

## **Section 2: Research Design**

The focus of this public archaeological study is to examine a 0.39-acre portion of the northern section of Block 587, Lot 1 to determine if intact archaeological deposits are present associated with the 17<sup>th</sup>- through 19<sup>th</sup>-century municipal use of the western half of the Study Area when the parcel was part of the Kirk Green before being taken over by the Episcopal Church. The archaeological study was also primarily focused on informing our understanding of the Dunham House, its development history, and its former occupants. This study also incorporates data from a previously unreported archaeological study conducted by Monmouth University in 2002. The results of the study may be used as a planning tool to preserve identified, intact archaeological deposits.

Several research questions are posed. Can cultural deposits provide information on the construction date of the existing brick home? Can artifacts shed light on the initial historic occupation of the site? What can artifacts and cultural deposits tell us about the lives of the former inhabitants and the built environment? If present, do those deposits shed light on historic municipal use of the Meeting House Green in the western half of the Study Area? Do archaeological deposits reveal encroachment activities by neighboring property owners or evidence for the presence of town-related buildings? The study was also conducted to determine if prehistoric Native American archaeological deposits are present in the Study Area given its proximity to a tributary of Woodbridge Creek. If present, can the time period and function of the prehistoric Native American occupation be determined?

Archaeological site files at the New Jersey State Museum (NJSM) and the New Jersey Historic Preservation Office (NJHPO) were also reviewed to determine if any archaeological sites had been previously identified in or adjacent to the Study Area or if any cultural resources surveys have been undertaken in or adjacent to the Study Area. Background research was also undertaken at various repositories to collect data for the creation of an historical context to be used for the interpretation of identified archaeological deposits.

### **1.1 Monmouth University 2002 Study**

At the bequest of Monmouth University, this report includes data generated during a research project undertaken by the university in 2002 in the west and north yard areas of the Dunham House. This study was conducted as a research project for a planned but uncompleted graduate thesis project. During graduate analysis, some survey notes and assemblage contexts were misplaced, resulting in a partial, yet important record. The results of the 2002 study are summarized herein to provide a permanent record of the study. To the greatest extent possible, data from the 2002 study was utilized in the current study to guide excavation locations; however, discussion and interpretation of the 2002 study results and artifact assemblage is limited and was not the primary goal of the current study.

Excavations undertaken in 2002 consisted of the placement of shovel test pits (STPs) on a 10-foot interval grid and the excavation of five (5) three-foot square excavation units (EUs). Shovel test pits were designated 1-36. Shovel test pit numbers 16, 17, 18, and 19

were not used. Shovel test pits measured one foot in diameter and were dug to culturally sterile soils. Soils encountered were separately dug by stratum and screened through ¼-inch wire mesh cloth to facilitate artifact recovery. Stratigraphy observed in each STP was detailed on field notes and included soil Munsell color, thickness and texture (Appendix F). Recovered artifacts were placed in resealable polyethylene bags by context. Each bag contained a tag listing the appropriate context.

Excavation units were dug west and north of the Dunham House to examine notably rich artifact deposits. Excavation units were designated as EUs 1-5. Stratigraphy encountered in EUs was dug in natural levels. Soils encountered were separately dug by stratum and screened through ¼-inch wire mesh cloth to facilitate artifact recovery. Stratigraphy observed in each STP was detailed on field notes and included soil Munsell color, thickness and texture. Recovered artifacts were placed in resealable polyethylene bags by context. Each bag contained a tag listing the appropriate context.

Artifacts found were processed at Monmouth University and cataloged by a graduate student years after the collection was initially excavated. Extant portions of the collection are detailed in Appendix G.

## **1.2 ASNJ 2019 Study**

The 2019 archaeological study was conducted through the excavation of 19 STPs excavated at 25- and 50-foot intervals in the Study Area. Shovel test pits were numbered consecutively from 50 to 71. One STP (STP 56) was not excavated due to existing underground utilities. Shovel test pits measured 1.0-foot in diameter and were dug into the B1 horizon, to 3.0 feet below grade, or to an impasse. Soils encountered were separately excavated by stratum and each stratum was screened through ¼-inch wire mesh to facilitate artifact recovery. Recovered artifacts from individual contexts were placed into re-sealable polyethylene bags with and accompanied with a tag that lists the appropriate provenience information. The characteristics of all stratigraphy encountered, such as thickness, depth, texture, and Munsell color were recorded on standardized field forms. Soils encountered were compared to data from the National Resource Conservation Service (NRCS). An STP log is present in Appendix H. Shovel test pits were backfilled upon completion and the ground surface was restored to its natural contours. All STPs were plotted on a project excavation map. Documentation of existing conditions and fieldwork was conducted via digital photography.

Potentially intact archaeological deposits identified in STPs were further investigated with the use of three hand-dug excavation units (EUs). Excavation units were numbered 7, 8 and 9. Excavation units 7 and 8 measured five feet square in plan and EU 9 measured 4.0 feet north/south by 5.0 feet east/west. Stratigraphy in the EUs was excavated with trowels and flat shovels. Particularly compact deposits were loosened with a sharp shooter to enable hand excavation. All soils encountered were recorded on standardized field forms and characteristics such as depth, thickness, Munsell color, and texture were noted. Soils were excavated in natural stratigraphic levels, with the exception of intact historical soil deposits that contained 17<sup>th</sup>- to 19<sup>th</sup>-century cultural material, in which case, such deposits

were excavated in 0.25 to 0.5-foot thick arbitrary levels depending upon thickness. Upon completion, EU wall profiles were documented via scaled line drawings and digital photography. Identified cultural features were documented in plan and were separately excavated. Cultural features were given numerical designations. All soils excavated in EUs were separately screened by stratum and/or level through ¼-inch wire mesh to facilitate artifact recovery and to prevent context mixing. Artifacts were placed in re-sealable polyethylene bags with an accompanying tag that lists the appropriate provenience information. All EUs were backfilled upon completion and the ground surface was restored to its original contours.

Recovered artifacts were processed, cleaned, analyzed, and cataloged according to provenience, function, material, type, and class. Where possible, manufacturing periods and other descriptive data was assigned to each artifact. No artifacts were discarded. The artifact catalog for recovered material is present in Appendix I. All artifacts were given a numerical bag log number according to provenience context. Museum display quality artifacts were marked with the archaeological site number and catalog number. All artifacts were placed in 2 mil, resealable polyethylene bags according to catalog row entry in Appendix I and each artifact back within a context contains a tag that lists the New Jersey State Museum site registration number, catalog number, and where appropriate, a unique vessel number.

A minimum vessel count was conducted on select contexts from EU 8, which contained a temporally discrete deposit associated with Samuel Barron's occupation. All ceramic vessel numbers were given a "c" suffix and all glass vessel numbers were given a "g" suffix. Rims were primarily used to differentiate between individual vessels. When rims were not available or were present in limited quantity, other defining ceramic vessel features were used to differentiate between vessels, such as paste color, glass color, decoration, and glaze color. The minimum vessel list is present in Appendix J.

A detailed faunal analysis was conducted by zooarchaeologist Adam Heinrich, Ph.D. This analysis focused on contexts that primarily dated to the 18<sup>th</sup> century, though some temporally discrete 19<sup>th</sup>-century contexts were also analyzed. The faunal analysis report is presented in Appendix K. Artifact bagging procedures conducted during faunal analysis corresponded to catalog data entry in the faunal analysis catalog in Appendix K. The specimen separation procedure utilized was regained when the collection was reassembled and the faunal remains that underwent specialized analysis were reincorporated into respective context bags with non-faunal artifacts.

A revised archaeological site registration form was prepared for the Dunham House Site (28-Mi-220) and is present in Appendix L. All artifacts and survey documents from the ASNJ's 2019 study will be provided to the MCOAH for permanent curation upon completion and approval of this report.