

**DelDOT / Upper Pike Creek Road
Slope Stabilization Project
Phase I Archaeological Survey**

Introduction

The Delaware Department of Transportation (DelDOT), Division of Highways, proposes a slope stabilization project along a stretch of Upper Pike Creek Road, in northern New Castle County. The proposed improvements extend northward for a distance of 1.2 km from the intersection of Upper Pike Creek Road and New Linden Hill Road. In compliance with federal and state regulations, a Phase I cultural resources survey was conducted of the project area by the Cultural Resources Department of Parsons Engineering Science, Inc., in July of 1998.

The work reported herein includes limited background research and archaeological survey to determine whether properties potentially eligible to the National Register of Historic Places are present within the Area of Potential Effects (APE), and if so, whether further archaeological study will be necessary to reach a determination of effect in compliance with Section 106 of the National Historic Preservation Act (NHPA). All survey work was performed in accordance with the National Historic Preservation Act of 1966, the Advisory Council's Guidelines set forth in 36CFR800 for the Protection of Historical and Cultural Properties, the Delaware State Management Plans, and the Guidelines for Architectural and Archeological Surveys in Delaware.

Project Description

Upper Pike Creek Road follows the right, or west bank of Pike Creek as it flows southward to White Clay Creek (Figure 1). The valley in which Pike Creek lies is moderately incised, and the stream is underfit, or smaller than the valley floor. In the project area, the channel lies against the west valley wall, while to the east lies a relatively wide and low terrace that has been developed as a golf course. Upper Pike Creek Road is located west of the creek, and has been cut into a side slope that rises sharply to the west. The proposed construction project entails stabilizing the slope through the addition of bulkheads, in the form of post and plank walls. The design plans indicate that in areas where slope stabilization is required, the road will be straightened slightly. In areas where there is no significant slope to the west, no stabilization is needed; the

improvement in these areas will consist of pavement overlay, resulting in no disturbance beyond the extent of the existing road surface and graded shoulder.

Background Research

To provide a context for potential cultural material discovered in the survey area, a records search was conducted at the Delaware State Historic Preservation Office (DESHPO) to determine whether cultural resources were known in the project area.

The records search indicated that several cultural resource investigations have occurred in the vicinity of the project area. A summary of these archaeological investigations appears in Table 1, appended to this report. No investigations have been conducted within project area boundaries. Thirty-three archaeological sites were recorded within a 2.4 km/1.5 mile radius of the survey area. Ten of these sites were historic, while 23 were prehistoric. Table 2, appended to this report, summarizes information on these sites. Figure 2 illustrates the site locations. In addition to this research, selected historic maps were reviewed (Heald 1820 in Catts et al. 1986; Rea & Price 1849; Beers 1868, Hopkins 1881; Baist 1893). Upper Pike Creek Road is not drawn on Henry Heald's map of "Roads of New Castle County," dated 1820, but does appear on the Rea and Price map of New Castle County, dated 1849. None of the maps indicate the presence of structures within the project area.

Physiography, Soils, and the Implications for Cultural Resources

The Upper Pike Creek Road Slope Stabilization project area lies in the Piedmont physiographic zone of northern Delaware (Figure 3). The Piedmont is a region of comparatively high relief, underlain by crystalline bedrock and dissected by narrow stream valleys. Surface topography is typically hilly, with soils that weather directly from the underlying parent material, or bedrock. The soils are eroded or susceptible to erosion.

Soils in the project area are of the Glenelg-Manor-Chester association, consisting of well-drained and often steeply inclined upland soils. They are described as medium-textured and weathered out of micaceous crystalline rocks, either gneiss or schist (Matthews and Lavoie 1970). Such soft, unconsolidated material, or rotted bedrock, that