INTRODUCTION

The Buchanan-Savin Farmstead (7NC-J-175) was located two miles north of the town of Smyrna, Delaware along the west side of Route 13, five hundred feet south of the junction of Duck Creek Road (Kent 486) in Blackbird Hundred (since 1875, formally part of Appoquinimink Hundred), New Castle County (Figure 1; Plate 1). The data recovery investigations of the site focused on a historical farm and in particular, the farmyard area adjacent to a standing farmhouse dating from the mid-nineteenth century.

Field work, artifact analyses, and report preparation were carried out between April 1990 and January of 1992 by archaeologists from the University of Delaware Center for Archaeological Research (UDCAR). Funding for the project was provided by the Delaware Department of Transportation (DelDOT) and the Federal Highway Administration to fulfill regulatory obligations under Section 106 of the National Historic Preservation Act (amended) prior to the construction of the State Route 1 Corridor. State Route 1 is a fifty-mile limited access highway which runs from Interstate I-95 to Dover, Delaware.

The Buchanan-Savin Farmstead was initially identified as a result of a Phase I location/identification survey (Bachman, Grettler, and Custer 1988) and subsequent Phase II investigations of the site (Grettler et al. 1991). Phase I and II survey and testing were also carried out by UDCAR for DelDOT, as part of the cultural resources survey of the proposed alignment of State Route 1.

The Phase I and II field investigations conducted at 7NC-J-175 revealed nine standing structures of a twentieth-century farm complex and an area of high artifact density representing an older farmyard dating from the mid-nineteenth to the early twentieth century. This yard contained intact subsurface features with associated cultural materials in the surrounding plow zone soils. Archival research indicated an occupation circa 1850. The Buchanan-Savin Farmstead was an owner-occupied farm, and later in the mid-twentieth century became a tenant-occupied home.

Based on the results of the Phase I and II investigations, the Buchanan-Savin Farmstead was eligible for inclusion in the National Register of Historic Places under Criterion "D," as it was deemed likely to yield significant archaeological data on the changes in the social and economic landscape of central Delaware in the nineteenth and twentieth centuries. In consultation with the State Historic Preservation Office and the Bureau of Archaeology and Historic Preservation (BAHP), a data recovery plan was prepared for the Phase III investigations of the site, and a National Register determination-of-eligibility form completed.

The Buchanan-Savin Farmstead (7NC-J-175) is discussed in terms of its environmental setting, its relation to historical settlement and developments, and site specific historical research. Field methods and the research design and perspectives governing the Phase III investigations will be presented, followed by a report of the results of the excavations. Artifact analyses, soil chemical analyses from within the excavation area and twentieth-century farm will be compared. Finally, interpretations, from both intra- and inter-site perspectives, will be presented with conclusions from local and regional viewpoints.

ENVIRONMENTAL SETTING

The Buchanan-Savin Farmstead was located in the High Coastal Plain of Delaware, south of the Piedmont Uplands (Custer 1984:25; Grettler et al. 1991:7-9). Situated well below the Fall Line and quite close to the Smyrna River, the High Coastal Plain represents the southeastern extension of the very coarse glacial deposits of the Columbia sediments. In many areas of New Castle County, these

coarse deposits resisted erosion, creating a rolling topography with up to 50 feet (16 meters) of elevation difference between headlands bordering larger streams and the adjacent floodplain marshes. Water courses tend to be deeply incised and are lined with a veneer of relatively recent sediments that are thin along the upper reaches of the drainages and become thicker toward their mouths (Matthews and Lavoie, 1970).

The Piedmont in northern Delaware is composed of an assortment of crystalline rocks of igneous and sedimentary origin which were heavily metamorphosed during later Precambrian or early Paleozoic orogenies. In the western part of the Delaware Piedmont, micaceous schists, gneisses, and migmatites

of the Wissahickon formation predominate (Spoljaric 1972:3). These crystalline rocks slope to the south and southeast, forming a basement of the wedge-shaped mass of sediments of the Upper Coastal Plain.

Soils in this portion of New Castle County are generally of the Sassafras-Fallsington-Matapeake association, which consists of level to gently rolling upland settings with well-to-poorly drained and moderately coarse-to-medium textured soils. This association makes up about 12 percent of New Castle County soils. Although not of the highest quality for agriculture, these soils are suitable for farming with moderate fertilization and drainage techniques. At the Buchanan-Savin Farmstead the soils are of the Sassafras and Fallington Series.

The Sassafras Series is a deep, moderately well-drained sandy loam located on uplands of the Coastal Plain, with two to five percent slopes and moderate erosion. These soils are easily worked, warm quickly in spring, and are suited to many types of crops. Vegetation most often found in Sassafras soils are mixed hardwoods but some pines also occur. New Castle County contains 4,530 acres of these soils (Matthews and Lavoie, 1970). The Fallsington Series are a less deep, sandy loam with less than a two percent slope, have poor drainage, and a water table near or at the surface in spring and winter. As a result areas may pond for extended periods of time. At the northeast corner of the Buchanan-Savin Farmstead site, an area of Fallsington soils held water from late May to August 1990, greatly impeding excavations. Matthews and Lavoie (1970) stated that tile lines generally function well to drain Fallsington soils. Excavations at the Buchanan-Savin Farmstead revealed a network of entrenched pipes which served as such tile lines or often called tile fields (Figure 2). Tile fields will be discussed in the Excavation Results portion of this report.

REGIONAL HISTORY

The history of southern New Castle and northern Kent counties has been discussed in the works of; Munroe (1978, 1984), Caley (1968), Hoffecker (1973, 1977), Zippe (1968), Weslager (1961, 1967), Lemon (1972), Hancock (1932, 1947, 1976), Hudson (1969), Scharf (1888), Hayes (1860), and Bausman (1940, 1941). A detailed historical overview of northern Kent County and southern New Castle County is provided in the Phase II investigations (Grettler et al. 1991), and readers should refer to that work for the regional history for the Buchanan-Savin Farmstead. A detailed discussion of how this historical overview has determined current historical research directions is presented in the state plan for Delaware's historical archaeological resources (De Cunzo and Catts 1990).

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

The Buchanan-Savin Farmstead was recognized during the Phase I pedestrian survey of the proposed Route 1 right-of-way (Bachman, Grettler, and Custer 1988). Seven structures, which composed a twentieth-century dairy farm, and two additional buildings, a nineteenth-century farmhouse with an associated meat house, were observed. At that time, the area around the Buchanan-Savin farmhouse was unplowed and had a high potential for intact subsurface features with artifacts in good stratigraphic context. Phase II investigations of the site consisted of the excavation of 183 shovel test pits and eight 3x3 ft test units (Grettler et al. 1991). The shovel test pits were excavated along a 25 ft grid around all standing buildings. The eight test units were located in areas of greatest domestic activity particularly around the Buchanan-Savin farmhouse (Figure 3).

The nine structures found in the Phase II investigation included the Buchanan-Savin farmhouse, a small frame storage shed, garage, large agricultural implements shed, small barn, milk shed, large dairy barn, animal pen, frame corn crib, poured concrete trough and adjacent well, and a concrete retaining wall (Figure 3). All buildings, except the small storage shed and the farmhouse of nineteenth-century construction, were found to be of early to mid-twentieth-century concrete block and frame construction.

Historical artifacts recovered from the Phase I and II testing included large amounts of window glass fragments, brick, cut and wire nails and nail fragments, bone and shell, lamp glass, bottle and jar glass, whitewares, ironstone, pearlwares, and redwares (Appendix I).

Phase II shovel testing exposed an area of high artifact density (more than 10 artifacts per shovel test pit) east of the Buchanan-Savin farmhouse. The area contained concentrations of architectural and domestic artifacts around the only two identifiable nineteenth-century structures at the site, the Buchanan-Savin farmhouse and a vertical plank storage shed originally constructed as a meat house (Figure 3). The density of artifacts ranged from less than 5 to 72 artifacts per shovel test. Significant densities of greater than 20 artifacts per shovel test pit are shown in Figure 4.

The Data Recovery Plan for the Buchanan-Savin Farmstead (Bachman 1989) determined this area to be the core of the site and represented the main domestic activity area. Bachman recommended that further work should be concentrated in this area. Accordingly, Phase III data recovery was specifically directed to this portion of the study area.