AN OVERVIEW OF HISTORICAL ARCHAEOLOGICAL RESOURCES OF THE PROPOSED EAST-WEST CORRIDOR

The purpose of this overview is to briefly discuss the types of historical archaeological resources that have been identified within, and that are expected to be located within, the proposed alignments of the East-West Corridor. Expected site locations utilized for historic settlement patterns within the project corridor were developed during the initial planning study (Catts, Custer and Hoseth 1991) and from the archaeological survey of selected portions of the proposed alignments (Watson, Catts, et al. n.d.). According to Ames et al. (1987:38), Sussex County in general, and the proposed alignments in particular, offers a unique opportunity to examine cultural resources which evolved in a relatively stable demographic context. Settlement patterns within the County were reinforced instead of replaced, and newer development was integrated with the old, creating an historic landscape in which the changes over time are still evident (Ames et al. 1987:37). The integration and slow replacement of historic settlement patterns suggests that many historic sites are present within the East-West Corridor as archaeological sites, dating from all time periods across the corridor. Table 5 shows the total number of historical archaeological sites located within the project corridor, broken down by Alignment, DelDOT Design Maps and archaeological Period.

REGIONAL HISTORY AND ARCHAEOLOGICAL SITES

1630-1730

Based on the work of historical archaeologists and geographers in the Middle Atlantic region and elsewhere (Miller

TABLE 5

SUMMARY OF HISTORICAL ARCHAEOLOGICAL SITES WITHIN THE LIMITS OF THE PROPOSED EAST-WEST CORRIDOR ALIGNMENTS

Del DOT Design Map #	Both A	Both B	Both C	Both D	Both E	Northern A	Northern B	Northern C	Northern D	Northern E	Northern U	Southern A	Southern B	Southern C	Southern D	Southern E	TOTAL
1			1	2	1												4
2				2	2												4
3			1	1	2												4
4													1		1	1	3
5									1								1
6								1	2								4
7															4	1	5
8													1	1	1	1	4
9									1		2						3
10								1	2	1							4
11													1	2	4		7
12															2		2
14									2								2
15																	0
17															2	4	6
19														1			1
20			1														1
24				1													1
26				1													1
29				2													2
30				3													3
31				2													2
Subtotal	0	0	3	14	5	0	0	2	6	3	2	0	3	4	14	7	
Total Alignment			22					13						28			63

KEY: A - 1630-1730+
B - 1730-1770±
C - 1770-1830±
D - 1830-1880+
E - 1880-1940±

1980; Wise 1980; Custer, Jehle, Klatka, and Eveleigh 1984:102-113; Lewis 1976: 14-15; Rubertone 1986; Blouet 1972; Earle 1975), settlement patterns in the proposed alignments dating from this period were characterized by a reliance on waterways. Historically, settlement was circumscribed by the drainages within the region, such as the Mispillion, Broadkill, Indian River and Bay, Assawoman Bay, and the smaller tributary creeks, such as Cool Spring Branch, Bundick's Branch, Herring Creek, and Lewes Creek. In the western portion of the proposed alignments, the region claimed at this time by Maryland and Lord Baltimore, the Marshyhope and the Nanticoke served as the foci of settlement. Limits of historic settlement during this period will be found approximately 10 to 12 miles from the Atlantic Coast, or to the heads of the eastern-flowing drainages in the project corridor, and probably within 1/4 to 1/2 of a mile from the Nanticoke and Marshyhope drainages.

The Dutch at Lewes, and at other locations on the shores of the Delaware estuary such as Appoquinimink and New Castle, instituted a system of "long lots" which fronted on and extended inland from the waterways (Custer et al. 1984:103; Delaware Division of Historic and Cultural Affairs 1976:15; Wise 1980:7;). Based on the results of the Atlantic Coast Comprehensive Survey undertaken in the late 1970s, Wise (1980:4) has postulated that historic sites dating from this period will be located within 300 feet (100 yards) of the drainage on which they fronted.

The long-lot pattern allowed easy access to navigable water, which also served as the primary mode of transportation and communication, since overland travel was severely limited by

dense woodlands and marshes. Lots laid out using the long-lot system varied considerably in size, those in towns like Lewes being fairly small, while those established by patents from the Penn government on the south side of Indian River contained several hundred acres. In the late seventeeth-early eighteenth centuries, the Penn government also divided land up in haphazard, irregular lots, generally consisting of about 200-acre parcels (Eastburn 1891). Like the long-lot system, these irregular parcels always contained some water source, and usually had a stream serving as a property line, or running through the parcel. Within the proposed alignments, irregular lots of this pattern will be found along the Nanticoke and Marshyhope drainages, and west of the immediate vicinity of Lewes, around Cool Spring Branch and Bundick's Branch.

Regardless of the lot system used to lay out a parcel, dwellings and "plantations" were generally constructed on well-drained soils with small agricultural field(s) close-by. The low population density of Sussex during this period is reflected in the distances between plantations, which ranged from 0.25 to 1.5 miles from each other (Earle 1975; Hancock 1962). Tobacco was the major agricultural crop at this time, along with livestock raising. Land use of this type suggests that plantations of the period would exhibit an intensive use of the land in the immediate vicinity of the dwelling house and outbuildings, with a patchwork of new and old fields, but significant portions of the property would be kept in woodland or marsh for cattle forage. Structures present on agricultural complexes dating to this

period would have included small dwelling houses generally built of wood (frame or log), and only rarely of brick. Dwelling plans included a range of traditional options such as hall, hall-parlor, double-cell, cross-passage, and four-room (Herman 1987:27). House foundations were generally of earthfast or impermanent construction, a building style that characterized much of the architecture of the Eastern Seaboard during this period (Carson et al. 1981; Kelso 1984; Herman 1987:84). A variety of outbuildings such as kitchens, tobacco and grain sheds, milk houses, barns, smokehouses, and meat houses would have been present on the farmsteads (Herman 1987:61-72). Job-specific buildings, such as ship carpentry shops and blacksmith shops, were few in number, and were located primarily in the Lewes area. There are no known historical archaeological sites that date to this period in the proposed alignments. However, the potential for sites from this period to be present is moderate to high, particularly where the proposed alignments cross drainages, such as in the vicinity of Cool Spring Branch, Deep Creek, the Nanticoke, the Marshyhope, and Northwest Fork. Specifically lacking are the impermanent sites from the earliest occupation of the area, and their immediate, more durable replacements. Sites dating to this period are therefore significant cultural resources and have high potential within the corridor, and if discovered would likely be eligible for listing on the National Register.

1730-1770

During this period historic settlement extended westwards across the drainage divide and spread eastward from the Nanticoke

and Marshyhope watersheds. The boundary between Maryland and the Three Lower Counties (Delaware) was settled at the close of this period; prior to that time the Nanticoke River and it's tributaries served as the provincial line. Because of this border dispute, there were overlapping land grants issued by both governments in this portion of the East-West Corridor. The land grant patterns of the previous period continued into this one, with large, irregular parcels often bounded by a water course located in the interior of the peninsula. Water continued to function as the primary transportation and communication medium, and overland routes, though present, were poor. The few roads that did exist were primarily regional connectors, running from the Chesapeake Bay across to the Delaware Shore, and from Lewes up country to Philadelphia, or local secondary roads.

Settlement pattern during the second quarter of the eighteenth century may have shifted from a water-oriented plantation to a more inland focus (Wise 1980). A settlement shift of this nature was probably due to the change from tobacco agriculture to grain agriculture that occurred in the early eighteenth century in southern Delaware (Munroe 1978). Grain agriculture would have required more extensive land clearing and planting, thus allowing more mobility in dwelling and farmstead location. Documented population increases, caused by immigration from overseas, and overland from the Eastern Shore, would have also contributed to the change in settlement orientation.

The change in settlement pattern orientation was reflected in changes in plantation layout and architecture. Starting in

the 1740s, Georgian architectural house forms began to appear, and more permanent methods of construction and material types were utilized (Carson et al. 1981; Herman 1987:26,109-110). Livestock raising continued to be an important occupation of the area's inhabitants, and home manufactures were added by the middle of the eighteenth century to the subsistence economy of Sussex's inhabitants (Main 1973; Jordan 1914). Outbuildings reflected the changes in agriculture, with a disappearance of tobacco sheds, the presence of more durable granaries, and barns, and the addition of structures related to home manufacturing, such as weaving houses.

In the western portion of the proposed alignments, large tracts of forest land and swamp were taken up by the iron companies that were established in the second half of the eighteenth century. These iron plantations required large amounts of charcoal and wood supplies to operate, which required extensive tracts of timber. A dispersed pattern of settlement was therefore maintained in the vicinities of the forges, though the population of the forges may have been relatively high, and the furnace complexes themselves contained a variety of structures, such as grist and saw mills, blacksmith shops, dwelling houses, stables, and perhaps churches (Heite 1974; Virginia Gazette 1770; Lewes Presbytery Minutes 1758-1810).

Several small "commercial towns" (Heite and Heite 1986) were established in the project corridor by the middle of the eighteenth century. Commercial towns were those that appeared at prominent crossroads or navigation locations, and served as focal points for the local economy and society, such as Bridgebranch

(Bridgeville). These towns usually consisted of a tavern, a bridge or fording place, a grist mill or saw mill, wharves if on a navigable river, maybe a store and perhaps some domestic dwellings. The economic effect of these small towns during this period was probably negligible on the overall region, or on the economy, and Lewes remained the only major urban location in Sussex.

Three known historical archaeological sites from this period are present in the proposed alignment alternatives. One of these is the site (field-checked) of the Unity Forge at the Nanticoke River crossing of Route 404 in the Southern Alignment Alternative. The other two sites, both located by archaeological survey and both in the Southern Alignment, may be dwelling or domestic sites -- one is located a few hundred feet north of Bridgeville Branch, and the other is part of the complex of archaeological sites located to the east of Collins Pond. The other known sites that were originally identified during the reconnaissance level survey of the East-West Corridor (Catts, Custer and Hoseth 1991) are no longer included within the potential alignments. As with the previous period, archaeological sites from this period are considered to be significant and to contain high potential for listing on the National Register.

1770–1830

This period within Sussex County saw a great deal of change and development of the landscape, as new areas were brought into cultivation, new towns and market centers were founded, and the

forests were lumbered off. Subsistence agriculture (predominately corn production), forestry, and home manufactures continued to dominate the economic growth of the project corridor in this period. For the most part, dwellings were constructed of log or frame, with only a few brick houses. Farmsteads were small and averaged few buildings, typically including a house, a smokehouse, one or two corn barns, and perhaps a stable and speciality structure like a loom house or weaving shed. The occupation of the land by tenants rose during this period, and many of the farms in the proposed alignments were considered to be "out plantations", or tenant-occupied farms (Herman 1988; Garrison 1988).

The population of the county grew from about 14,000 in 1775 to over 24,000 in 1790. Though the population fluctuated throughout the remainder of the period, it generally rose, and reached over 27,000 by 1830. The early growth may be attributable to the acquisition of Maryland lands in the 1770s (the settling of the boundary issue), and the rise in population over time is indicative of the increased development of agriculture, the rise of tenancy, and home manufactures in the region (Herman and Siders 1986:79).

The founding of the "planned town" of Georgetown in the 1790s was a significant event in the history of Sussex, because it reflects the changing social and economic environment of the period. By the start of the nineteenth century, Georgetown was followed by the establishment of other centralized market place towns like Seaford, Laurel, Milton, and Millsboro, and these towns stimulated the growth of the interior portions of Sussex

County. Although not large by regional standards, these commercial towns became foci of service and merchant locations, and shops, stores, wharves, and taverns were located in them. The iron industry located in the Nanticoke watershed began to decline in economic importance during this period, and the lands sold off for farming and lumbering. Mill seats became significant locations in the project corridor during this period, and often were the center of other service-oriented structures, such as blacksmith and wheelwright shops, and taverns. Religious diversity in the County was reflected by the erection of numerous churches and chapels in interior locations throughout the project corridor, most notably Methodist and Baptist churches.

During this period the landscape of the project corridor was transformed, with more land cleared and put into agricultural production, an intensive deforestation of the interior portions of the county, and improvements in the internal transportation network (Herman and Siders 1986:80). All of these changes were reflective of larger-scale significant economic and social changes, as more land was occupied by the poorer classes of farmers and tenants.

There are at present nine known historical archaeological site located within the proposed alignments. These are evenly distributed in the Northern Alignment (3 sites), the Southern Alignment (3 sites) and the area containing both alignments (3 sites). Included in these archaeological sites are agricultural complexes, dwelling complexes, dwellings, a sawmill, Collins Forge and mill dam. There are comparatively more sites within

the proposed alignments dating from this period than from the two earlier periods, and these site's locations are well-documented. Sites from this period are considered to be significant and to have high potential. The area around Collins Pond has particularly high potential for containing significant sites that could be eligible for the National Register.

1830-1880

It is during this period that the amount of cleared land within Sussex County reached its apex, and with this clearing a rise in population and a revolution in farming. Changes in agriculture in Sussex were manifested during this period by the reclamation of waste and forest lands, and by the ditching and draining of low swamp lands. Major transportation changes, most obviously the arrival of the railroad in the County in the late 1850s, spurred the further development of the interior of Sussex, forcing the occupation, clearing and farming of previously marginal lands. Within the project corridor these lands are located at the drainage divide, south and west of Georgetown in the vicinity of Flea Hill, and east as far as Sand Hill (Bausman 1941).

During this period, the number of new roads constructed or created within the project corridor was greater than in any previous period, particularly roads that ran from interior locations to railheads and stations. Land was used for truck farming and orchard crops such as peaches and strawberries, though subsistence agriculture and corn production was still predominant as a major agricultural product of the county.

Subsistence farming continued to reinforce dispersed settlement, but the housing stock in the corridor alignments improved during this period. By 1860, earlier dwellings were being replaced and enlarged by two-story hall-parlor or center-passage single pile dwellings, with barns, corn cribs, and stables as outbuildings (Herman and Sider 1986:87).

The railroad directly created several new town locations in or near the corridor alignments, such as Greenwood and Ellendale, and at the same time allowed other cross-roads locations to decline in importance. These towns provided new foci for urban settlement, and railroad oriented services and other emerging industries were constructed at these locations. In addition, several religious "new towns", such as Rehoboth, were founded during this period. Earlier churches were also replaced or enlarged with more fashionable structures (Herman and Siders 1986:87).

All of these changes -- population increases, new transportation routes, gradual shifts in agriculture from subsistence to market gardening, land clearing and reclamation, and the establishment of new urban centers -- are suggestive of changing social, cultural and economic values within Sussex County. Though agriculture was still the predominant occupation of the people of the proposed East-West Corridor, significant urban locations contrasted with the rural nature of the region, and the rise of the tourism industry reveals changes in social perceptions of leisure time.

Settlement patterns during this period are most easily viewed by examining Beers' Atlas (1868), which is the first

detailed map of the proposed alignments. There are a total of 34 known historical archaeological sites dating from this period within the proposed alignments. Fourteen of these are located in the Southern Alignment, fourteen in the area containing both alignments, and six in the Northern Alignment. The majority of site types within the corridor dating from this period are identified as agricultural complexes, dwelling complexes, and dwellings, and there is also a grist mill, schoolhouse, and family cemetery.

Issues of historic significance and National Register potential for sites dating to this period should be addressed on a case-by-case basis, taking into consideration site type, the integrity of the archaeological remains, number of sites of this type, the presence of standing structures of the same type, associated outbuildings or architectural remains, and the like.

1880 to 1940

Herman and Siders (1986:93) have characterized the existing landscape of the region as one that is a reflection of the agricultural practices and markets that were created or practiced during the 1880 to 1940 period. The most obvious changes that can be seen today are the mechanical cultivation and irrigation of large field areas, natural forests confined to watercourses or nature preserves (such as Ellendale and Redden State Forests), and a network of roads which serve to shorten the distance between the "backcountry" and towns in the county. There has been a decline in forest area in the county, and an increase since 1940 of the number of channelized and ditched drainages.

Bausman (1941:7) identified a 25% decline in the number of farms in Sussex since 1880, attributable to the exhaustion of marginal soils for farming.

The existing housing stock within the corridor alignments dates from this period or later, including barns, corncribs, sheds, perishable-related buildings (potato houses, etc.), chicken houses, tractor sheds, and other sheds. In fact, about 77% of the housing stock in Sussex County was constructed after 1940, as either new construction or the enlarging or replacing of older buildings (Ames et al. 1987:58).

The rise in popularity of the automobile as a means of transportation has had a profound effect on the county, especially with the creation of new roads, such as Route 13 and Route 113. New roads in turn have provided new economic opportunities, particularly in the service-related industries (service stations, restaurants), which is evident by the "strip development" in sections of the proposed alignments along major regional connectors. Improved transportation also sparked the further development of market gardening and perishable crops, as well as continued growth of the tourism industry.

The development of the broiler industry that began in the 1920s has experienced a tremendous change from the previous agricultural methods followed in the area, and in land use patterns related to chicken farming. Large chicken houses are readily apparent on the landscape, and are a ubiquitous part of the agricultural growth of Sussex County.

There are fifteen known archaeological sites dating to this period in the proposed alignments. Seven of these sites are

within the Southern Alignment, three are in the Northern Alignment, and five are located in the area claimed by both alignments. Considerably more standing structures dating to the 1880-1940 +/- period are present within the project corridor and can provide more significant cultural information than archaeological sites of the same time (refer to the next section for architectural survey information). Thus archaeological sites dating to this time period are not considered to be as significant as sites from former periods, and the standing structures offer better potential for data retrieval.

MANAGEMENT CONSIDERATIONS

Detailed statements of cultural resource management considerations are provided in a separate overview (Catts, Custer and Hoseth 1991), but a few comments can be made here. The listing of known sites in the proposed alignment alternatives shown in Table 5 and provided in Appendix II and in the other planning studies is a partial statement of all of the historical archaeological sites located within the project area and should be viewed as a sample of the sites. For management purposes it is necessary to use both the projected probability zones for the earlier occupation sites and the site listings that are marked on the enclosed maps (Attachment II). The marked probability zones are based on the initial models reported by Catts, Custer and Hoseth (1991:146-149 and Attachment V), and have been refined based on the field testing and further analysis (Watson, Catts, et al. n.d.). Generally, areas noted as being high probability zones will not only have more sites, but the sites located will

be more likely to have more large sites eligible for listing on the National Register of Historic Places. Therefore, the high probability zones are the areas for significant historical archaeological cultural resources. All known historical archaeological sites located within the alignment alternatives will require at least Phase II testing to determine their eligibility for listing on the National Register, and many may also require Phase III data recovery excavations. Any investigations at historical archaeological sites located within the proposed alignment alternatives should be excavated following the research goals and guidelines established in the **Management Plan for Delaware's Historical Archaeological Resources** (De Cunzo and Catts 1991).