2.0 METHODS

2.1 Background Research

Prior to the initiation of the geomorphological and archaeological fieldwork and the historic structures inventory, background research was conducted. Background research for the project included the examination of the Delaware archaeological site files, the National Register of Historic Places (NRHP) files, the historic resources inventory files, reports documenting previously conducted cultural resource studies, relevant state-wide historic contexts, and historic as-built roadway plans housed at the Delaware State Historic Preservation and DelDOT offices.

2.2 Fieldwork

The U.S. 13/U.S. 13A/Road 46 Intersection Improvements project archaeological survey was conducted in two stages. The first stage was a geomorphological reconnaissance of the archaeological APE in order to assess the nature of the landforms and soils within it, and to determine if appropriate areas existed for the implementation of archaeological survey procedures. Geomorphological investigations included the examination of the soils/sediments contained in the archaeological APE, *via* expedient hand excavated auger borings, in order to determine the presence or absence of *in situ* soils, slope, microrelief, the depth of potential cultural deposits, and any areas of modern disturbances which would preclude the preservation of buried archaeological resources. Areas with less than 15 percent slope, no obvious disturbances (e.g., cut and fill or grading operations, below-ground utility installation), and relatively intact, well drained soil horizons were chosen as appropriate locations for archaeological survey fieldwork.

Archaeological field procedures consisted of a visual examination of the entire project APE, followed by subsurface testing of one test area (Connector Road Test Area) delineated during the geomorphological reconnaissance. The Phase I archaeological survey was accomplished in July 2004. A total of 13 shovel test pits (STPs) were used during the survey. STPs were spaced at 15.0 m (49.2 ft) intervals along a single transect within the test area, and excavated by arbitrary 10.0 cm (3.9 in) levels within natural strata to a minimum depth of 10.0 cm (3.9 in) into the culturally sterile Pleistocene subsoil. All of the sediments recovered from

each STP were screened through 0.64 cm (0.25 in) mesh hardware cloth. Information regarding the soil texture and color, depth of any cultural materials recovered, and any soil disturbance was recorded on Skelly and Loy's standard excavation forms. Daily field notes and STP excavation information were kept by the field director. Field data were recorded on standardized field forms and were supplemented with notes made on the project maps, as warranted. The fieldwork was documented *via* 35 mm and some digital photography.

2.3 Laboratory

The archaeological survey of the U.S. 13/U.S. 13A/Road 46 Intersection Improvements archaeological APE yielded only one historic period artifact. The recovered artifact was transported to Skelly and Loy's laboratory in Monroeville, Pennsylvania, where it was cleaned and processed. Provenience information and an artifact catalog are included as Appendix A.

2.4 Curation

The U.S. 13/U.S. 13A/Road 46 Intersection Improvements project cultural resources materials, including field notes, maps, photographs, and one artifact, are being temporarily stored at Skelly and Loy's Monroeville, Pennsylvania facility. Permanent curation of the project materials is at DelDOT's discretion.

2.5 Historic Structures Inventory

A scoping field view was held with representatives of DelDOT on July 15, 2004. At that time, an APE for architectural resources was established. The historic structures APE includes two above-ground resources built prior to 1955, a former automobile service station now being used to sell discount cigarettes, and a single-story, frame residence constructed *ca.* 1940. The resources were photographed using 35 mm black and white film.

Background research was undertaken in late July 2004. Secondary source material was reviewed, including a history of Sussex County and Seaford Hundred, historic maps and atlases, Sussex County tax assessment records, and Delaware State Highway Department as-built plans from the 1930s, 1940s, and 1950s.