

Appendix B

ACCEPTED PROPOSAL

DELAWARE DEPARTMENT OF TRANSPORTATION

U.S. ROUTE 301

SECTION 2

ST. GEORGES HUNDRED, NEW CASTLE COUNTY

DELAWARE

PHASE IA CULTURAL RESOURCE SURVEY

PARENT AGREEMENT 1415

TECHNICAL PROPOSAL NARRATIVE

Prepared for:

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and

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Outline:

A. UNDERSTANDING OF PROJECT

B. DATA BASE

**C. ANTICIPATED ARCHAEOLOGICAL RESOURCES AND CONDITIONS
WITHIN SECTION 2**

D. WORK PLAN

E. SCHEDULE

F. REFERENCES

G. COST PROPOSAL

A. UNDERSTANDING OF PROJECT

1. Route 301 Preferred Alternative

The projected construction of U.S. Route 301 will undoubtedly adversely affect both identified historic and prehistoric archaeological properties as well as unidentified sites predicted to lie within the project corridor. These properties were identified in an August 2006 study, *Archaeological Predictive Model U.S. 301 Project Development St. Georges, Pencader, and Appoquinimink Hundreds* prepared by A.D. Marble & Company for the Delaware Department of Transportation and Rummel, Klepper & Kahl, LLP (RK&K) (A.D. Marble 2006). This report discusses the prehistoric and historic archaeological potential for all four sections of the U.S. Route 301 corridor as well as various design alternatives that were under consideration at the time of the study.

2. HRI Section (2, Yellow) APE

Hunter Research, Inc. has been requested to examine Section 2 of the U.S. Route 301 corridor. Section 2 has been identified on DelDOT project maps as the Yellow Section. This section lies at the western municipal boundary of Middletown between Station 255+60 and Station 455+00 with a short spur branching out at Station 370+00 from 0+00 to 100+00 covering approximately 21,600 feet or just over four and a half miles (RK&K U.S. 301 Project Development Plans, Sheets 2 & 3 of 9 dated April 2008). This does not include the construction of six access ramps, (Ramp #s 1 and 4 at the southern end and Ramp #s 1- 3, & 7 located at the northern end with two toll plazas), one overpass (State Route 15, measuring 1,700 feet), 51 potential stormwater management facilities or basins (of various sizes) and three proposed earthen berms (measuring a total of 685 feet). The main corridor limit of disturbance/proposed right of way measures 300 feet wide for the most part. The proposed route within Section 2 will cross State Route 15/County Road 437 (Bunkerhill Road), Armstrong Corner Road (County Road 429) and the existing alignment of U.S. Route 301/ State Route 71 (Summit Bridge Road). At the northern end of Section 2 the proposed corridor crosses the Norfolk Southern Railroad. The proposed corridor also crosses two sub-branches of the Sandy Branch near the southern end of Section 2 and two sub-branches of the Spring Mill Branch. The archaeological area of potential effect (APE) is considered to be limited to the proposed right of way as shown by a dashed black line on U.S. 301 Project Development Plans, Sheets 2 & 3 of 9 dated April 2008.

3. Purpose of this Task

The purpose of this study is to provide DelDOT and the Delaware SHPO with a detailed synthesis of historic and prehistoric research for the proposed U.S. Route 301 corridor, Section 2 based on predictive prehistoric and historic settlement models and intensive historic research. The goal of this study will be to produce a document that will locate "hot areas" for archaeological testing and to access the appropriate level of effort necessary for Phase I testing based on our recommendations.

B. DATA BASE

A series of documents and studies has been prepared in developing the Preferred alternative in accordance with the National Environmental Policy Act of 1969.

The *US 301 Project Development: Final Environmental Impact Statement* was issued on December 14, 2007. Chapter III, (pages 51-52; 64-66) summarizes the data and conclusions from the A.D. Marble study.

The *Record of Decision, U.S. 301: Delaware/Maryland State Line to SR1, South of the Chesapeake and Delaware Canal, New Castle County, Delaware (April 30th 2008)* (ROD) documents the planning process that has led to the current Preferred Alternative.

The ROD (Chapter III, Section B.8) notes that “Any archaeological resources (known or unexpectedly identified during project construction) will be addressed in accordance with NHPA and Section 4(f) regulations to avoid, minimize, or mitigate adverse effects to any such properties, as stipulated in the MOA” (Memorandum of Agreement).

Commitment C-20 of the ROD is to “Conduct Phase I/II archaeological testing of LOD prior to commencement of construction, using the predictive model as a tool to determine levels of testing required, in accordance with stipulations in the **Memorandum of Agreement**”. The latter is dated November/December 2007 and is included as Attachment D to the ROD. The Deputy State Historic Preservation Officer confirmed concurrence with the EIS Finding of Adverse Effect to Historic Properties. at the same time (Martz to Kleinberg December 6th 2007: Appendix F to the ROD).

During 2006-7 A.D. Marble & company prepared a series of studies relating to cultural resource issues (see References) The august 2006 **archaeological predictive model** prepared by A.D. Marble for the proposed U.S. Route 301 alignments is a planning tool to assist in the development of designs for the various alignments under consideration by DelDOT. Prehistoric and historic archaeological potential was considered and assessed by this model so that areas of archaeological potential could be ranked as to greater or lesser archaeological sensitivity. Selective Phase I testing of the model “failed to record any definitive (prehistoric) sites” (A.D. Marble 2006:96). Prehistoric sites encountered during the Phase I testing, comprising “isolated point fragments and flakes”, were actually in areas categorized by the model as having low sensitivity, indicating that there are likely to be factors other than those deployed in the A.D. Marble study influencing site location.

This data was held to indicate an “ephemeral prehistoric usage of the area, consistent with the current theories of prehistoric settlement and subsistence patterns in the Midpeninsular Drainage Divide Zone during this period”. The study concluded that “while low sensitivity and moderate areas did not contain archaeological sites (e.g., procurement camps, habitation sites, etc.), Native Americans hunted and likely performed other procurement activities in and around low-moderate sensitivity zones. Unfortunately, these activities have left only a very weak, ephemeral archaeological signature” (A.D. Marble 2006:96).

This reflects a general assumption that larger sites such as procurement camps and habitation sites are more significant in informational terms than the smaller "ephemeral" locations. The latter may in fact provide information important to subsistence and settlement model development (see, for example Carr 2002; Jehle and Carr 1983). Hunter Research will take into account the variables identified in the A.D. Marble model and refine them so that "hot areas" can be accessed at the appropriate level of effort necessary to develop Phase I testing plans.

C. ANTICIPATED ARCHAEOLOGICAL RESOURCES AND CONDITIONS WITHIN SECTION 2

1. Resources

Figure 19 (Prehistoric Archaeological Sensitivity) from the *Archaeological Predictive Model* classifies the majority of Section 2 as low sensitivity with lesser amounts of moderate to high sensitivity, and one small area of nil sensitivity (A.D. Marble 2006, August). Prehistoric resources anticipated within Section 2 include but are not limited to macro-band and micro-band base camps, base camp maintenance stations, procurement sites, hunting stations, and possible major or minor mortuary sites (Custer 1989). These sites will likely occupy well-drained, level land near reliable sources of water.

Figure 20 (Historic Archaeological Sensitivity) from the *Archaeological Predictive Model U.S. 301 Project Development St. Georges, Pencader, and Appoquinimink Hundreds* prepared by A.D. Marble & Company located 13 sites within or very close to the Section 2 corridor. These sites were identified using historic maps (Rea & Price 1849, Pomeroy and Beers 1868, Hopkins 1881 and Baist 1893). Historic resources anticipated within this rural area of Delaware would consist mainly of agricultural, domestic properties and family cemeteries. Early historic sites and later historic sites not documented on maps such as tenant farms (which fall within larger parcels of land) will largely be located only through archaeological survey.

2. Conditions (soils, land-use etc.)

The majority of Section 2 lies at between 50 and 15 feet above sea-level with less than 2% slopes everywhere except at the drainage crossings. Soils are mostly quite permeable and belong to the Matapeake-Sassafras Association. For the most part, the Section crosses currently or recently farmed land.

D. WORK PLAN

1. Background Research

Hunter Research proposes secondary and selective primary source-level historic research program on Section 2. The objective of this study is to establish the ownership property boundaries and tenancies of properties in the Section highlighted by initial secondary research and historic maps, primarily using the Delaware State Archives and the more recent deed information held at New Castle County. The product will greatly assist is interpreting and making preliminary evaluations of historic properties. Preliminary

research suggests that there are about 35 properties on Section 2. Deed research on selected properties is proposed, together with more limited examination of such wills and tax ratables as necessary, plus secondary sources and site files (Historical Society of Delaware, DelSHPO, University of Delaware and possibly other repositories

In addition, there will be a brief review of existing reports, both for the specific alignment and for adjacent areas such as those on Choptank Road, and major pertinent studies in the DelDOT Series across the state. Local informants will also be sought on the area. Susan Ferenbach, one of the Senior Archaeologists assigned to the project and local resident, will use her extensive local contacts in this regard during the fieldwork preparation.

2. Fieldwork Preparation

- a. Soil and topographic information will be reviewed and predictive statements developed on the basis of the Marble study and other factors
- b. Access arrangements: Ownership and occupancy information and letters of introduction will be obtained from DelDOT prior to going in the field. Any personal encounters will be used to learn more about the properties and any site locations.

3. Walkover Survey

The objective of the field survey will be to subject the undeveloped portions of Section 2 to pedestrian survey under optimum conditions, as far as this can be achieved within the timeframe of the overall project. A three-day program is proposed, using senior staff with extensive experience in landscape and surface collection survey. Documentation will be through the annotation of project maps, with locational detail of any resources shown, photography, and notebook entries. No artifact collection is proposed, although any observed artifacts will be noted and characterized as far as possible

4. Development of Sampling Strategy for Phase IB testing

The sampling strategy will be developed on completion of the background research and walkover survey

aDevelopment of strategy – sampling, shovel testing intervals (25, 50 and 100 foot), pedestrian survey of plowed fields, selective stripping of known sites

bThe draft strategy will be sent to DelDOT for comment and refinements made as necessary

5. Completion of Phase IA report

The Phase IA report will be a fully supported technical document that presents specific and reasoned recommendations for the Phase IB survey. A conference call will be held with DelDOT and SHPO before report submittal

E. SCHEDULE

Fieldwork and research will be completed by the end of September, and the draft report submitted at the end of November 2008.

F. REFERENCES

A.D. Marble & Company (all reports on file, DelDOT)
2006 (July) U.S. 301 Project Development: Historic Context and Reconnaissance Survey Report

2006 (August) U.S. 301 Project Development: Archaeological Predictive Model U.S. 301 Project Development St. Georges, Pencader, and Appoquinimink Hundreds

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1881 *Map of New Castle County, Delaware*. G.M. Hopkins & Co., Philadelphia, Pennsylvania.

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G. COST PROPOSAL

See Separate file