

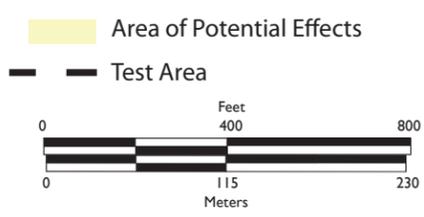
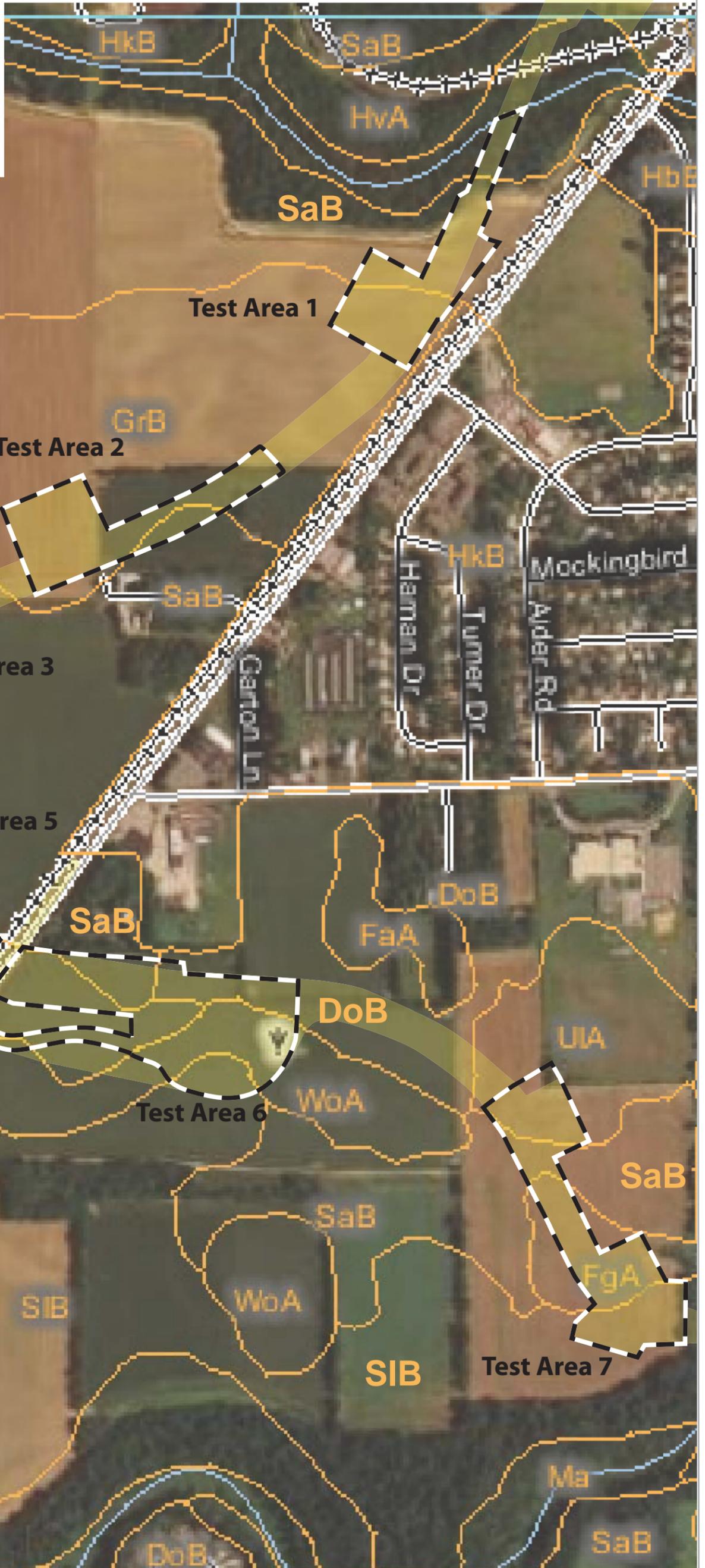
2.0 ENVIRONMENTAL SETTING

The West Dover Connector APE is located within the Mid-Drainage zone of the low Coastal Plain Physiographic Province. This area is underlain by the Pleistocene sands and gravels of the Columbia formation. These deposits have been extensively reworked, resulting in a relatively flat and featureless landscape. The topographic elevation in the APE ranges from approximately 25 feet to 50 feet above sea level. The area is drained by a series of small creeks, including Puncheon Run and Isaac Branch. Both of these streams are tributaries to the St. Jones River, a tidal drainage that flows east into the Delaware Bay. Puncheon Run traverses the northern portion of the APE in a west-to-east orientation. Isaac Branch traverses the southern edge of the APE similarly. Isaac Branch provided water power for several early mill seats in the vicinity. Sassafras sandy loam comprises the soil throughout much of the APE. This well-drained soil is characterized as prime farmland (U.S. Department of Agriculture [USDA] 1971). This was a major contributing factor in the agricultural development of the APE. Farmsteads were constructed on landforms of relative topographic prominence and along early road networks. Low-lying and poorly drained areas associated with wetlands and drainages remain wooded. Agricultural landscapes are still preserved in portions of the western and southern sections of the APE. Suburban land use now characterizes much of the area east of the APE.

Soils in the study area are characterized primarily as level and well drained (USDA Web Soil Survey, accessed May 2012; see also Matthews and Ireland 1971). The APE is composed of 12 soil types. In order of decreasing frequency, these include: Sassafras sandy loam (SaB, 2 to 5 percent slopes), Hambrook sandy loam (HbA and HbB, 0 to 2 percent and 2 to 5 percent slopes), Urban land (Up, flats), Downer sandy loam (DoB, 2 to 5 percent slopes), Sassafras loam (SIB, 2 to 5 percent slopes), Unicorn loam (UIA, 0 to 2 percent slopes), Greenwich loam (GrB, 2 to 5 percent slopes), Zekiah sandy loam (Za, frequently flooded), Woodstown sandy loam, (WdA, 0 to 2 percent slopes), Woodstown loam (WoA, 0 to 2 percent slopes), Hurlock sandy loam (HvA, 2 to 5 percent slopes), and Fallsington loam (FgA, 0 to 2 percent slopes). These soils tend to occur in high and dry locales relative to the surrounding topography. Only the Hurlock, Zekiah, and Fallsington soils are poorly drained; these occur near extant or relict streams that intersect the APE. The other soils in the APE are moderately or well drained. The most well-

SOIL LEGEND

DoB	Downer Sandy Loam	2-5% Slope
FgA	Fallsington Loam	0-2% Slope
GrB	Greenwich Loam	2-5% Slope
SaB	Sassafras Sandy Loam	2-5% Slope
SIB	Sassafras Loam	2-5% Slope
UIA	Unicorn Loam	0-2% Slope
WoA	Woodstown Loam	0-2% Slope



**Figure 3
Soils Map**

Phase I Archaeological Survey, West Dover Connector,
Kent County, Delaware

drained soils are the Downer, Sassafras, and Greenwich, which exhibit a water table at a depth greater than 80 inches from the ground surface. Figure 3 shows the soils that occur within the seven Test Areas. Relict bay/basin features are evident within agricultural fields surrounding the APE. These were attractive Native American locales because they represented hubs for procuring plant and animal resources (see Egghart 2008). Vegetation patterns shifted from a mosaic pattern to a zoned pattern in the early Holocene (post-8,000 B.C.). Pine was dominant, with lesser amounts of hemlock, birch, and oak. After 6,000 B.C., an oak-hickory climax was present, and it was followed by a pine-oak dominated forest after 3,000 B.C. Historic-period vegetation has been described as oak-hickory and marsh climax vegetation.

In sum, given the bay/basin topography, proximity to major tributaries (Puncheon Run and Isaac Branch), and the presence of agriculturally productive soils still in use today, the project area was a very attractive landscape for human settlement in the past.