2.0 Project Setting

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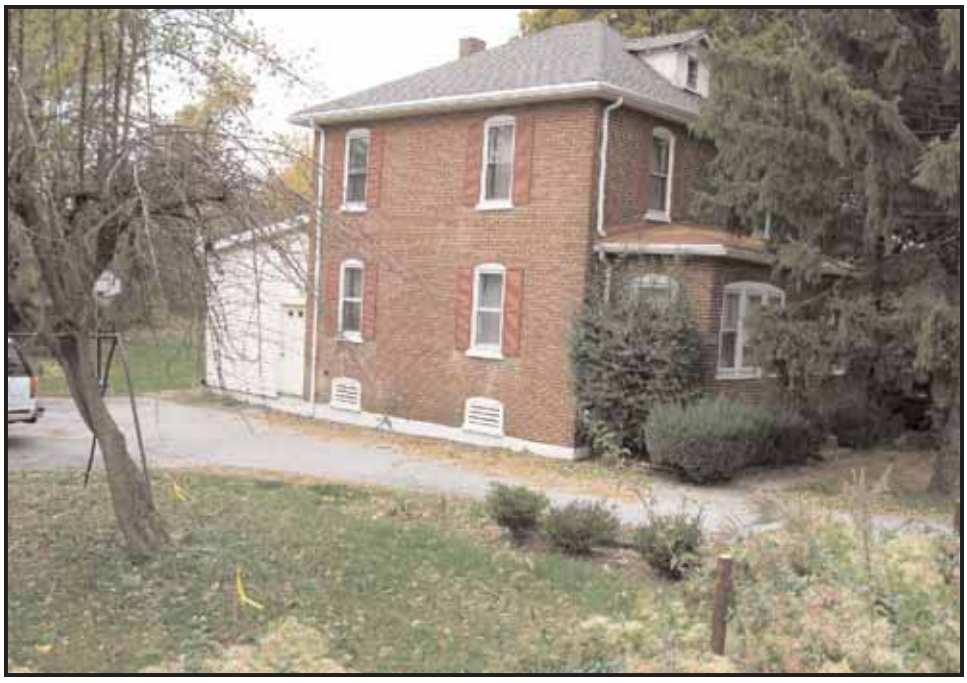
The project area is located in north-central New Castle County, Delaware, and in the Fall Line Zone of the southern margin of the Piedmont Physiographic Province. Red Clay Creek, the nearest major tributary to the project APE, is located approximately 0.25 mile west of the project area. It flows north to south and feeds into the White Clay Creek approximately 1.0 mile south of the project area. White Clay Creek flows west to east across the county and precisely at the Fall Line.

The Fall Line Zone resembles a large alluvial fan because it is where tributaries originating in the Piedmont drop their bed loads as they encounter the abrupt shift from a steep to gradual-sloped gradient at the Fall Line (Custer 1984:23-25). In the deeper past, these bed loads included clast sizes ranging from fine sands to cobbles and boulders. This depositional history at the Fall Line has precipitated a series of well-drained soils that are interspersed with cobble beds.

The maximum difference in topographic elevations in the Fall Line Zone is 170 feet. The project area is flat; its elevations range from 50 to 60 feet above sea level. The project area is drained by Red Clay Creek to the west and Hershey Run, which is located a few hundred feet to the east. Hershey Run flows into White Clay Creek roughly 0.5 mile west of the confluence of White Clay Creek and Christina River, which is a tidal drainage that flows east into the Delaware Bay. The nearest major tributary, the Red Clay Creek, was an important mill waterway; it provided water-power for several early mill seats located west and southwest of the APE (Heite 2000).

The CSX Railroad divides the project area into north and south halves (Photographs 1 to 2). The soils in the APE have been defined as moderately well-drained Delanco silt loam soil (USDA 1971). This soil is typically found in roughly level settings and, as a result, it tends to remain wet for extended periods in the winter and early spring. Erosion is considered only a slight hazard for this soil. Together, the relatively dry, flat, and erosion-free nature of this soil likely contributed to the development of farmlands in the project area in the historic era. In addition, the nearby tributaries and the well-drained setting likely also provided an attractive habitat for occupations in the precontact era.

Photograph 1: View of the southern section of the APE, facing northwest (October 2008).



Photograph 2: View of the north end of the northern section of the APE, facing southwest (October 2008).

Land use in and around the APE can be characterized as largely residential in nature. Dwellings are located along Newport Road and in the residential subdivision of Marshallton Heights. Institutional resources near the APE include two schools, the Marshallton Consolidated School and Delcastle Technical High School. Two public works facilities (electric power substations) owned by Delmarva Power are located in the northwest and southeast quadrants of the CSX/Bridge 1-651 intersection. A number of vacant lots are also present around the APE.