

Chapter 1

INTRODUCTION

A. PROJECT DESCRIPTION

1. Purpose and Need

The Federal Highway Administration (FHWA) and the Delaware Department of Transportation (DelDOT) will construct a new alignment for U.S. Route 301 in southern New Castle County, Delaware, from just south of the Chesapeake and Delaware Canal as far as the Maryland state line southwest of Middletown (Figure 1.1).

The purpose of the U.S. Route 301 project is “to improve and enhance highway safety, manage truck traffic, and address existing and projected traffic congestion in the U.S. Route 301 corridor, while minimizing environmental impacts and accommodating existing and planned development.” Five specific needs for the project were identified: safety, traffic growth, system deficiencies, demographics, and land use (Federal Highway Administration and Delaware Department of Transportation 2007, Chapter 1).

2. The Highway Project

In April 2008 the U.S. Department of Transportation issued the Record of Decision (ROD) on the selected alternative for U.S. Route 301 from the Maryland/Delaware state line to Delaware State Route 1 south of the Chesapeake and Delaware Canal (Federal Highway Administration 2008). This large (\$500 million-plus) highway construction undertaking is classed as a Major Project (often referred to as a Mega Project) under the 2005 SAFETEA-LU Act. Such projects have elevated standards of project and finan-

cial planning and oversight (Capka 2007). DelDOT is required, under the ROD, to implement the mitigation features planned for this project.

The selected alternative mainline is a limited-access toll highway with a 66-foot median, providing a four-lane, limited access roadway on a new location, extending generally northward from the Maryland/Delaware state line, west of Middletown, along the Ridge Route, to the vicinity of Armstrong Corner Road. In the vicinity of Armstrong Corner Road, the new U.S. Route 301 mainline alignment curves and extends northeast, crossing over existing U.S. Route 301, the Norfolk Southern Railroad, and existing Delaware State Route 896 (Boys Corner Road) before curving and extending east and tying into Delaware State Route 1, north of the Biddle’s Corner Toll Plaza and south of the Chesapeake and Delaware Canal. The spur road portion of the selected alternative is a limited access toll highway with a 62-foot-wide median. Near Armstrong Corner Road, the two-lane spur road would extend north on a new location from new U.S. Route 301, along the Ridge Route, to interchange with Delaware State Route 15/State Route 896 south of Summit Bridge and the Chesapeake and Delaware Canal (Federal Highway Administration 2008:9).

3. Planning for Cultural Resources

As a federally funded and supervised undertaking, the U.S. Route 301 project is required to comply with a range of statutes, Executive Orders and guiding regulations. The National Historic Preservation Act of



Figure 1.1. General Location of the U.S. 301 Selected Alternative Project Corridor. Limits of Section 2, the portion covered by this report, is indicated. (Source: Federal Highway Administration and Delaware Department of Transportation 2007 Figure I-2).

1966 (as amended) and the associated federal regulation 36 CFR 800 are in this case the primary instruments for addressing cultural resource issues.

In November 2007 a Memorandum of Agreement (MOA) was signed by the Federal Highway Administration, the Delaware State Historic Preservation Officer, the Maryland State Historic Preservation Officer and the Delaware Department of Transportation. This MOA, prepared pursuant to Section 106 of the National Historic Preservation Act of 1966 (as amended) and to 36 CFR 800, sets out the procedures to be followed for historic properties (Federal Highway Administration 2008, Attachment D).

For archaeological resources, the MOA stipulations include the following:

Phase I identification surveys and, if necessary Phase II National Register eligibility evaluation surveys, within the APE.

Submittal of reports by DelDOT to the Maryland and Delaware State Historic Preservation Officers.

Procedures for making National Register eligibility determinations.

Treatment of adversely affected eligible archaeological resources, including documentation through research-oriented programs of archaeological data recovery. Such programs will include a public participation plan.

Procedures for the treatment of human remains.

Curation of artifacts with the Delaware Division of Historical and Cultural Affairs.

Procedures for addressing changes to the U.S. Route 301 project design.

Procedures for addressing late or unanticipated discoveries in accordance with 36 CFR 800.13.

B. THE CURRENT STUDY

This report documents the results of fieldwork and data analysis of from the Phase IB archaeological survey of the roughly 4.5 miles of Section 2 (Yellow) of U.S. Route 301, St. Georges Hundred, New Castle County, Delaware (Figure 1.2; Plate 1.1). Project Manager for the project was Ian Burrow, Principal Investigator was William Liebeknecht, and Senior Archaeologist was Susan Ferenbach. The work has been performed under Task Order 8 of DelDOT Agreement 1415. This document forms part of the compliance process under the Memorandum of Agreement.

The primary task accomplished under this task order was surface collection and subsurface testing within a total of 20 areas. Two other areas were excluded from testing for reasons explained in the text. The surveyed areas were identified in a Phase IA study (Hunter Research, Inc. 2009), and in subsequent discussions with DelDOT, as likely to contain potentially significant archaeological cultural resources. The fieldwork was performed between early October 2009 and January 20, 2010. Three areas that were inaccessible during this main phase of work were tested in November 2010 (Area 13), and February (Area 19) and May 2011 (Area J).

The archaeological Area of Potential Effects (APE) of Section 2 is estimated to cover 238 acres (96 hectares), of which 104 (42 hectares) were surveyed under this task order. The APE crosses, or runs close to, the headwaters of several drainages feeding the Bohemia Creek watershed on the west and the Appoquinimink Creek watershed to the east. Between Survey Stations 340 and 365 the road alignment also runs along the west side of a more extensive area of hydric soils forming the headwaters of the Dove Nest Branch. This feeds the Appoquinimink drainage to the east. Soils are predominantly of the well-drained Matapeake-Sassafras Association, with poorly drained Johnston Loams in the valley bottoms.

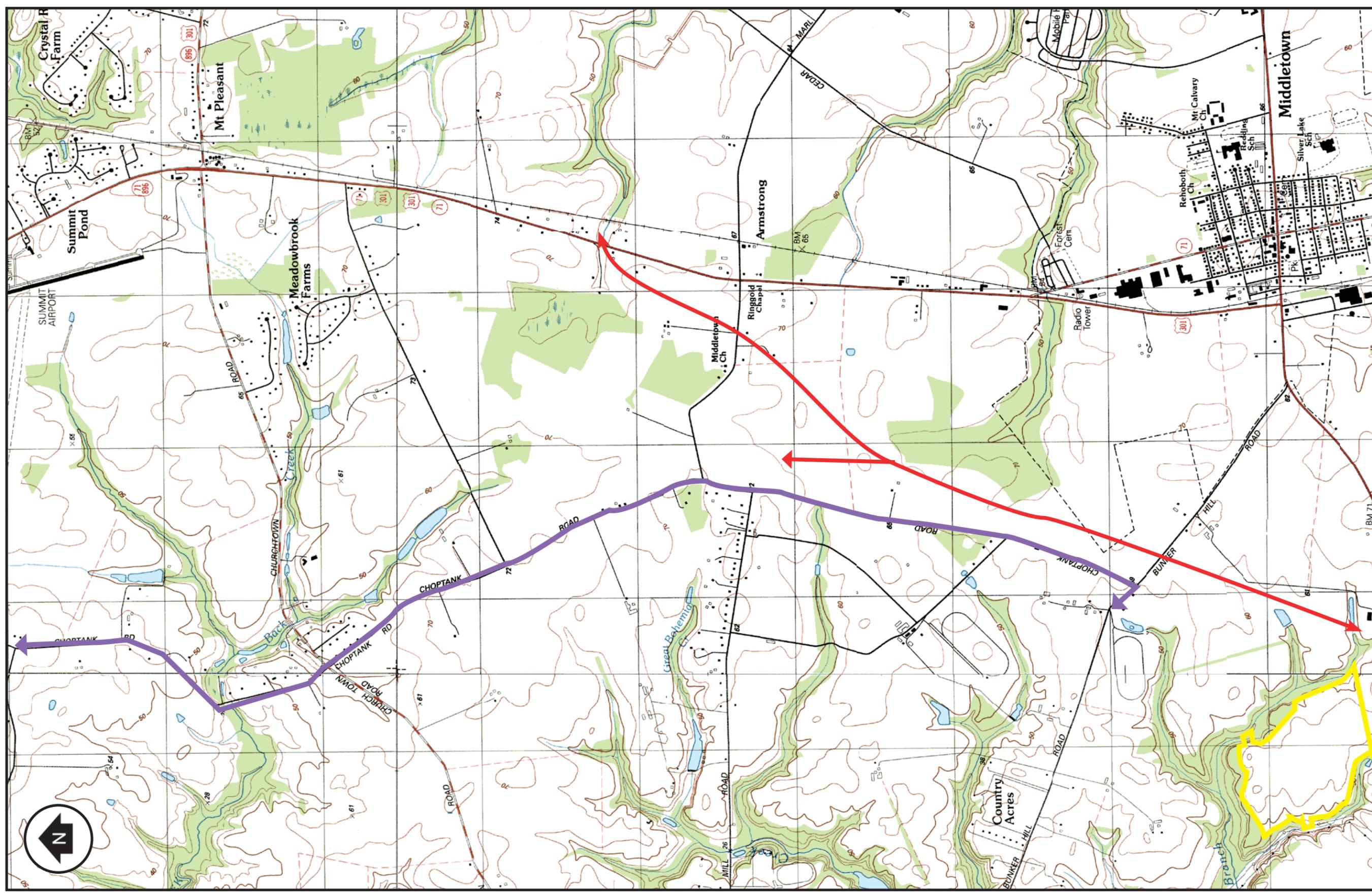


Figure 1.2. Detailed Location of U.S. 301 Selected Alternative, Section 2. Scale: 1 inch= 2,000 feet. The location of the nearby 2009 geoaerological investigation (Hayes 2009) and the Choptank Road studies (Kise Straw and Kolodner 2008, Figure 1) are also shown. Source: USGS 7.5' Cecilton, MD. (1993) and Middletown, DE. (1993) Quadrangles.

The landscape in 2010 is one of open farmland that is suburbanizing rapidly. Areas of woodland are present, chiefly in the stream valleys or headwater areas where soils are less well drained.