated with this historic context and of cultural resource surveys undertaken in New Castle and Kent counties has raised important issues for further consideration. First, as the planning studies for the Route 13 and Route 301 project areas have demonstrated, the State inventory of historical archaeological sites woefully underrepresents sites associated with

this historic context. Most dramatically excluded are those sites initially occupied between 1880 and 1940. As the State inventory of standing buildings, the Route 13 and Route 301 projects, and other smaller scale cultural resource surveys that identified architectural resources together evidence, the problem is not that the sites have not been identified. Post-1880 resources of all types have not, though, received the attention of earlier buildings and sites. Rather, for archaeological sites, the issue is that they have not been included in the State historical archaeological site inventory unless they have been tested to verify the presence of archaeological remains. Although the State Historic Preservation Office follows National Park Service policy in this regard, the impact it has had on the state inventory of archaeological sites remains problematic. It seems unlikely that many of the sites with intact standing buildings contain no archaeological remains associated with the 1830-1940 period. The nature, extent, and integrity of these remains is a separate issue. Determining the significance and thus National Register eligibility of sites is the purpose of a Phase II survey. At that level, clearly the significance of the sites' architectural and archaeological components must be evaluated separately. The significance criteria are different, and in many cases sites may be found eligible for the National Register on the basis of surviving architecture but ineligible on the basis of archaeological potential, or vice versa. Finally, the property types currently employed in the State historical archaeological site inventory warrant reconsideration as well, at least those associated with this historic context. This has been addressed in Section VI. **PROPERTY TYPES.**

Setting aside the issue of the criteria for including sites in the State historical archaeological site inventory, Phase I/identification/reconnaissance survey coverage for certain property types associated with this historic context in New Castle and Kent counties is comparatively good. This is attributable especially to the Route 13 and Route 301 projects and to the reconnaissance surveys of hundreds to locate and inventory standing buildings. Within the Route 13 (the initial planning study area) and Route 301 project areas, only post-1880 sites and the sites of poor farm laborer and tenant houses appear to remain underrepresented in the lists of historical archaeological sites, standing buildings, potential standing buildings, and potential archaeological sites. To identify the latter, archaeological field survey is probably necessary; further documentary research and architectural survey should identify many of the former. Outside of these and other study areas with completed cultural resource surveys, the architectural reconnaissance surveys provide an important starting point for identifying archaeological sites associated with this historic context. The quality of these survey data of course varies among the hundreds, and supplementary documentary and archaeological field survey would be necessary.