

## INTRODUCTION

The purpose of this report is to describe the results of a cultural resources planning study of the proposed Route 13 Relief Route (Figure 1). The study was undertaken by the Center for Archaeological Research, Department of Anthropology, University of Delaware, under the direction of Jay F. Custer, Principal Investigator, and Patricia Jehle, Assistant Investigator. Archaeological research was requested by the Delaware Department of Transportation to provide project planning information. The specific goals of the project were to identify zones within the proposed 40 mile long by 7 mile wide corridor that were likely to contain significant prehistoric archaeological resources, historic archaeological resources, and historic standing structures. The project did not seek to determine the significance of any individual site or structure. Rather, it sought to outline the potential cultural resources that may be encountered in various sections of the proposed project area. Further survey work will be necessary to determine the impact of proposed individual alignments on specific sites and to determine these sites' eligibility for listing on the National Register of Historic Places. No specific fieldwork was carried out as part of this study. Existing data listed by the Delaware Bureau of Archaeology and Historic Preservation were utilized along with a series of previously tested predictive models for archaeological site locations.

The report is organized into four sections. The first section provides a description of the study area and briefly reviews the regional prehistory and history. The second section presents the existing data base on archaeological site locations and standing structure inventories. Also, a discussion of the cultural context of the known sites and the quality of the existing data is provided. The third section describes the application of predictive models to planning studies, discusses the various predictive models used in this study, and presents the results

of their application to the project study area. Also, applications of LANSAT satellite data to the development of the prehistoric predictive model are discussed. The fourth and final section discusses the potential significance of the known sites in the project area and the potential significant sites that may yet be encountered based on the applications of the predictive models. A series of sensitivity zones based on potential occurrence of significant sites is also presented and described along with recommended cultural resource management strategies. The final three sections of this report also include a series of small scale maps showing locations of known sites, predicted site locations, and sensitivity zones.

Appreciation for their support, administration, and services is extended to individuals from:

**Division of Highways**

Raymond M. Harbeson, Jr., Asst. Director, Preconstruction  
Joseph T. Wutka, Jr., Location Studies and Environmental Engineer  
Kevin W. Cunningham, DelDOT Archaeologist  
Carol L. Kates, Secretary  
Paul H. Meleri, Draftsperson  
Jackie Mitchell, Word Processor  
Tim O'Brien, Photographer  
Barbara A. Willis, Draftsperson

**Federal Highway Administration**

A. George Ostensen, Field Operations Engineer  
Michael J. Otto, Area Engineer

**Bureau of Archaeology and Historic Preservation**

Daniel R. Griffith, Bureau Chief  
Faye L. Stocum, Archaeologist  
Alice H. Guerrant, Archaeologist

**University of Delaware**

Juan Villamarin, Chairman, Department of Anthropology  
Vytautas Klemas, Center for Remote Sensing College of Marine Studies  
Special Collections Room, Morris Library

**Hagley Museum**

Eleutherian Mills Historical Library

**Division of Graphics and Printing**

Ray Moore, Shop Supervisor  
John Bordley, Pressman  
Merrill Clark, Cameraman  
Bob Farley, Pressman  
Jeff Faulkner, Pressman  
Dorothy Hutchins, Machine Person

Jeff Faulkner, Pressman  
Dorothy Hutchins, Machine Person  
Joan Pillsbury, Machine Person  
Charles Pritchard, Pressman  
William Yerkes, Pressman