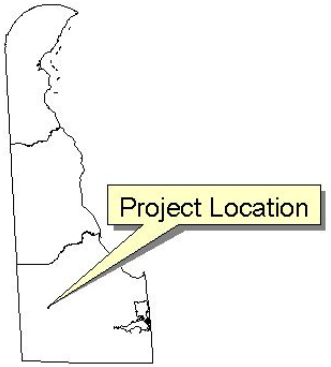
CHAPTER 1: INTRODUCTION

The Delaware Department of Transportation (DelDOT) has replaced Bridge 238, on S 46 over Gravelly Fork, in Sussex County, Delaware. The bridge lies in an area referred to locally as the Middleford Mills, a milling and iron production complex that operated during the 18th and 19th centuries along the Nanticoke River. Phase I Cultural Resource Survey of the project right-of-way, completed in June of 1998, confirmed that S 46 follows an early 19th century mill dam, while Bridge 238 carries the road across what is believed to be a tail race or slipway. The survey found evidence of wooden structures of undetermined function in the waterway beneath the bridge, and indications of early ground surface deposits below fill layers associated with modern road and bridge construction. Excavation carried out underneath the bridge inside a cofferdam in 1999 exposed foundation remains from an earlier bridge and possible waste gate structure. Following the criteria set forth in 36 CFR 800.9(c) (1986 version), there was no adverse effect to the resources identified underneath Bridge 238 because the information value has been collected via data recovery. The following documentation is intended to fulfill the requirements of 36 CFR 800.8(a) (1986 version).

DESCRIPTION OF THE UNDERTAKING

DelDOT replaced Bridge 238, in Sussex County with a wider, concrete structure. The improvements consisted of removing the existing Bridge 238 structure, building a precast concrete culvert on a cast-in-place concrete pile foundation, installing drainage and guardrail, and reconstructing roadway approaches with bitumous concrete. Plans for the new bridge and road are shown in Figure 1. The general location of the project is shown in Figure 2.



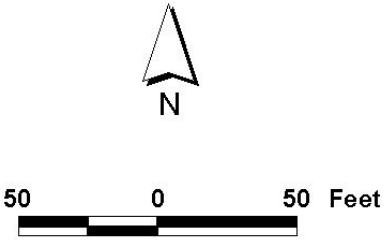


Figure 1: Plans for Bridge 238 on S 46

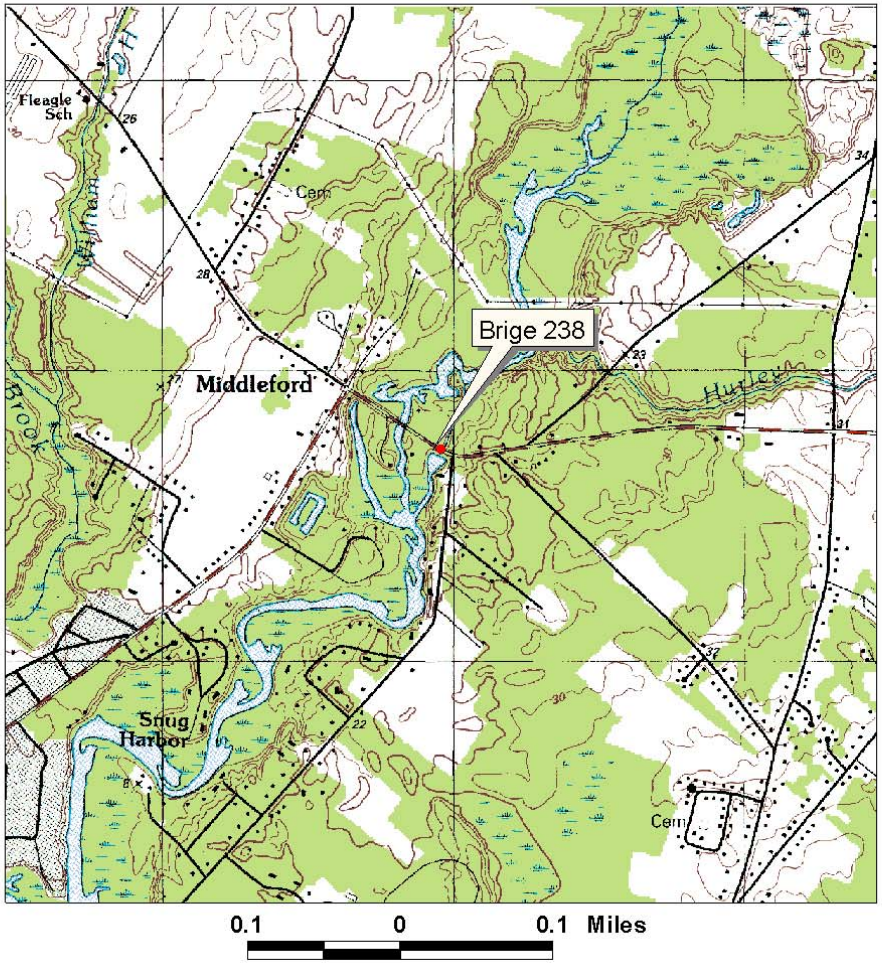
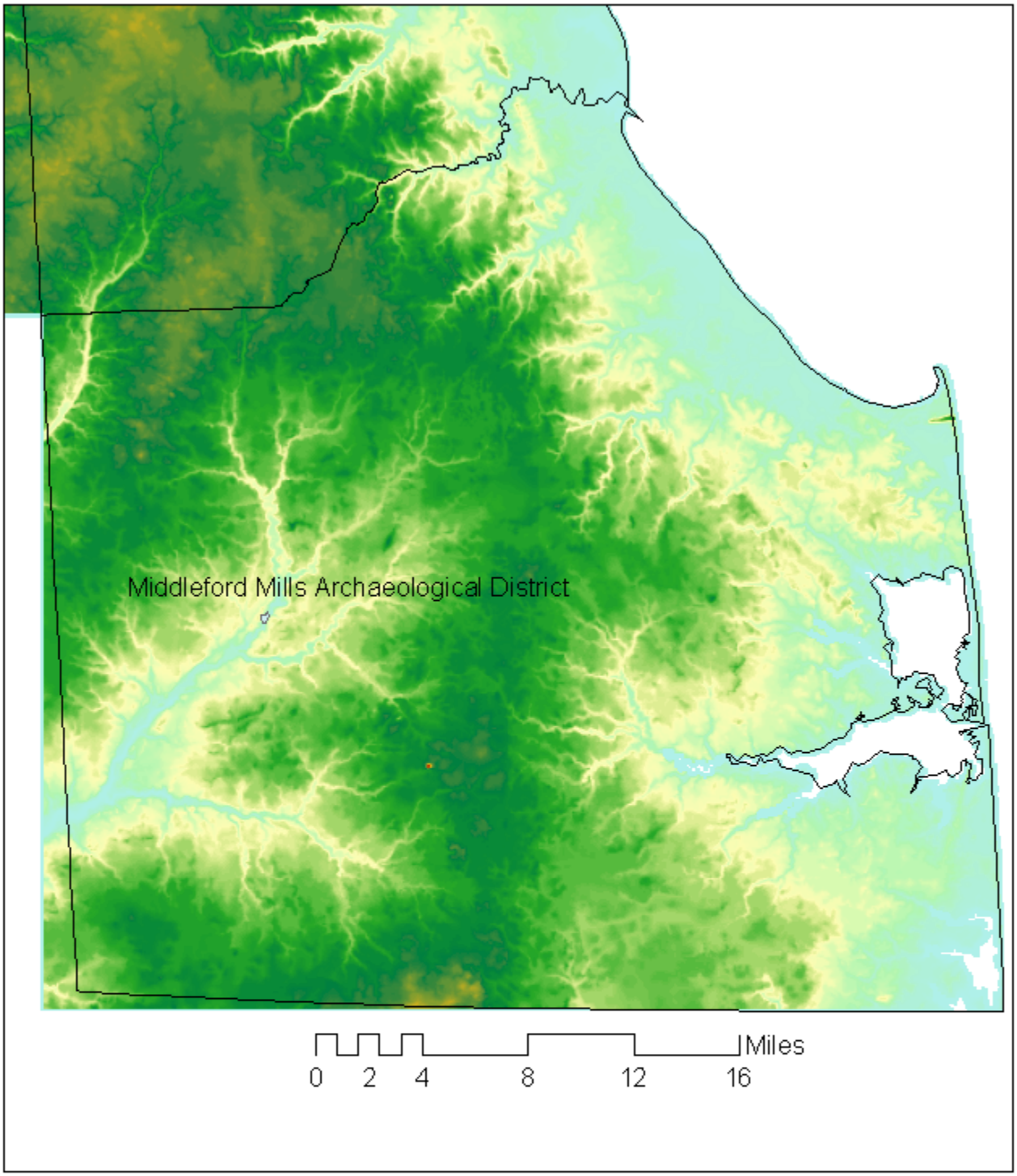


Figure 2: Bridge 238
Project Location



Legend

Value

High : 495.000000

Low : 1.000000

Figure 3: Middleford Mills Location on Sussex County Elevation Model