

SECTION 1.0 INTRODUCTION

This report presents the results of a combined Phase I (identification-level) archaeological survey (hereafter Phase I archaeological survey) that includes Phase IA and Phase IB surveys conducted by Richard Grubb & Associates (RGA) of Cranbury, New Jersey for the Delaware Department of Transportation (DelDOT), within the Area of Potential Effects (APE) for the proposed U.S. Route 301 Levels Road Mitigation Site in St. Georges Hundred, New Castle County, Delaware (Figures 1.1-1.3). This Phase I archaeological survey was conducted as part of the implementation of a Memorandum of Agreement (MOA) developed between the Federal Highway Administration (FHWA), the DelDOT, the Delaware State Historic Preservation Office (DESHPO), and the Maryland Historical Trust (MHT) (executed in November and December of 2007). As part of the development of the U.S. Route 301 project, a Final Environmental Impact Statement was completed in December of 2007 (DelDOT 2007) and a Record of Decision was issued by the FHWA on April 30, 2008. Consultation with the FHWA and the DESHPO has taken place. Stipulation 1.A. of the MOA requires completion of identification/evaluation-level (i.e. Phase I/II) archaeological surveys to determine if archaeological or historic properties (i.e. National Register-eligible) are present in the APE (see Appendix A).

The survey was completed in accordance with scopes of work (SOW) for the Phase IA archaeological survey dated May 28, 2008 (approved by DelDOT on September 2, 2008) and the Phase IB archaeological survey dated August 5, 2009 (approved by DelDOT on September 17, 2009, see Appendix B), the Secretary of the Interior's *Standards and Guidelines for Archaeology, Historic Preservation*, and the *Guidelines for Architectural and Archaeological Surveys in Delaware* (DESHPO 1993, 2008). Because federal funds are being used, this work was performed in accordance with Section 106 of the National Historic Preservation Act and its regulations (36 CFR 800), and was directed by Ilene Grossman-Bailey, Ph.D., RPA, whose qualifications exceed the requirements of 36CFR61 (see Appendix C).

The Phase IB archaeological survey was conducted in compliance with the Delaware Unmarked Human Remains Act (7DE Code Chapter 54, 66 Del. Laws, c.38§ 1; 75 Del. Laws, c. 153, §§4, 5). No human remains were located during the Phase IB archaeological survey. Future archaeological surveys for this project will be conducted in accordance with the MOA, and in compliance with Delaware state laws and guidelines regarding human remains.

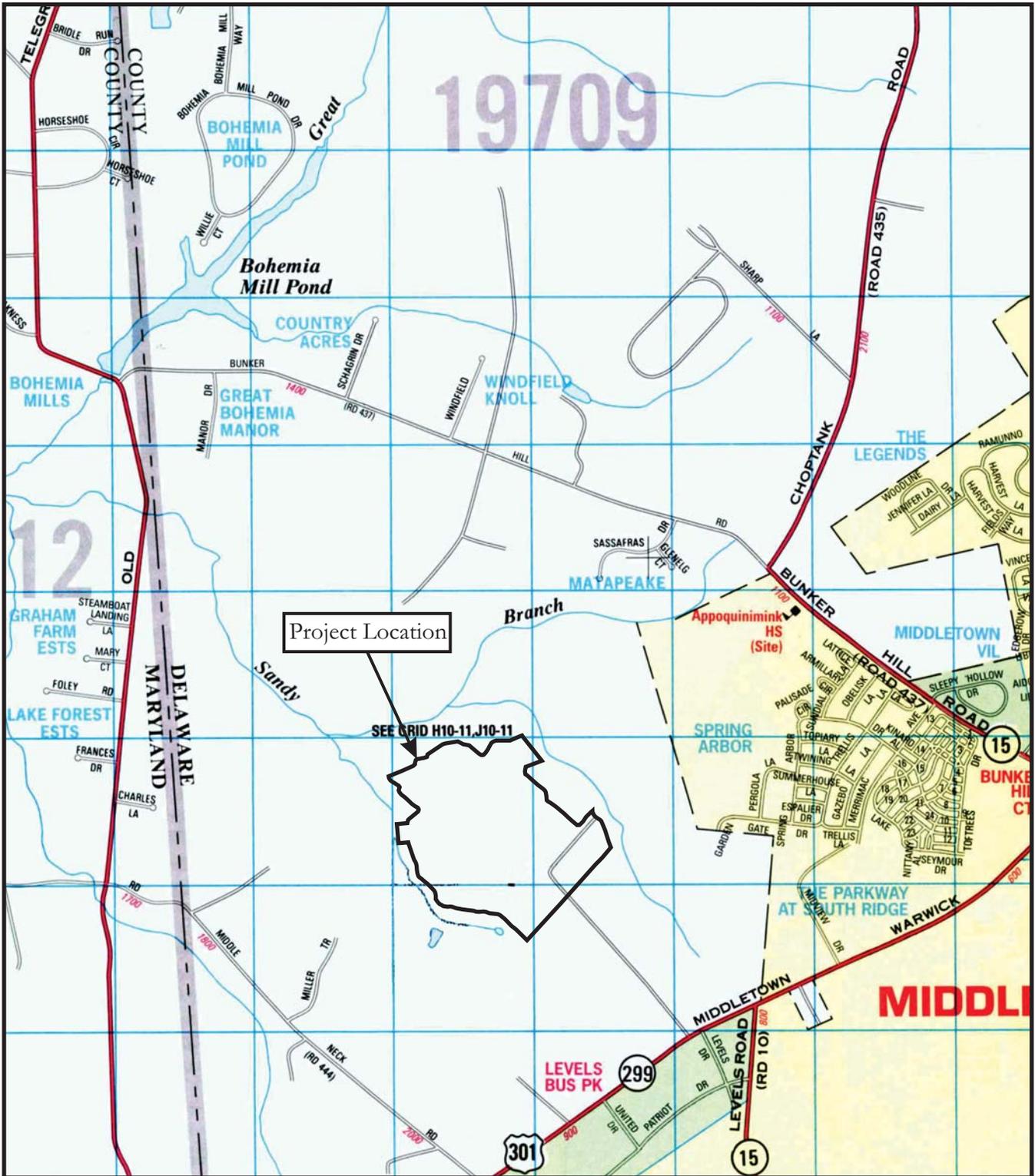


Figure 1.1:

County Map
 (from 2006 Alexandria Drafting Company,
 New Castle County, Delaware).



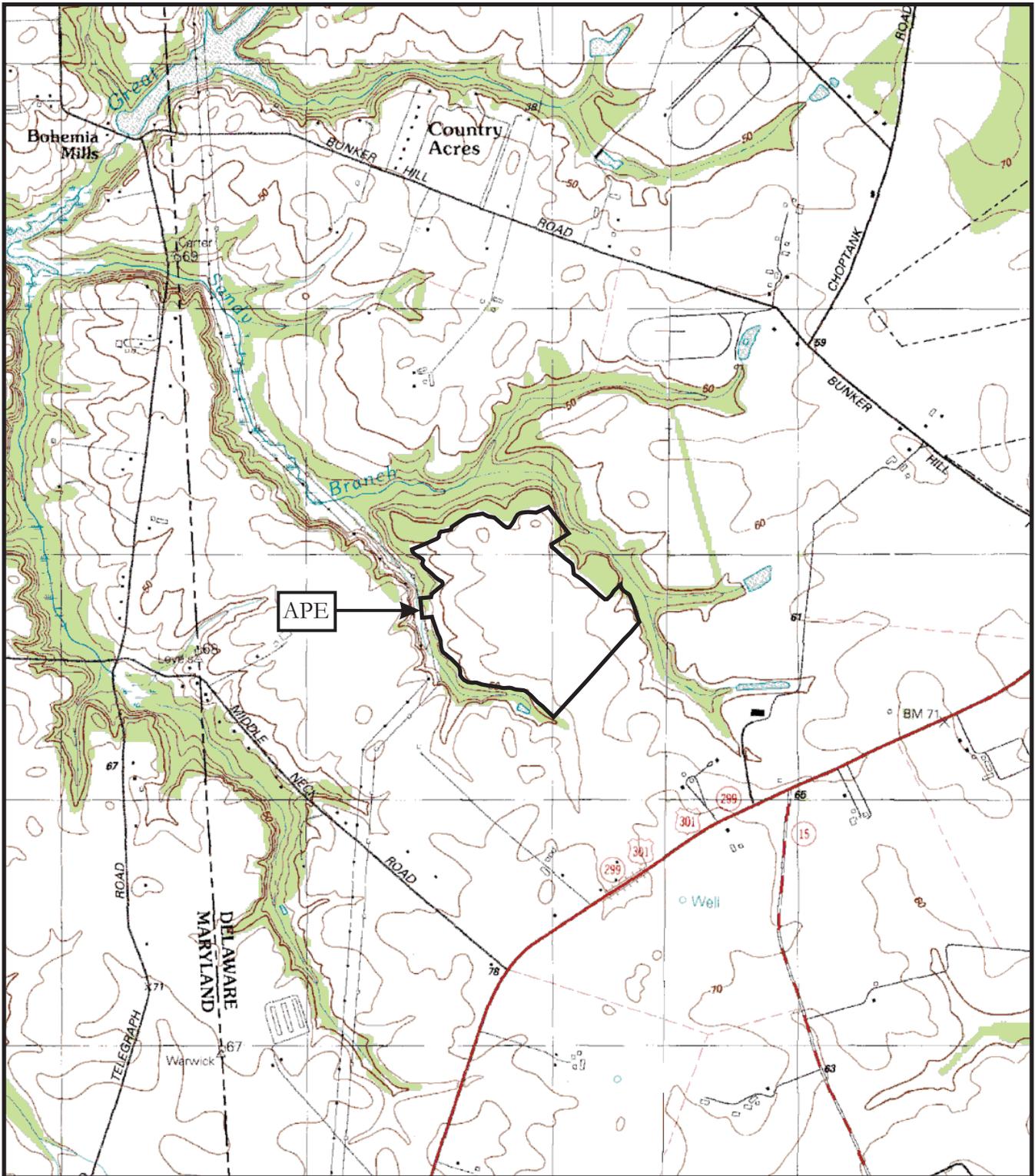


Figure 1.2:

U.S.G.S. Map

(from 1993 U.S.G.S. 7.5' Quadrangles:
Cecilton, MD-DEL and Middletown, DEL).



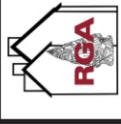


Figure 1.3:
Aerial Map (from U.S.G.S. Delaware Digital Ortho Quarter Quad Aerial Photography 2007).



The purpose of this combined Phase I archaeological survey was to 1) determine the potential for the APE to contain archaeological resources; and 2) identify potentially significant historic or prehistoric archaeological resources within the APE. The Phase IA SOW (see Appendix B) included background research, pedestrian reconnaissance, and preparation of a testing strategy for the Phase IB archaeological survey. The Phase IB SOW included the archaeological field survey; artifact processing, analysis, cataloguing, and curation; and reporting (see Appendix B). This Phase I (combined Phase IA and Phase IB) archaeological survey report was preceded by a Phase IB management summary (Richard Grubb & Associates, Inc. 2010). Results of the Phase IA archaeological survey were presented to DelDOT/DESHPO at a meeting on January 9, 2009. Results of the completed Phase IB archaeological survey were presented at a meeting on February 16, 2010, in the management summary dated March 31, 2010, and at a meeting with DelDOT/DESHPO on June 25, 2010. All field notes, photographs, and project documents are housed at the office of RGA in Cranbury, New Jersey.

This report includes an introduction, sections on the environmental setting, background research, archaeological fieldwork and results, archaeological sites located during the survey, conclusions and management recommendations, references cited, and 12 appendices: Appendix A: Memorandum of Agreement (MOA); Appendix B: Phase IA and IB Scopes of Work (SOW); Appendix C: Curriculum Vitae for Key Project Personnel; Appendix D: Record of Consultation; Appendix E: Project Table; Appendix F: Shovel Test Pit Log; Appendix G: Prehistoric Artifact Catalog; Appendix H: Historic Artifact Catalog; Appendix I: Metal Detector Survey Report; Appendix J: Geoarchaeological report; Appendix K: Site Registration Forms; and Appendix L: Annotated Bibliography.

1.1 Project Description and the Area of Potential Effects

The Area of Potential Effects (APE) is defined in 36 CFR 800.16(d) as “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects cause[d] by the undertaking.” For the Phase I archaeological survey, the APE includes all locations where an undertaking may result in ground disturbance.

The description of the APE is based on a map provided by DelDOT dated January 2008. The APE for U.S. Route 301 Mitigation Site consists of a 123.21-acre tract with two outfall areas to the north and south, and wooded areas at the northeastern portion, in St. Georges Hundred, New Castle County, Delaware (see Figures 1.1-1.3). The APE includes the entire area of proposed construction impacts. The APE is adjacent to the western limits of Section 3 and southwest of the southern limits

of Section 2 of the proposed U.S. Route 301 in Delaware. U.S. Route 301 is a proposed four-lane toll highway that will extend approximately 17.5 miles from near the Maryland-Delaware border to State Route (SR) 1, just south of the SR 1 Bridge over the Chesapeake & Delaware Canal.

1.2 Methodology

The methodology for the Phase IA archaeological survey was described in the May 28, 2008 SOW (see Appendix B). The Phase IA archaeological survey included background research, a pedestrian reconnaissance of the APE, geomorphological investigation, and development of a Phase I field strategy. The methodology for the Phase IB archaeological survey was described in the August 5, 2009 SOW for the project. Tasks included a pedestrian survey, completion of shovel test pits (STPs) and excavation units (EUs), a metal detector survey, artifact analysis, and report production. The results of the Phase IB were initially reported in a management summary dated March 31, 2010 (Richard Grubb & Associates, Inc. 2010).

During the Phase IA archaeological survey, background research tasks included documenting the environmental settings present in the APE, consultation with individuals knowledgeable about the APE and its vicinity, review of registered archaeological site files, National Register nominations, cultural resources management reports on file with the DESHPO, MHT, and DelDOT, and the development of site-specific prehistoric and historic contexts to aid in the identification and interpretation of archaeological sites. A geomorphological investigation was conducted during this phase to determine the depositional nature of the APE and potential for deeply buried archaeological sites to be discovered during the survey. Detailed site-specific documentary research including an examination of deeds, probate records, and genealogies resulted in the construction of a chain of historic land ownership for the APE. This record of land use was used to assess the potential for historic archaeological resources within the APE and to guide the development of the field strategy for the Phase IB archaeological survey.

During the Phase IA current land use patterns in the APE were examined, and zones of archaeological sensitivity were defined within the APE. Topographic and hydrological settings and the vegetation cover were examined. Mapped locations of historic structures were examined for the presence of any standing buildings or remnant landscape features. A predictive model of prehistoric and historic sensitivity developed by A.D. Marble & Company and delineated on project maps provided by the DelDOT was utilized in this effort (A.D. Marble & Company 2006a). Existing conditions were recorded on field notes and with digital photography.

The APE was divided into 15 areas based on an assessment of low, moderate, or high prehistoric and historic archaeological potential. This is discussed in detail in Section 4.1. During the Phase IB archaeological survey, a pedestrian reconnaissance was conducted within archaeologically sensitive agricultural portions of the APE. A metal detector survey was performed by the Battlefield Restoration and Archaeological Volunteer Organization (BRAVO) in areas deemed to have high potential for historic resources. Shovel test pits were placed in wooded areas, and in the vicinity of surface finds, artifact concentrations, and other archaeologically sensitive locations in consultation with DelDOT. Excavation units were placed to collect additional data from designated sites with artifact concentrations, feature locations, and areas requiring more investigation at the discretion of the Principal Investigator in consultation with DelDOT. A detailed description of the Phase IB archaeological survey methods are found in Section 4.2.

1.3 Acknowledgements

Paul J. McEachen served as the project manager. Ilene Grossman-Bailey, Ph.D., RPA, was the Principal Investigator/Senior Archaeologist and principal report author. Philip A. Hayden wrote portions of the historic context section. Allison Gall, Philip A. Hayden, and Ilene Grossman-Bailey completed background research. The Phase IA pedestrian reconnaissance was conducted on October 17, November 11, and November 14, 2008 by Ilene Grossman-Bailey. The geomorphological investigation was conducted by Daniel Hayes in December 2008 with the assistance of Ilene Grossman-Bailey (Hayes 2009, see Appendix J). Phase IB fieldwork was supervised by crew chiefs Tara Bini and David Strohmeier (see Appendix C) and assisted by Alexis Platvoet. The field crew included Dawn Chessaek, Jennifer Danis, Tara Dossantos, Jennifer Falchetta, Emily Griffin, Ashley Hardison, Jason Kranch, Valerie Laton, Ariadne Moore, J. Andrew Ross, and Monica Weetman. BRAVO volunteers under the leadership of Daniel Sivilich, and supervised by Ilene Grossman-Bailey and Tara Bini, conducted the metal detector survey (see Appendix I). The artifacts were cataloged by Brenda Springsted, M.A., RPA, Laura Cushman, and Tara Bini. Report graphics were created by Patricia McEachen, Catherine Reagan, Allison Gall, Amy Raes, Sean McHugh, Jason Bottcher, and Ilene Grossman-Bailey. Paul J. McEachen, Mary Lynne Rainey, and Richard Grubb edited the report with the assistance of Christina Dunn. Richard Grubb & Associates would like to thank Dennis and Michael Clay, Jack Cresson, Dr. Jay Custer, Dr. LuAnn De Cunzo, John Giangrant and Meghan Gregg of Century Engineering, Daniel R. Griffith, Daniel Hayes, Darrin Lowery, Kimberly Morrell, and Daniel Sivilich for their assistance and advice. We would also like to acknowledge the assistance and advice of Gwen Davis, Charles Fithian, Alice Guerrant, Terence Burns, Jack Kraft, and Craig Lukezic of DESHPO.

