

I. INTRODUCTION

The Cultural Resource Group of Louis Berger & Associates (LBA) has conducted a Phase I archaeological survey of impact areas associated with proposed improvements to the intersections of Rts. 7 and 58 in New Castle County, Delaware (Figure 1). The work was carried out in accordance with a proposal prepared under Parent Agreement No. 729-1, for the Delaware Department of Transportation, Division of Highways (DelDOT).

The Rt. 7/58 intersection is currently at ground level, but DelDOT proposes to elevate Rt. 7 onto an overpass. The improvements will include the construction of several ramps, the relocation of an access road northeast of the intersection, and the relocation of softball and soccer fields belonging to the Delaware Technical College. The current survey covered all these improvements. Much of the impact area, however, had already been disturbed by the massive construction activity of recent decades, including the construction and widening of New Churchman's Road (Rt. 58), the widening of Rt. 7, the construction of the Technical College, and the construction of numerous motels, office complexes, restaurants and retail stores. Therefore, although the project included a walkover survey of the entire project area, subsurface testing was focused on less disturbed areas, especially on the Technical College grounds.

Fieldwork for the survey was carried out in August, 1995. Charles LeeDecker was the Project Manager, Dr. John Bedell was the Principal Investigator, and Earl Proper served as Field Supervisor.

II. PROJECT SETTING AND ENVIRONMENT

The project area is located at the boundary of the Coastal Plain physiographic province, which is generally characterized by low-lying, nearly level topography, and the Piedmont, which is characterized by dissected upland terrain. The Coastal Plain was formed by the deposition of material transported from beyond the Fall Line, and it consists of masses of unconsolidated sands, gravels, and clays of marine or fluvial origin. Piedmont soils are formed from decaying sedimentary rocks. Immediately east of the project area is Churchman's Marsh, a large wetland at the confluence of the Christina River and White Clay Creek. Other large wetlands are located both north of the project area, along White Clay Creek, and to the south along the Christina River. The dominant soils in the project area are Mattapex silt loam, a fertile soil with some drainage problems, and Keyport silt loam, a moderately drained soil that develops on old clay deposits (Mathews and Lavoie 1970).

In the past 15 years the immediate vicinity of the project area has experienced extremely rapid development, moving in that time from an essentially rural area to a bustling suburb. Some of the many large developments in the vicinity constructed in that time frame are an enclosed shopping mall to the south, a hospital and large office park to the west, a major banking center to the north and the Delaware Technical College to the east. The intersection itself is surrounded on the northwest, southwest and southeast by motels, restaurants and shopping centers. The only open ground is to the northeast, around the Technical College. The college's softball and soccer

fields are immediately adjacent to the intersection and will be destroyed by the proposed construction. Therefore, DelDOT is constructing replacement fields east of the College in an area of woods and waste. Parts of this area have also been disturbed, but the proposed location of the new soccer field includes undisturbed woods overlooking wooded wetlands.

III. BACKGROUND

A. Previous Investigations

A number of significant archaeological survey and excavation studies has been carried out in the vicinity of the project area (Figure 1). The Clyde Farm Site, 7NC-E-6, one of the most important prehistoric sites in the Delaware, is located only northeast of the Rt. 7/58 intersection. In recent years Dr. Jay Custer of the University of Delaware has conducted several excavations on the Clyde Farm Site and has also carried out surveys of the surrounding areas, locating twelve other prehistoric sites within 1000 meters of 7NC-E-6. These sites span the Woodland I (3000 BC to AD 1000) and Woodland II (AD 1000 to 1600) periods, and they have yielded large numbers of projectile points, ceramics, steatite bowls fragments, and subsurface features.

Other archaeological surveys have been carried out in the area as part of DelDOT highway improvement projects. The first was carried out by Ron Thomas of MAAR on proposed improvements to Rts. 4, 7 and 273. During that survey the Delaware Park Site (7NC-E-41), a major prehistoric site dating to the Woodland I period, was located along White Clay Creek approximately one mile north of the current project area.

Another survey was carried out in along New Churchman's Road (Rt. 58) when the road was widened in 1982 (O'Connor et al. 1983). One site was located during that survey, a historic farmstead called the Hawthorn Site (7NC-E-46); this site was later extensively excavated (Coleman et al. 1984).

B. Historical Sketch

The project area is in White Clay Creek Hundred, which was one of the first inland areas of Delaware to attract substantial European settlement. The town of Christiana Bridge, located two miles south of the project area, developed as a crossroads and landing on the Christina River by the 1740s. However, with the coming of the railroad in 1839 crossroads towns such as Christiana Bridge suffered, and the town entered a long decline from which it recovered only as a suburb in recent years.

Although the area was an early one to develop, there is no map evidence of historic habitation in the project area. Rt. 7, the Christiana to Stanton Road, is shown on early maps, but Churchman's Road (Rt. 58) was not constructed until the 1880s. The historic houses shown on nineteenth century maps have been accurately located during earlier work on New Churchman's Road, and none are shown in the project area. Therefore, although historic settlement is certainly possible in the project area, no historic sites are expected.

IV. ARCHAEOLOGICAL SURVEY

A. Methods

Because the majority of the project area had been disturbed by recent construction, fieldwork was focused on less disturbed areas. Disturbance was evaluated by a review of 1"=100' DelDOT plans of the proposed intersection improvements and a thorough surface inspection of the entire project area. The only undisturbed areas identified were northeast of the intersection. Area B was the site of the proposed soccer field, in a wooded area east of the College. Area C was the site of the proposed access road, which runs from the Technical College north across the property of the AAA and to the Morgan Guaranty Trust driveway.

The shovel tests, which measured approximately 50 centimeters (1.5 feet) in diameter, were excavated at least 10 centimeters into sterile subsoil. The excavated soil was screened through 1/4 inch hardware cloth to recover any artifacts. Schematic soil profiles, including soil texture and Munsell soil color notation, were recorded for each shovel test on a standardized form. Each shovel test was backfilled upon completion. The locations of all shovel tests were recorded on 1"=100" maps supplied by DelDOT. Black and white photography was used to record general conditions throughout the project area.

B. Findings

1. *Area B*

Area B was the location of the proposed new soccer and softball fields, east of the Technical College in woodland ground just north of Rt. 58. Nineteen shovel test pits were excavated in the location of the proposed soccer field. The eastern two-thirds of this area was largely undisturbed, and since it was gently sloping ground overlooking wetlands, close to an intermittent stream, it was considered to have high potential for prehistoric archaeological resources. No prehistoric artifacts were recovered. A very thin scatter of historic artifacts, consisting of four pieces of window glass, one piece of whiteware, one nail, and one piece of bottle glass, was noted throughout the area. No more than two artifacts were recovered from any one STP, and the scatter was considered too thin to indicate a nineteenth-century house within the area. The artifacts most likely represent a field scatter associated with one of the known nineteenth-century farm sites located south and north of the project area.

The western third of the proposed soccer field, along with the entire proposed softball field, had been disturbed by grading and the excavation of a small borrow pit, and these areas were not tested.

2. *Area C*

Area C was the location of the proposed new access road, northeast of the intersection on Technical College property. Seventeen shovel test pits were excavated in this area, in a single line at 20-meter intervals, following the route of the access road. Shovel test pits C-1 to C-12

were excavated from the current soccer field north to the AAA driveway. The level of disturbance in this area could not be determined by visual inspection, and because of its proximity to an intermittent stream it was considered to have some potential for prehistoric archaeological resources. The southern part of this line, STPs C-1 to C-4, encountered soils that had been heavily truncated by grading, and decaying shale bedrock was reached in each test at a depth of 10 to 20 centimeters. Farther north the soil was less disturbed, although it had all been plowed. STPs C-10, C-11 and C-12 encountered substantial quantities of recent bottle glass, apparently the result of roadside dumping.

Shovel Test Pits C-13 to C-17 were excavated in the wooded wetland between the AAA driveway and the Morgan Bank driveway. Although the soils in this area were dry at the time of the testing, it has been a dry summer, and the soil profiles suggested that the area was wet for most of the year. No areas of higher ground that might have been attractive camping sites for prehistoric peoples were noted in this portion of the project corridor. No artifacts were recovered in this area except some recent bottle glass.

V. CONCLUSIONS AND RECOMMENDATIONS

A total of 37 shovel test pits were excavated in the Rt. 7 and 58 intersection improvements project area, and no archaeological sites were located. Two possible prehistoric artifacts, both lithic flakes, were recovered on Technical College property just northeast of the intersection, but no site was defined and no further work is recommended. Otherwise, only a few pieces of recent glass and other trash were recovered. No further archaeological work is recommended in the Rt. 7 and 58 intersection improvements project area.