Chapter 2

GEOGRAPHICAL SETTING AND ENVIRONMENT

According to Custer (1983:13 and Figure 1), the project area lies near the upstream limits of the Mid-Drainage Zone of the Coastal Plain, close to the Drainage Divide. These mid-drainage locations are identified as providing varied ecological opportunity to human populations because of the proximity to tidal brackish and freshwater areas. However, the general character of the specific project area more closely resembles that of the mid-Peninsula Drainage Divide. Geologically, the area is underlain by Pliocene/Miocene quartz sands with some shell beds of the Tertiary Period.

The project area lies north of an unnamed third order branch of the Cedar Creek, which runs northeast into the Delaware Bay. The unnamed branch runs in a southeasterly direction about 950 feet south of the project vicinity. The project area lies within gently undulating agricultural upland away from the drainage between about 25 feet above sea level (ASL) near the location of proposed Ramp B and 32 feet ASL near the proposed location of the SR 30 overpass north of SR 1. One small relict stream is visible in aerial photographs crossing the proposed locations of Ramps A and B at Station 622+50. Another small relict steam, perceptible from the ground, can be detected from close examination of the one-foot contour intervals reveals a series of peaked contours which when connected indicates the course of a former fourth-order stream crossing the proposed alignment on a northwest-southeast axis at Station 630+30, originating in well-drained agricultural fields (see Figure 5.3). At the time of the survey the fields were planted in bush lima beans between SR 1 and 30, feed corn north of SR 1 and soybean south of SR 30. The remainder of the project area is occupied by well-manicured lawns adjacent to residential homes.

Soils in the project area are classified into two types, Downer loamy sand (DnA) and Ingleside loamy sand (IeA) (Figure 2.1). Both soils are well-drained loamy fluviomarine sediments with 0 to 2 percent slopes. The depth to the water table is more than 80 inches and the area is not subject to flooding (Figures 2.2 and 2.3). The division between DnA and IeA within the agricultural field located between SR 1 and 30 correlates to the location of a small prehistoric site and a multi-component historic site (See Chapter 5). The differences between these soils are slight, but may have generated subtle variations in vegetation that attracted Native Americans and early colonists. The adjacent floodplain to the south is mapped as poorly drained wet Fallsington sandy loam (FaA).