

1.0 INTRODUCTION

This report presents the application of an archaeological predictive model and the development of an archaeological survey methodology (testing strategy) for Purple Section 1 of the Delaware Department of Transportation's (DelDOT) US Route 301 relocation project. The new highway will consist of a limited access tolled facility on new location, extending from existing US Route 301 at the Delaware/Maryland state line in the southwest to State Route 1 just to the south of the Chesapeake and Delaware Canal in the northeast. A limited access tolled spur highway will extend north from the new US Route 301 to an interchange with SR 15/896 to the south of Summit Bridge. The project is sponsored and funded by DelDOT and the Federal Highway Administration (FHWA).

Purple Section 1 of the new highway extends along the highway's main line from its crossing of the Norfolk Southern Railroad to and including the SR Route 1 interchange, a distance of approximately 5.4 miles. This section of the highway crosses gently rolling rural terrain, most of which is under cultivation (Figure 1). The archaeological Area of Potential Effect (APE) encompassed approximately 262 acres (106 hectares).

The archaeological predictive model utilized herein is a refinement of a model developed by A.D. Marble & Company (ADM) for the overall US Route 301 project area during an earlier stage of project development (Baublitz et al. 2006). Archaeological & Historical Consultants, Inc. (A&HC) evaluated and applied ADM's model through a combination of background/archival research and a detailed walkover examination of the archaeological APE of Purple Section 1, as defined at the time of survey. Background research was performed from October to December, 2008 and in January 2009. The walkover survey was conducted in October, 2008. Based on the results, A&HC segmented the APE into areas having various probabilities for the occurrence of archaeological resources. A&HC's testing strategy entailed two distinct decision making processes – sample selection of APE segments and fieldwork methodology development. For each APE segment selected for survey, A&HC's Phase Ib testing strategy recommended a survey methodology appropriate to the level of archaeological sensitivity of the segment, the type(s) of archaeological resources expected there, and current field conditions.

During the development of the testing strategy presented herein, A&HC coordinated closely with DelDOT and with the Delaware State Historic Preservation Office (SHPO). A preliminary version of A&HC's predictive model and fieldwork strategy was presented in summary form, and DelDOT and the SHPO commented on it via conference call and follow up written response. This report incorporates those comments.

The primary authority for the work described herein is Section 106 of the National Historic Preservation Act of 1966, as amended, and implementing regulation 36CFR800 (as amended). Other relevant authorities include the National Environmental Policy Act of 1969, Executive Order 11593, Section 4(f) of the Federal-aid Highway Act of 1966 as amended in 1968, and the Archaeological and Historic Preservation Act of 1974. The work was performed in compliance with the provisions of the Delaware SHPO Guidelines for Architectural and Archaeological

Surveys (DESHPO 1993) and in partial fulfillment of Stipulation 1.A. of the Memorandum of Agreement for the US 301 Project Development.