APPENDIX S

ARCHEOLOGICAL SURVEY/REPORT

PALEOWEST, SEPTEMBER 16, 2021

PALEOWEST

PHASE I INVESTIGATION OF PROPOSED BRIDGEHAMPTON TO BUELL NEW 69 KV UNDERGROUND CABLE SUFFOLK COUNTY, NEW YORK

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on behalf of

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Technical Report No. 21-253

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September 16, 2021

NY SHPO MANAGEMENT SUMMARY

SHPO Project Review Number: 21PR02348

Involved State and Federal Agencies: Long Island Power Authority (LIPA)

Phase of Survey: Phase IA & B

Location Information:

Location: Southampton and East Hampton, New York
County: Suffolk

Survey Area:

Phase IA:

Length: 5.2 mi (8.37 km)
Width: 15 ft (4.6 m)
Number of Acres Surveyed: 10.35 acres (4.19 ha)

Phase IB:

Length: 2.67 mi (4.3 km)
Width: 15 ft (4.6 m)
Depth: 100 cm (39 in.)
Number of Acres Surveyed: 5.79 acres (2.34 ha)

USGS 7.5 Minute Quadrangle Map:

Sag Harbor, New York (2019)

East Hampton, New York (2019)

Archaeological Survey Overview:

Number & Interval of Shovel Tests: 276 STPs at 15 m intervals

Surface Survey Transect Interval: 1 m

Results of Archaeological Survey:

Site Identified: None

Report Authors:

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Date of Report: September 16, 2021

ABSTRACT

PaleoWest was contracted by GEI Consultants, Inc., P. C. (GEI) on behalf of PSEG Long Island (PSEGLI) to conduct Phase IA and IB archaeological investigations in advance of the Bridgehampton to Buell New 69 kV Underground Cable project in the towns of Southampton and East Hampton in Suffolk County, New York. The purpose of this contract is to determine if significant archaeological resources are present in the areas of PSEGLI's Proposed Action. The Proposed Action is the installation of a new underground 69kV cable from the Bridgehampton Substation located on Bridgehampton-Sag Harbor Turnpike in the Town of Southampton to the Buell Substation located on Cove Hollow Road in the Town of East Hampton. The new underground cable is designed to be installed below grade within the existing Long Island Power Authority (LIPA) owned and/or controlled overhead right-of-way (ROW).

The overall project area, or Area of Potential Effect (APE) for the Phase IA survey includes the cable corridor and measuring a total of approximately 5.2 miles [mi] (8.37 kilometers [km]) in length and 15 feet [ft] (4.6 meters [m]) in width and a 0.90-acre laydown area north of the existing Bridgehampton substation, for a total area of 10.35 acres (4.19 hectare [ha]).

The New York State Historic Preservation Office/Office of Parks, Recreation and Historic Preservation (SHPO/OPRHP) recommended a Phase IA Literature Search and Sensitivity Assessment survey to identify previously recorded archaeological sites and other cultural resources within or near the project area, to assess the archaeological sensitivity of the project area, to document previous ground disturbance, and to make recommendations regarding the potential need for Phase IB subsurface archaeological testing.

PaleoWest conducted a Phase IA investigation of the project area. A site file search conducted on the New York Cultural Resource Information System (NY CRIS) online geodatabase revealed ninety-one [91] historic resources, eight [8] building districts, and fifteen [15] previous surveys within a one mile buffer of the APE. There are no previously recorded cultural resources within the APE itself. Development has occurred in the area since the late nineteenth century. PaleoWest concurs with SHPO/OPRHP that most of the ground disturbances associated with the project will occur within soils characterized by extensive prior disturbance, with no archaeological potential. In addition, most of the project route has limited archaeological sensitivity due to excessive distance from permanent water. However, portions of the project fall within soils lacking evidence of extensive prior disturbance, and in locations with high archaeological sensitivity. These portions of the APE were recommended for Phase IB testing.

PaleoWest conducted Phase IB subsurface testing of the 0.90-acre laydown area and approximately 2.67 mi (4.3 km) of the APE in two areas of high archaeological sensitivity that lack evidence of extensive prior disturbance. The APE measures approximately 15 ft wide, resulting in a total of 5.79 acres (2.34 ha) included in Phase IB testing. Phase IB investigations consisted of a pedestrian survey at a one meter transect interval and a total of 276 shovel test pits (STPs). The interval between STPs did not exceed 15 m (49 ft). The STPs measured 30 centimeters (12 inches) in diameter, excavated in natural stratigraphic layers to culturally sterile subsoils or to 1 m (ca. 3 ft) in depth. All excavated soil was screened through ¼-in hardware cloth to facilitate the recovery of artifacts. No cultural materials were recovered in the course of excavation and no new sites were documented. The Phase I archaeological survey established that the undertaking should have no effect on cultural resources eligible for the State Register

or National Register of Historic Places. PaleoWest recommends no additional archaeological investigation within the APE.

This archaeological survey was conducted in accordance with the guidelines outlined in the Phase I Archaeological Report Format Requirements issued by the New York SHPO (2005) and the Standards/or Cultural Resource Investigations and the Curation of Archaeological Collections issued by the New York Archaeological Council and the New York State OPRHP (1995). Helen Juergens, M.A., RPA served as Principal Investigator and Lawrence Chiatti, M.A., RPA served as Field Director.

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FIGURES AND PHOTOS

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INTRODUCTION

PaleoWest was contracted by GEI Consultants, Inc., P. C. (GEI) on behalf of PSEG Long Island (PSEGLI) to conduct Phase IA and IB archaeological investigations in advance of the Bridgehampton to Buell New 69 kV Underground Cable project in the towns of Southampton and East Hampton in Suffolk County, New York. The purpose of this contract is to determine if significant archaeological resources are present in the areas of PSEGLI's Proposed Action. The Proposed Action is the installation of a new underground 69kV cable from the Bridgehampton Substation located on Bridgehampton-Sag Harbor Turnpike in the Town of Southampton to the Buell Substation located on Cove Hollow Road in the Town of East Hampton. The new underground cable is designed to be installed below grade within the existing Long Island Power Authority (LIPA) owned and/or controlled overhead right-of-way (ROW).

Ground disturbance associated with this project will consist of installation of the new underground cable, new manholes, potential stabilization activities, vegetation clearing, and grading. Fourteen [14] manholes will be installed along the proposed route. Approximately 4,000 linear feet of the cable extending east from the Bridgehampton Substation to the west side of Widow Gavits Road will be installed via horizontal directional drill (HDD) with a single manhole installed within the previously disturbed area west of Widow Gavits Road. Approximately 100 linear feet of the cable located west of Cove Hollow Road and beneath the Long Island Railroad (LIRR) will be installed via HDD. The remaining portions of cable installation will be installed via trenching and the trench may measure up to about four [4] feet in width. To facilitate the temporary use of HDD equipment and pipe laydown during construction, a 0.90-acre portion of the LIPA owned and/or controlled overhead ROW north of the existing Bridgehampton Substation will be cleared; a 0.36 acre portion of the cleared area will also require grading to facilitate construction. A single manhole will be located within this cleared area. Additionally, portions of the ROW may require stabilization in order to allow machinery access for the installation of the underground cable and manholes. Stabilization may include grading or excavation of existing soils and temporary placement of Recycled Concrete Aggregate (RCA).

The PSEGLI Bridgehampton to Buell New 69 kV Underground Cable project is located on Long Island extending from the Bridgehampton Substation in the Town of Southampton to the Buell Substation in the Town of East Hampton in Suffolk County, New York (Figure 1). The overall project area, or Area of Potential Effect (APE) for the Phase IA survey includes the cable corridor measuring a total of approximately 5.2 mi (8.37 km) in length and 15 ft (4.6 m) in width and the 0.90 acre laydown area north of the existing Bridgehampton substation, for a total area of10.35 acres (4.19 ha).

PaleoWest conducted a Phase IA investigation of the entire APE and Phase IB subsurface archaeological testing of the laydown area and approximately 2.67 mi (4.3 km) of the APE in two areas of high archaeological sensitivity that lack evidence of extensive prior soil disturbance (Figure 2). The APE measures 15 ft wide, resulting in a total of 5.79 acres (2.34 ha) included in Phase IB testing.

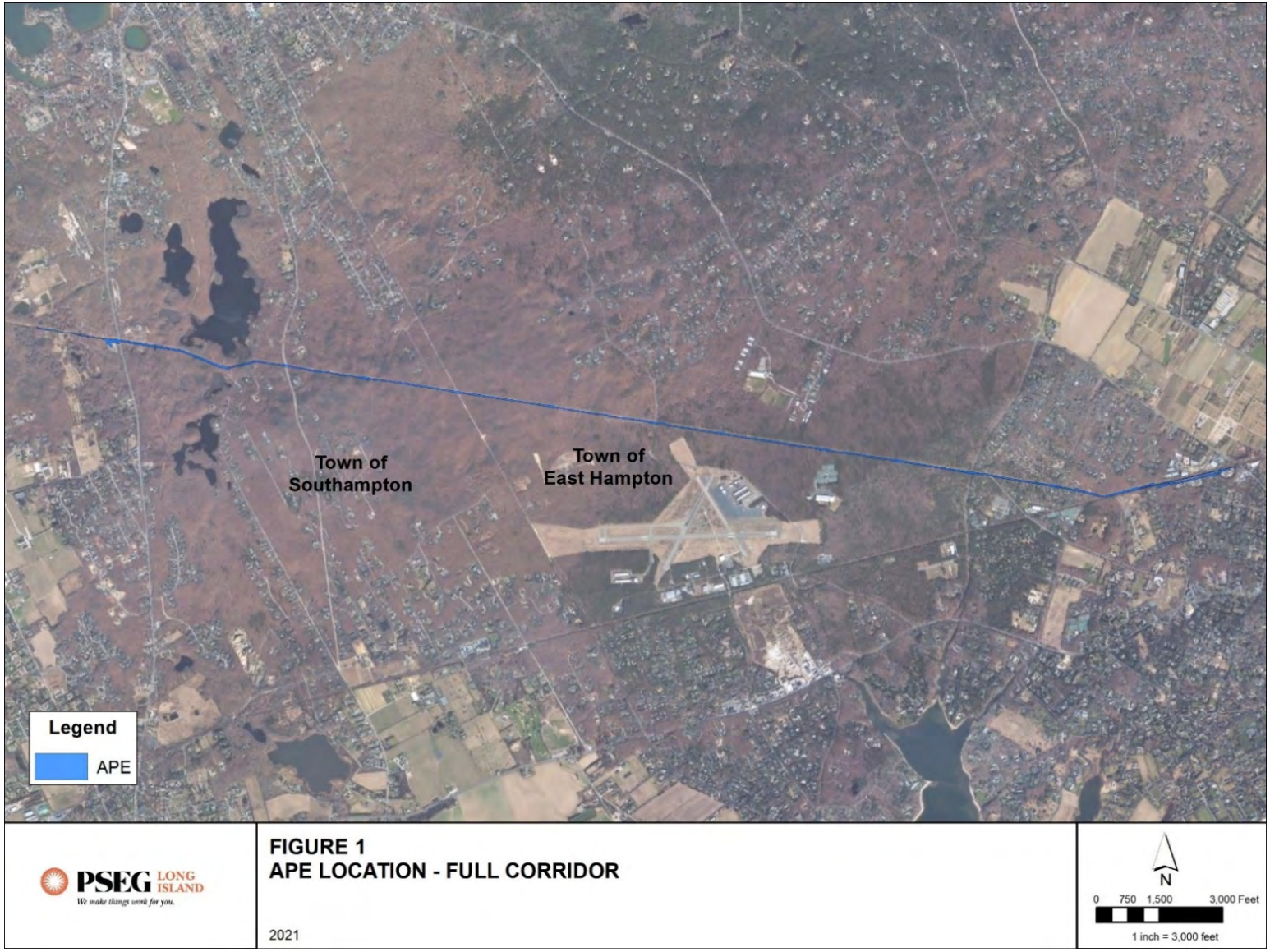


Figure 1. APE Location.

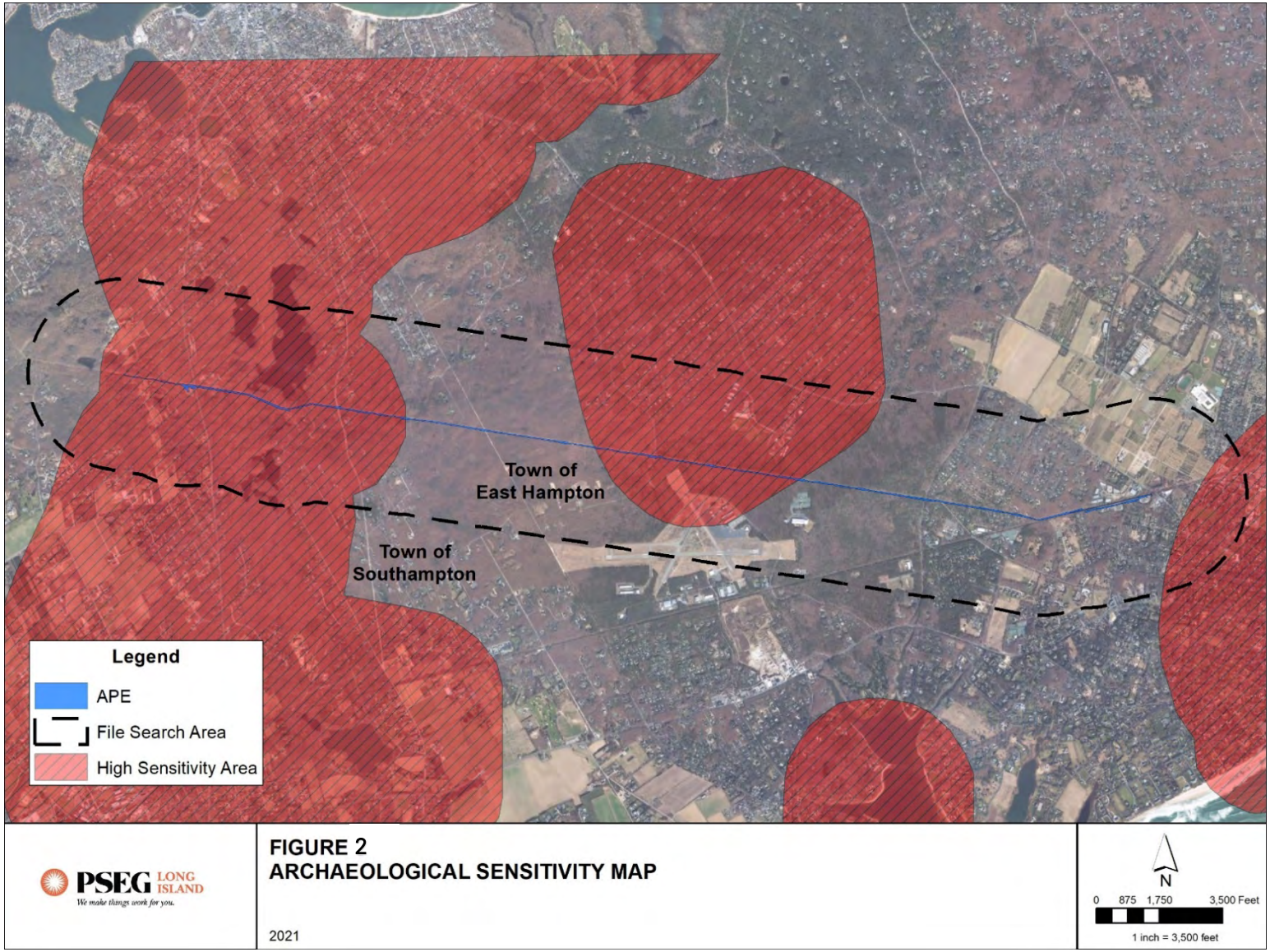


Figure 2. Archaeological Sensitivity Map.

ENVIRONMENTAL SETTING

The project is located in the east of Long Island in the Atlantic Coastal Lowland Physiographic Province. The Geologic Map of New York, Lower Hudson Bedrock Sheet, describes the area as part of the Monmouth Group, Matawan Group, and Magothy Formation of the Coastal Plain Deposits. This bedrock is formed from silty clay, glauconitic sandy clay, sand, and gravel (Fisher, Isachsen, & Rickard, 1970). New York State was subjected to glaciation multiple times during the Pleistocene Epoch. Glacial deposits on Long Island were derived mostly from the Late Wisconsinan glaciation, from approximately 28,000 to 21,750 years ago (Cadwell 1986). Three major lobes of the glacier deposited moraines on Long Island.

The soils of the project area are classified predominately as Carver and Plymouth sands along with Bridgehampton silt loam and Plymouth loamy sand (USDA-NRCS 2020). Carver and Plymouth sands (CpC) are formed from coarse sandy glaciofluvial deposits as moraines and outwash plains. They have a typical profile of 0 to 1 inches of highly decomposed plant material (Oa) above 1 to 9 inches of coarse sand (H1), 9 to 23 inches of coarse sand (H2), and 23 to 60 inches of coarse sand (H3) with 0 to 15 percent slope. The soils are excessively drained without frequency to flood. Bridgehampton silt loam (BgA) is formed in outwash plains from silty glaciolacustrine or eolian deposits underlain by contrasting glacial drift, derived mainly from gneiss, granite, and schist with some sandstone, conglomerate, and shale. BgA has a typical profile of 0 to 11 inches of silt loam (H1) over 11 to 56 inches of silt loam (H2) and 56 to 80 inches of stratified gravelly sand (H3) with a 0 to 2 percent slope. These soils are well drained and not prone to flooding. Plymouth loamy sand (PlA) is formed from acid sandy glaciofluvial or deltaic deposits as moraines and outwash plains. PlA has a typical profile of 0 to 4 inches of loamy sand (H1) above 4 to 27 inches of loamy sand (H2) and 27 to 60 inches of gravelly coarse sand (H3) with a 0 to 3 percent slope. PlA is also excessively drained. A comprehensive soil typology is included as Appendix A.

PREHISTORIC CONTEXT

Archaeologists divide the cultural sequence on Long Island into six general periods (Paleoindian, Archaic, Transitional, Woodland, Contact, and Historic) though several local traditions, complexes, and other taxonomic units have been used (Ritchie 1994, Funk 1965). The original peopling of Long Island remains contested (Lepper and Bonnichsen 2004), though it is certain that people have been on Long Island for at least 12,000 years. Long Island has been a strategic place throughout the cultural sequence due to its location at the confluence of the Hudson and other rivers between New England and the Mid-Atlantic (Stone 2009).

Seasonal mobility patterns based on the availability on fixed resources (mainly shellfish, among others) undoubtedly influenced the settlement systems on Long Island. Traditional views of the prehistoric shellfish industry on Long Island contend that shellfish were largely harvested during the warm season (Gwynne 1985, Werner 1982, Wyatt 1977, Kaeser 1978, Rothschild and Lavin 1978). In fact, some researchers (Ceci 1977) postulate that shellfish harvesting was so vital to the prehistoric economy that Long Island was virtually abandoned during the winter months when shellfish gathering was presumably suboptimal. Others (Gwynn 1982, Lightfoot and

Cerrato 1988) believe shellfish exploitation occurred during more than one season on Long Island.

Our understanding of change through time on Long Island is diminished by the adverse effects of sustained and often intense development that occurred on the island before cultural resource management projects were conducted as part of the regulatory process (Salwen 1977). In addition, according to Wyatt (1977) "interpretation of the culture-historical events at Long Island sites is greatly complicated by shallow deposits in which a bewildering mixture of Late Archaic, Transitional, and Woodland material is often found in the upper strata." However, much is known about the culture history, and the following is an overview of the major periods in Long Island beginning with the earliest occupation and concluding immediately before modern times (Table 1).

Table 1. Culture History of Long Island, New York

Temporal Unit	Time Span	Culture or Tradition	Diagnostic Attributes
Historic	300–100 B.P.	Euro-American	—
Contact Period	400–300 B.P.	Canarsie, Matinecock, Merrick, Rockaway	Wampum, European trade goods
Late Woodland	1000–400 B.P.	Windsor/East River	Shantok Fort Corchaug Pantigo Niantic Clasons Point Old Field Sebonac
Middle Woodland	2000–1000 B.P.	Windsor	Windsor North Beach Matinecock Point
Early Woodland	2700–2000 B.P.	Adena	Middlesex Denning Point Adena Plain ceramics,
Transitional	3700–2700 B.P.	Orient	Baxter Solecki Jamesport Orient #2 Orient #1 Stony Brook II Sugar Loaf Hill
Late Archaic	6000–3700 B.P.	Laurentian	Sylvan Lake Garvie Point II Wading RiverHematite, steatite vessels
Middle Archaic	8000–6000 B.P.	Laurentian	Stony Brook I Garvie Point I
Early Archaic	10,000–8000 B.P.	—	Corner and side notched projectile points, groundstone implements

Temporal Unit	Time Span	Culture or Tradition	Diagnostic Attributes
Paleoindian	12,000?–10,000 B.C.	Clovis	Lanceolate (sometimes fluted) projectile points

Based on Ritchie, 1994; Cantwell and Wall, 2001

PALEOINDIAN (~12,000–9000 B.C.)

The Paleoindian period coincides with the end of the Pleistocene Epoch and the end of the Wisconsinan glaciation on Long Island; it is best known by the Clovis tradition of large, fluted lanceolate projectile (spear) points. Long Island forms the extreme southern boundary of this glaciation and was marked by a rapidly changing physical environment. As temperatures rose and areas of tundra were replaced by spruce parkland and forest, a gradual shift to coniferous forest occurred. At that time, the current project area was approximately 20 mi from the shores of the Atlantic Ocean, as the sea levels were 300 or more feet lower than today (Cantwell and Wall 2001:37). Evidence for the Paleoindian inhabitants of Long Island is exceedingly rare (Smith 1952), consisting of a fluted projectile point recovered from the Wickham Farm (on the North Fork) in 1923 and other scattered surface finds of unreliable provenience (Saxon 1973).

The Paleoindian diet was long considered megafauna-centered, with a subsistence strategy focused on big game hunting. Subsistence strategies were, however, diverse and included exploitation of migratory game, especially caribou (Seeman et al. 2008), and a wide variety of smaller fauna. There is evidence from adjacent regions that an assortment of floral resources were also exploited (Hill 2007, Kitchel 2008, Kuehn 1998).

EARLY ARCHAIC (10,000–8000 B.P.)

Much of what we know about the Archaic period on Long Island comes from evidence from small archaeological sites on the North Fork (Wyatt 1977). At the beginning of this period, temperatures rose to approximately modern levels and precipitation increased dramatically. In response to these changes, forests across Long Island underwent a south to north transition from a coniferous forest to a parkland made up of spruce, fir, pine, and oak forests (Cantwell and Wall 2001). Early Archaic groups remained organized into band-level societies but may have added more logistical mobility into their residentially mobile strategies. Seasonal mobility patterns would have changed based on the changing spatial organization of resources across the landscape (Binford 1980, Kelly 1983). According to Wyatt (1977) "there are archaeological sites on Long island with the potential to document the seasonal round."

The Archaic period across the greater Northeast is characterized by three major technological traditions: the Laurentian, Piedmont, and Susquehanna. On Long Island, the earlier Laurentian tradition gave way to the later Susquehanna (Orient Culture) tradition at the end of the Archaic. Alternatively, the Archaic period is divided into phases on Long Island by some researchers. These phases include Vergennes, Vosburg, Sylvan Lake, Wading River, and Snook Kill (CITY/SCAPE 1994).

The transition from the lanceolate points of the Paleoindian toolkit to corner- and side-notched forms occurred at this time (Justice 1995). Due to the dynamism of the coastal environment,

evidence of Early Archaic occupation on Long Island is scarce and mostly exists in the form of isolated occurrences recovered along drainages. Early Archaic projectile point types recovered on Long Island include Kanawha Stemmed and Lecroy Bifurcate types (Broyles 1971) and Vosburg and Brewerton types (Wyatt 1977).

MIDDLE ARCHAIC (8000–6000 B.P.)

The Middle Archaic period on Long Island is characterized as the Laurentian Tradition. Although manifesting during the Early Archaic across much of New York State, the Laurentian appears on Long Island during the Middle Archaic period. According to Ritchie (1994) the main diagnostic traits of the Laurentian include the "gouge; adz; plummet; ground slate points and knives, including the lunar form or ulu, which also occurs in chipped stone; a variety of chipped-stone projectile points, mainly broad-bladed and side-notched forms; and the barbed bone point."

Wyatt (1977), however, contends the "elements of the Laurentian tradition are (also) poorly represented on Long Island. Characteristic Vergennes phase artifacts are rare, and the broad corner-notched point diagnostic of the Vosburg phase is at least as scarce." While little is known about this era across Long Island, it is generally agreed upon that as widespread Holocene climactic conditions stabilized, logistical mobility increased for bands in the region (Jefferies 1997). Evidence for this shift occurs in the remnants of architecture in the archaeological record. No remnants of Middle Archaic architecture have been discovered on Long Island; however, elsewhere in the Eastern U.S., such as at the Koster site in Illinois (Sassaman and Ledbetter 1996), evidence points to semi-permanent structures during this time.

The material culture of Middle Archaic groups appears much the same as Early Archaic assemblages but with a reduced variety of formal point types. Projectile points diagnostic of the Middle Archaic period on Long Island include Stanley Stemmed and Morrow Mountain I and II (Justice 1995).

LATE ARCHAIC (6000–3700 B.P.)

The beginning of the Late Archaic period on Long Island coincided with the xerothermic interval, the driest span since postglacial times in the region (Carbone 1976, Custer 1984). The onset of the Late Archaic also corresponded with a settlement shift from a foraging mobility strategy marked by frequent residential movements across many disparate resource zones to a collecting strategy typified by fewer residential shifts oriented to riverine zones (Pagoulatos 2006). By the end of the Late Archaic period, vegetation and climactic conditions assumed modern conditions across Long Island. Environmental stabilization was just one factor contributing to a measurable population increase.

Projectile points manufactured during the Late Archaic in the region include Brewerton Corner-notched, Brewerton Side-notched, Brewerton Ear-notched, Lamoka, Pomranky, Vosburg Corner-notched, Gennesee, Savannah River, and Snook Kill (Justice 1995). The Wading River point is the most common Late Archaic type found across Long Island (Wyatt 1977).

According to Wyatt (1977) the most complete data on the Late Archaic period as manifested on Long Island comes from the Wading River locality on the north shore of Suffolk County. The cultural deposits at Wading River dating to the Late Archaic period include shellfish baking and

refuse pits, hearths, fire cracked rock (FCR) concentrations, a cache of 13 ovate bifaces manufactured from quartz, and an articulated dog burial.

TRANSITIONAL (3700–2700 B.P.)

The Transitional period on Long Island is a significant era; however, it remains a controversial classification because, in reality, all prehistoric periods transition into each other. In general, there are no abrupt starts and stops in cultural evolution and adaptation. As a result, some New York archaeologists forego the use of the term and instead conceptualize the Late Archaic developing into the subsequent Early Woodland. As a heuristic device, the Transitional period is useful as it emphasizes the tremendous socio-cultural change that occurred at this time.

The Transitional period on Long Island is highly significant due to the emergence of the distinctive Orient Culture. The diagnostic traits of the Orient Culture include the fishtail projectile point, soapstone vessels quarried in Rhode Island and Connecticut, the intense exploitation of shellfish, and, most notably, the distinctive burial practices and associated mortuary behaviors (CITY/SCAPE 1994).

Pagaloulatos (1986, 2009) examined the mortuary behaviors of Long Island groups during the Transitional period (referred to therein as Terminal Archaic /Early Woodland Transition) and found a strong correlation between seasonal mobility and burial practices among these late manifestations of the Susquehanna technological tradition. Four cemeteries (Orient I, Orient II, Jamesport, and Sugar Loaf Hill) and two habitation sites (Stony Brook and Cutchogue) dating to the Transitional period and attributed to the Orient Culture contained the rich burial goods and material culture that provided the bulk of our understanding of this ceremonial complex and lifeway. The Stony Brook site (radiocarbon dated to 930 B.C.) contained a rich Orient Culture occupational deposit overlaying an earlier Middle Archaic Laurentian transition occupation at the site (Salwin 1962). The Baxter Site (near Cutchogue) is another occupation site attributed to the Orient Culture. A dense midden containing nine diagnostic Orient fishtail projectile points was encountered below a Woodland period layer (Salwen 1962). The Baxter site (alternatively named the Solecki or Rail Fence Well Site) remains listed as NRHP-undetermined on NYS CRIS. Due to the lack of formal excavations, the significance of the site remains unknown.

Caches of burial offerings at these eastern Long Island prehistoric cemeteries usually included four main components: a cosmetic kit, a fire-making kit, a woodworking kit, and a hunting kit (Cantwell and Wall 2001). The sudden emergence, fluorescence, and disappearance of the spectacular Orient Culture has confounded archaeologists for decades. Wyatt (1977) cautions "whatever the nature of the Orient phase on Long Island, the relative sparsity of archaeological evidence for its presence makes it difficult to believe that an islandwide displacement, or replacement of the indigenous Late Archaic population was involved." Projectile points diagnostic of the Transitional period on Long Island include Susquehanna Broad and Perkiomen Broad (Justice 1995).

In a 1962 passage summarizing the transition from the Archaic to Early Woodland period on Long Island, Boyd's synthesis (1962) remains largely in accordance with our current understanding:

> *Long Island and the adjacent Connecticut coast, like the Pennsylvania and Hudson Valley regions, appear to be characterized by a basal Lamokan stratum which blends gradually into a Lamokan-Laurentian, Vosburg-like complex. There*

follows a Transitional period in which steatite vessels, Orient fishtail points, and other distinguishing implements are introduced, seemingly by diffusions from the Hudson Valley cultures. It was during this time that an elaborate mortuary cult was developed on the sandy knolls of the eastern tip of Long Island in the Orient I and II burial sites. Toward the end of this period, during which the first pottery was introduced and the Jamesport and Sugar Loaf Hill burial sites were constructed, foreign influences were again felt, and [thus] the beginning of the Early Woodland period."

EARLY WOODLAND (2700–2000 B.P.)

Although the lifeways of the Early Woodland period represent a continuation of earlier Archaic (and Transitional) patterns and behaviors in many ways, the significant changes that occurred at this time encouraged archaeologists to define the Woodland period in the region. The most important change that occurred during the Early Woodland on Long Island was the appearance of pottery. The earliest crushed rock-tempered pottery (Vinette I) quickly replaced the steatite vessels used by the Orient peoples (Cantwell and Wall 2001).

Wymer and Abrams (2003) argue that the formation of tribal societies during the Early Woodland period was largely due to the intensification of local plant species gardening in proximity to increasingly sedentary communities beginning around 500 B.C. This practice involved the gathering and tending of plants that lead to management and eventual domestication in gardens.

Projectile points manufactured during the Early Woodland period on Long Island include the Cresap Stemmed, Adena Stemmed, and Robbins (Justice 1995).

MIDDLE WOODLAND (2000–1000 B.P.)

Ritchie (1994) identifies the North Beach Phase of the Windsor Tradition as the primary archaeological horizon on Long Island during the Middle Woodland period. Salwen (1968) excavated the Muskeeta Cove site in present day Glen Cove (on the north coast of Suffolk County) and identified two distinct lenses of Windsor deposits (Occupation A and B) separated by sterile soil. The site yielded a rich assemblage of ceramics (n = 1,013) including Vinette Interior Cord-Marked, Clearview Stamped, North Beach Net-Marked, Bowman's Brook Stamped, Owasco Corded Horizontal, Clasons Point Stamped, and Van Cortlandt Stamped among other undecorated sherds. According to Salwen (1968) "Though sea level was probably slightly more than three feet lower than it is today, the early Windsor people at Muskeeta Cove lived in a microenvironment not very different from that of the present."

Although distinct from continental New York and New England, Middle Woodland inhabitants of Long Island likely practiced similar lifeways to their mainland neighbors. Presumably, this included increased sedentism, incipient agriculture, and native cultigen horticulture. Cantwell and Wall (2001:77) provide the following summary: "Evidence from sites in tidewater New York suggests that the Middle Woodland peoples there lived in small-scale, largely egalitarian communities, supported by a hunting, fishing, and gathering economy, with a comparatively modest funerary style and material culture."

LATE WOODLAND (1000–400 B.P.)

Although direct archaeological evidence for agriculture on Long Island is scant, certainly this subsistence strategy was well-established by the Late Woodland period on the island. The nearby Sebonac site provides a tantalizing glimpse into the agricultural Late Woodland. The site, located on the South Fork, was originally excavated between 1899 and 1902 by Mark Harrington. The site yielded the only direct evidence of Late Woodland farming from Long Island when 35 corn kernel fragments yielded the calibrated date range of A.D. 1260–1485. Of note is the date derived from thermoluminescence (A.D. 1270 +/- 136) of a Windsor Cord-Marked sherd from the same site was consistent with the ^{14}C dates (Ceci 1990). In addition, chronometric studies of Late Woodland maize have been carried out in nearby Fishers Island (Funk and Pfeiffer 1988), Connecticut (Lavin 1988, McBride and Dewar 1987), and Martha's Vineyard (Ritchie 1969), firmly establishing the presence of maize agriculture in the vicinity during that time.

Projectile points diagnostic of the Late Woodland period on Long Island include Levanna, Madison, Jack's Reef Pentagonal, Jack's Reef Corner-notched, and Raccoon Side-notched (Justice 1995).

CONTACT PERIOD (400-300 B.P.)

Native populations on Long Island were thriving during the Contact period as the Canarsie, Matinecock, Merrick and Rockaway peoples that occupied this part of the island maintained mostly amiable relations with European settlers at that time (Brasser 1978, Salwen 1978). Although skirmishes and conflicts occurred during these early years of culture contact, all sides acted with agency and believed they could control the developing relationship (Kupperman 2000). Indeed, first-hand accounts of early encounters vary dramatically in tone, disposition, and bias (Karr 1999).

HISTORIC CONTEXT

Settlers, primarily from England, purchased the lands that were to become Suffolk County from the Native American inhabitants in the mid-seventeenth century. Many of these purchases were overseen by Wyandanch, a sachem of the Montaukett Indians (Munsell et al 1882). The eastern end of Long Island was initially settled in 1653 as an independent colony; however, it was subsequently incorporated into the colony of Connecticut in 1662 and became part of the colony of New York in 1664 when the Dutch ceded control of their colony to the British (Munsell et al 1882). The Battle of Long Island took place on August 27, 1776 and the island was occupied by the British army until their evacuation in 1783 (Munsell et al 1882).

The Project Area is located within the Towns of Southampton and East Hampton. Permanent settlement of Southampton and East Hampton by the English began in 1640, when a group of colonists from Lynn, Massachusetts landed at North Sea (Hazelton 1925). The English colonists carried a warrant from the Earl of Sterling granting them about 64 square mi of land, stretching from Shinnecock to Sagaponack (Stone 1983).

Interaction between the Indian and Euro-American populations was marked by agreements (and later conflicts) concerning land use. In 1687 "a lease for a nominal rent" of forty shillings a year was given to the Indians (Stone 1983). A 1698 census records an Indian population of 152 in the area (Keene 1983). The 1687 accord was updated in 1703 with a "thousand year lease," in which the Indians paid a rent of one ear of corn each year in place of the forty shillings. By the terms of this lease, the Indians were permitted land for cultivation and timber, and access to "such grass as they usually make their mats and houses of, and to dig ground nuts" (Bayles 1874). The colonists reserved a right to "meadows, marshes, grass, herbage, feeding and pasturage, timber, stone, and convenient highways" (Bayles 1874).

Though agriculture provided the subsistence base for the colonists, coastal resources (waterfowl, fish, shellfish) were also heavily utilized. Whaling played a vital role in the economy of the early Hamptons area. The value of whale oil and bone as trade goods spawned the local industry which was active from 1640 until the middle of the nineteenth century.

Most of eastern Long Island was affected by British occupation during the American Revolution. Wharves, vessels, and naval stores were commandeered or destroyed in Suffolk County to halt American shipping, and the British fleet stationed in Gardiners Bay was provisioned with East Hampton crops, wood, and livestock, seriously depleting local resources (Luke and Venables 1976). Pre-war economic patterns gradually resumed during the early nineteenth century, facilitated by waterborne trade.

Around 1870, the Sag Harbor branch of the Long Island Rail Road was constructed north of Montauk Highway. The coming of the railroad greatly facilitated the movement of New York City residents to country retreats and marked the start of a thriving summer tourist industry on the south shore of Suffolk County. The railroad fostered the development of the Hamptons as a summer resort, and soon summer cottages and hotels lined the streets and shores of the community. The establishment of golf clubs, private clubs, bathing stations, and large estates continued until World War I (Keene 1983).

Following the war, Suffolk County experienced another real estate boom, especially in outlying areas. Growth slowed dramatically during the 1930s and 1940s with the Great Depression and World War II, but the second half of the twentieth century witnessed renewed economic growth (especially in the 1950s and, more recently, the 1990s). The Hamptons today host booming vacation and summer home industries.

CULTURAL RESOURCES INVENTORY

A site file search conducted on the NY CRIS online geodatabase revealed ninety-one [91] historic resources, eight (8) building districts, and fifteen [15] previous surveys mapped within a one mile buffer of the APE (Figure 3-Figure 5; Table 2-Table 4). No previously recorded resources are located within the APE itself.

PREVIOUS CULTURAL RESOURCE INVESTIGATIONS

Fifteen [15] previous surveys are mapped within a one mile buffer of the APE as described below (Figure 3-Figure 5, Table 2).

In 2000, the Institute for Long Island Archaeology within the Department of Anthropology of the State University of New York (SUNY) Stony Brook conducted an archaeological survey (00SR1530) ahead of activities related to the East Hampton Industrial Park. The APE measured approximately 60 acres, overlapping with the current project area from the Bridgehampton Substation to the Buell Substation. Survey consisted an Archival search and Archaeological survey with subsurface shovel testing. The project area was tested primarily along a 10 x 20 m grid, with a 30 m linear transect excavated to verify disturbance in the south-central portion of the project area. A total of 401 STPs were excavated. No archaeological resources were identified.

In 2001, Jo-Ann McLean conducted a survey of the Mulford Farm National Historic Landmark in the Town of East Hampton at the request of the East Hampton Historical Society (01SR52528). The survey focused on potential effects the 0.4 acre landmark site ahead of proposed restoration activities.

In 2002, the Institute for Long Island Archaeology within the Department of Anthropology of SUNY Stony Brook conducted an archaeological survey (02SR52984) on behalf of the Federal Highway Administration (FHWA) ahead of the construction of a new bicycle path from Townline Road to Buckskill Road in Suffolk County. The linear APE measured approximately 3.2 km (2 mi) in length and 15.2 m (50 ft) in width, overlapping with the current project area from the Bridgehampton Substation to the Buell Substation. Survey consisted of pedestrian surface inspection and subsurface shovel testing. A total of 190 STPs were excavated, with 15 m (49 ft) spacing between tests. No archaeological resources were identified during surface inspection or shovel testing.

In 2002, Robert Miller conducted a Phase IB survey of the Mott Minor subdivision in Sag Harbor for SEQRA (02SR53267). A total of 15 STPs were excavated. One pre-contact artifact was found in the course of the 6-acre survey, but no significant cultural deposits or sites were identified.

In 2004, Dr. Bernstein et al of Stony Brook conducted a study for the Long Island Housing Partnership in Bridgehampton (04SR54196). The Phase I survey covered 3.9 acres. A total of 61 STPs were excavated and no cultural material was encountered.

In 2005, Tracker Archaeology Services conducted an archaeological survey (05SR55577) on behalf of Land Planning Services ahead of clearing activities on the Talmage Property in East Hampton. The APE measured approximately 5 acres (2.02 ha) overlapping with the current project area from the Bridgehampton Substation to the Buell Substation. Survey consisted of pedestrian surface inspection and subsurface shovel testing. A total of 57 STPs were excavated at 15 m (49 ft) intervals. No archaeological resources were identified during surface inspection or shovel testing.

In 2005, Alfred Cammisa of Tracker Archaeology conducted a survey of the Reid Property in Sag Harbor (05SR55661). The APE consisted of 3 acres which was investigated with 19 STPs. No cultural material was encountered.

In 2007, the Institute for Long Island Archaeology within the Department of Anthropology of SUNY Stony Brook conducted an archaeological survey (07SR57695) on behalf of the Long Island Power Authority ahead of a 64kV line installation through the town of Southampton. The linear APE measured approximately 13.5 km (8.4 mi) long, overlapping with the current project area from the Bridgehampton Substation to the Buell Substation. Survey consisted of a Phase IA literature search and sensitivity assessment for four proposed transmission line routes. Shovel testing was recommended based on an assessment of moderate sensitivity.

In 2008, Alfred Cammisa conducted a Phase I study for the Vintage Vines Subdivision in Bridgehampton (08SR58616). A total of 48 acres were surveyed with 741 STPs excavated. No cultural materials were encountered.

In 2016, the Public Archaeology Facility within SUNY Binghamton conducted an archaeological survey (16SR00149) on behalf of the Research Foundation for the University of Albany ahead of the installation of several Mesonet Stations (weather stations) throughout New York State. Two Mesonet Station locations were within Suffolk county; the Brookhaven National Laboratory and the East Hampton Station, both of which were considered enhanced stations. The APE for enhanced stations measured approximately 10 x 10 m (33 x 33 ft), overlapping with the current project area from the Bridgehampton Substation to the Buell Substation. Survey consisted of a pedestrian survey and subsurface shovel testing. Four STPs were excavated at the location of the East Hampton Station, with 8 m (26 ft) intervals. The Brookhaven National Laboratory had been previously tested. No archaeological resources were identified during shovel testing.

In 2017, Alfred Cammisa conducted a Phase I survey for the Magidoff Property (17SR00425). The 4 acre property was investigated with 67 STPs and no cultural materials were encountered.

In 2017, ACME Heritage Consultants conducted an archaeological survey (17SR00733) on behalf of Trileaf Corporation ahead of the Wainscott Telecommunications Facility at Wainscott Northwest Road in East Hampton. The APE measured approximately 0.05 acres (0.2 ha) overlapping with the current project area from the Bridgehampton Substation to the Buell Substation. Survey consisted of pedestrian surface inspection and subsurface shovel testing. Five STPs were excavated in total at 15 m (49 ft) intervals. No archaeological resources were identified during surface inspection or shovel testing.

In 2018, Environmental Design and Research conducted an archaeological survey (18SR56489) and architectural survey (18SR5605) on behalf of Deepwater Wind, LLC, and AECOM ahead of the South Fork Export Cable-Onshore Cable and Substation project in East Hampton. Seven alternative routes and five alternative landing sites were proposed by the applicant and investigated by Environmental Design and Research. The linear APE for the proposed routes measured between 3.5 and 12.9 mi (5.6 to 20.8 km) depending on the proposed route, overlapping with the current project area from the Bridgehampton Substation to the Buell Substation. The APE for proposed substations measured between 0.7 acres and 2.4 acres, depending on the landing site, overlapping with the western extent of the current proposed project. Archaeological survey consisted of a pedestrian surface inspection and subsurface shovel testing. A total of 378 STPs were excavated at variable intervals which were no more than 30 m (100 ft). Two archaeological sites were encountered: the pre-contact Napeague State Park Site and the post-contact Promised Land/Smith Meal Fish Factory Site. Neither site intersects with the current APE. Architectural survey consisted of database review and field reconnaissance and took place within a 1 mi (1.6-km) buffer around a proposed 2.4 acre (0.97 ha) substation adjacent to the Cove Hollow Road substation where the current project will

terminate (Buell Substation). One property and three historic districts previously listed on the NRHP were encountered within the survey area. Three NRHP eligible properties were evaluated as well as five previously identified properties that had not been evaluated. Three properties and one possible historic district were newly identified by this survey and recommended NRHP eligible.

In 2018, Heaton et al conducted a Phase I survey for the South Fork Wind Farm upland export cable and onshore substation (18SR56505). The APE of the wind farm consisted of a 2.4 acre portion of a larger 17.6 acre parcel owned by National Grid. The architectural survey covered a 1 mile survey area around a proposed onshore substation. One property and three districts previously listed in the NRHP were located within the 1 mile survey area for the project including three resources determined to be eligible and five properties whose NRHP eligibility was undetermined. The survey identified and recommended three newly surveyed properties and one potential historic district.

In 2019, Zachary Studenroth conducted an intensive-level architectural survey for the Village of Sag Harbor to justify a boundary expansion of the existing historic district (19SR00515).The survey covered an area of approximately 162 acres focusing on structures dating from the 1945-1970. 64 new structures were recommended as eligible for the NRHP.

Table 2. Previous Cultural Studies Within One Mile of the Project APE

REPORT NO.	SURVEY TYPE	DATE	AUTHOR	TITLE
00SR51530	Archaeology Surveys	2000	Bernstein, D., M. Lenardi, D. Merwin	Stage 1 Archival Search and Archaeological Survey for the East Hampton Town Industrial Park, Town of East Hampton, Suffolk County, New York.
01SR52528	Archaeology Surveys	2001	Jo-Ann McLean	Limited Archaeological Survey, Stage IB and Stage II—1999: The Mulford Farm National Historic Landmark, Town of East Hampton, Suffolk County, New York
02SR52984	Archaeology Surveys	2002	Barber, L.	Cultural Resource Reconnaissance Survey Report, PIN 0805.63.121, South Fork Bikeway, Townline Road to Buckskill Road, Town of East Hampton, Suffolk County, New York
02SR53267	Archaeology Surveys	2002	Robert L. Miller	Phase 1B Archaeological Investigation of the Mott Minor
04SR54196	Archaeology Surveys	2004	Bernstein, Lenardi, Manfra	Stage IA Archaeological Survey for the Long Island Housing Partnership, Bridgehampton, Town of Southampton, Suffolk County, New York
05SR55577	Archaeology Surveys	2005	Alfred Cammisa	Phase I Archaeological Investigation for the Talmage Property, Wainscott, Town of East Hampton, Suffolk County, New York,
05SR55661	Archaeology Surveys	2005	Alfred Cammisa	Phase I Archaeological Investigation for the Reid Property, Sag Harbor, Town of Southampton, Suffolk County, New York
07SR57695	Archaeology Surveys	2007	Bernstein, D., A. Manfra, D. Merwin	Phase IA Archaeological Survey for the Proposed LIPA Southampton to Bridghampton Electrical

REPORT NO.	SURVEY TYPE	DATE	AUTHOR	TITLE
				Transmission Line, Town of Southampton, Suffolk County, New York.
08SR58616	Archaeology Surveys	2008	Alfred Cammisa	Phase I Archaeological Investigations for the Proposed Vintage Vines Subdivision, Bridgehampton, Town of Southhampton, Suffolk County, New York
16SR00149	Archaeology Surveys	2016	Miroff, L., N. Versaggi	Phase I Archaeological Survey, The University of Albany Mesonet Project, Batch #6, Part 2 (AKA Batch 12), Various Towns and Counties, New York.
17SR00425	Archaeology Surveys	2017	Alfred Cammisa	Phase I Archaeological Investigation tor the Magidoff property
17SR00733	Archaeology Surveys	2017	Spigelman, M.	Wainscott Telecommunications Project.
18SR56489	Archaeology Surveys	2018	Heaton, P., K. Garenani, N. Free Land, J. Loucks, S. Lawson, A. Roblee, J. Sabino	Phase I Archaeological Survey: South Fork Wind Farm Upland Export Cable & Onshore Substation
18SR56505	Building Surveys	2018	Heaton, P., K. Garenani, N. Free Land, J. Loucks, S. Lawson, A. Roblee, J. Sabino	Phase I Archaeological Survey: South Fork Wind Farm Upland Export Cable & Onshore Substation
19SR00515	Building Surveys	2019	Zachary Studenroth	Sag Harbor Intensive-level Historic Resource Survey

CULTURAL RESOURCES RECORDED WITHIN ONE MILE OF THE PROJECT APE

Ninety-one [91] previously recorded resources including three [3] archaeological sites and eighty-eight [88] architectural resources were located within a one mile buffer of the project APE (Figure 3-Figure 5; Table 3-Table 4). The majority of the historic structures are located in districts to the east of the APE. Those resources located within a half-mile of the APE are described below.

The Newtown Lane Historic District (10303.000858) consists of well-preserved early twentieth-century residences which highlight the transition of the village from commercial to suburban. It is bounded by Newtown Lane to the south, Cedar lane to the north, railroad tracks to the east, and the East Hampton High School to the west. Newtown Lane was previously called New Town Street in the late sixteenth century as a way to differentiate it from Town Street (now called Main Street). The establishment of the East Hampton Railroad Station in 1895 promoted development of the surrounding community, which became the commercial center of the village and the first bedroom community in East Hampton. Many residences within this historic district are original and maintain high integrity. As such, the Newtown Lane Historic District has

been evaluated as eligible for the NRHP, satisfying Criteria A and C (Mackey 2018, NY Resource Evaluation Form).

The Buells Lane Historic District (10372.000436 and 90NR01935) was nominated in 1985 by M. Peckham of the NY State Historic Preservation Field Services Bureau. According to the Historic and Natural Districts Inventory Form, the district is located in the northwest quadrant of the village of East Hampton along Buell's Lane. Buell's Lane is described as "an early road which connects the center of East Hampton with Sag Harbor, seven miles to the west." The District is majority residential with a total of 25 contributing buildings. Contributing buildings within the district consist of late nineteenth century homes with light-frame constructions that range from one and one-half to two-stories in height. Most homes reflect Victorian Vernacular style with picturesque rooflines. The district is emblematic of rapid development that took place in the late nineteenth century which took place concurrently with the growth years of East Hampton's Summer Colony and a period of prosperity for the villages middle class. The district was listed on the NRHP on July 21, 1988.

The Town of East Hampton Airport (10303.000825) is situated on 600 acres on the western border of the Town of East Hampton. The airport was originally constructed in 1936 and continues to operate seasonally. It is comprised of 2 runways, a Terminal Building, a seasonal control tower (operated only during the summer season), and 62 private hangars that house aircraft for general aviation. In the off season the Airport is designated a non-towered or uncontrolled airport. There is one fixed base operator (FBO) that provides fueling, aircraft charters, catering, and ramp service. There is also an additional charter service and flight school at the airport.

The single-story residence at 84 Sag Harbor Turnpike (10303.000857) was built in 1800 and still in use within the town of East Hampton. The building has a rectangular structure with a salt-box profile and is clad in wood shingles. The main entrance to the structure is centered on the southwest elevation and consists of a single-entry door underneath a side gable projection (Heaton et al 2018). The property was identified by the 18SR56505 survey discussed above. The NY CRIS lists the property as ineligible for the NRHP.

The Railroad Bridges crossing Sag Harbor Turnpike (10303.000861), Cove Hollow Road (10303.000862), and Stephen Hands Path (10303.000860) were evaluated in 2018 by Environmental Design and Research as ineligible for the NRHP (Heaton et al 2018). The NY CRIS lists the three Railroad Bridges as constructed in 1895, making them contemporary constructions with the establishment of the East Hampton Railroad Station. The Railroad Bridges over Stephen Hands Path and Cove Hollow Road are listed in NY CRIS as being rehabilitated in 1929.

The National Grid East Hampton Generating Station (10303.000842) is an energy facility currently in use within the town of East Hampton, New York. The site has been evaluated as ineligible for the NRHP.

The Geus Residence (10372.000237) was recorded in 1979 by R. Hefner and A. Hoagland of the Village of East Hampton and Ladies' Village Improvement Society. The Architectural Inventory Form lists the Geus Residence as the Miller Dayton House with an original construction date of 1799. According the Inventory Form, Miller Dayton was an important figure in local commerce. Dayton hired an Amagansett carpenter and millwright, Samuel Schellinger to build the house, which began construction in 1793. The Miller Dayton house is a Colonial

Style, two-story residence with a wood frame and stone foundation and rectangular plan. The building has a gable roof and is clad in wood shingles. Fenestration consists of 6/6 double hung sash of early construction, and 9/6 and 9/9 double hung sash of later construction. A large center chimney projects from the ridge of the gable roof. The main entrance consists of a single-entry batten door centered on the east elevation. Remodeling is noted to have taken place in the 1870s. The NY CRIS lists this property as eligible or the NRHP.

The Dayton Residence (10372.000238) was recorded in 1979 by R. Hefner and A. Hoagland of the Village of East Hampton and Ladies' Village Improvement Society. The Architectural Inventory Form lists the Dayton Residence as the Josiah Dayton Residence. According to the Inventory Form, the land where the residence sits has been in the Dayton family since the seventeenth century. Josiah Dayton tore down the original residence on the property in 1829 to have the current residence erected. The new construction was overseen by Benjamin Glover, a prominent builder from Sag Harbor. The building is a nineteenth century style building with a rectangular plan. The structural system is wood frame clad in wood shingles. Two brick chimneys project from the gable roof. Fenestration is listed as "balanced and symmetrical on all elevations", consisting of 2/2 and 4/4 double hung sash. The NY CRIS lists the property as eligible for the NRHP.

The Long Pond Archaeological Site (10309.000208) was reported in 1975 by A. Pickman and W. Harris as part of the Main Street Sanitary and Sewage Project in Southampton and originally identified by R. Wyatt in 1969. The site is described on the Archaeological Site Inventory Form as consisting of flakes and two "Wading River" projectile points found between 4 and 9 in (10.2 and 22.9 cm) below ground surface. The site eligibility for the NRHP is currently listed by NY CRIS as undetermined.

The A. Edwards Historic Site (10309.000300) was recorded in 2007 by A. Manfra of the Institute for Long Island Archaeology within SUNY Stony Brook. Excavation of the site consisted of 12 STPs at the Phase I level in 2007 and one 1 x 1 m (3.3 x 3.3 ft) test unit and one 2 x 1 m (6.6 x 3.3 ft) test unit at the Phase II level in 2008. The revised 2008 inventory forms details 910 historic period artifacts recovered from the site consisting of: household refuse (bottle/lamp glass, ceramics, food remains, and coal) and architectural debris (window glass, brick fragments, mortar, and nails). Site eligibility is currently listed as undetermined.

Table 3. Building Districts within One Mile of the Project APE

RESOURCE NR NO.	RESOURCE USN NO.	DISTRICT NAME	NRHP ELIGIBILITY	DISTANCE FROM APE
N/A	10303.000858	Newtown Lane Historic District	Eligible	0.39
N/A	10372.000443	First Presbyterian Church complex	Eligible	0.92
90NR01933	10372.000439	East Hampton Village Historic District (Boundary Increase)	Listed	0.55
90NR01935	10372.000436	Buells Lane Historic District	Listed	0.30
90NR01937	10372.000438	Jericho Historic District	Listed	0.61
90NR01939	N/A	North Main Street Historic District–East Hampton	Listed	0.99
94NR00635	N/A	Sag Harbor Village Historic District (Boundary Increase)	Listed	0.99

RESOURCE NR NO.	RESOURCE USN NO.	DISTRICT NAME	NRHP ELIGIBILITY	DISTANCE FROM APE
99NR01544	N/A	East Hampton Railroad Station	Listed	0.64

Table 4. Cultural Resources within One Mile of the Project APE

RESOURCE USN NO.	RESOURCE NAME	RESOURCE TYPE	NRHP ELIGIBILITY	DISTANCE FROM APE
10303.000825	Town of East Hampton Airport	Historic Structure	Undetermined	0.48
10303.000857	84 Sag Harbor Turnpike, East Hampton	Historic Structure	Not Eligible	0.10
10303.000861	Railroad Bridge over Sag Harbor Turnpike	Historic Structure	Not Eligible	Adjacent
10303.000862	Railroad Bridge over Cove Hollow Road	Historic Structure	Not Eligible	Adjacent
10303.000842	National Grid East Hampton Generating Station	Historic Structure	Not Eligible	Adjacent
10372.000237	Geus Residence	Historic Structure	Eligible	0.24
10372.000238	Dayton Residence	Historic Structure	Eligible	0.23
10303.000860	Railroad Bridge Over Stephen Hands Path	Historic Structure	Not Eligible	0.27
10372.000425	East Hampton Long Island Rail Road Station	Historic Structure	Listed	0.65
10372.000412	Private Residence, Ca. 1890	Historic Structure	Not Eligible	0.62
10372.000427	East Hampton Middle School	Historic Structure	Not Eligible	0.89
10372.000426	John M Marshall Elementary School	Historic Structure	Not Eligible	0.59
10372.000002	Congress Hall	Historic Structure	Listed	0.79
10372.000001	Weitzman Residence	Historic Structure	Listed	0.80
10372.000023	The Mulford Farm	Historic Structure	Listed	0.86
10372.000024	The Box	Historic Structure	Listed	0.87
10372.000367	Colonial Revival Residence	Historic Structure	Listed	0.90
10372.000368	Colonial Revival Residence	Historic Structure	Listed	0.94
10372.000186	Mcgivern Residence	Historic Structure	Listed	0.97
10372.000390	Guild Hall	Historic Structure	Listed	0.86
10372.000225	East Hampton Star Free Library	Historic Structure	Listed	0.81
10372.000224	E. Hamper Star Newspaper Office	Historic Structure	Listed	0.83
10372.000223	Clinton Academy (East Hampton Historical Society)	Historic Structure	Listed	0.83
10372.000222	Town House (East Hampton Historical Society)	Historic Structure	Listed	0.83

RESOURCE USN NO.	RESOURCE NAME	RESOURCE TYPE	NRHP ELIGIBILITY	DISTANCE FROM APE
10372.000200	Tiedmann Residence	Historic Structure	Listed	0.80
10372.000199	Rattray Residence	Historic Structure	Listed	0.75
10372.000218	1770 Inn	Historic Structure	Listed	0.84
10372.000221	Smoke House	Historic Structure	Listed	0.86
10372.000220	Parker Residence	Historic Structure	Listed	0.88
10372.000219	Kornelist Deboer Residence	Historic Structure	Listed	0.87
10372.000217	Dr. Magill Residence	Historic Structure	Listed	0.88
10372.000216	Neil Robinson Residence	Historic Structure	Listed	0.80
10372.000214	Osborne Residence	Historic Structure	Listed	0.85
10372.000215	Osborne Law Office	Historic Structure	Listed	0.82
10372.000213	Richey Residence	Historic Structure	Listed	0.90
10372.000212	Gossler Residence	Historic Structure	Listed	0.90
10372.000211	Presbyterian Manse	Historic Structure	Listed	0.90
10372.000210	Rosinsky Residence	Historic Structure	Listed	0.89
10372.000206	Presbyterian Church	Historic Structure	Listed	0.94
10372.000207	Presbyterian Church Parish Hall	Historic Structure	Listed	0.95
10372.000208	Wilkinson Residence	Historic Structure	Listed	0.88
10372.000204	Osborne - Jackson House / Museum	Historic Structure	Listed	0.92
10372.000205	Smith Residence	Historic Structure	Listed	0.97
10372.000202	Nathaniel Huntting House/Inn	Historic Structure	Listed	0.99
10372.000203	Baker Residence	Historic Structure	Listed	0.90
10372.000201	Ball Residence	Historic Structure	Listed	0.97
10372.000393	Commercial Bldg	Historic Structure	Listed	0.98
10372.000394	Non-Contributing Commercial Bldg	Historic Structure	Listed	0.97
10372.000145	White Pharmacy	Historic Structure	Listed	0.96
10372.000142	Latham House Clothiers	Historic Structure	Listed	0.98
10372.000141	Diamonds / Commercial	Historic Structure	Listed	0.98
10372.000140	Kelly Liquor Shop	Historic Structure	Listed	0.97
10372.000139	Old Barn Bookshop	Historic Structure	Listed	0.99
10372.000137	Meyer's Store	Historic Structure	Listed	0.99
10303.000859	Cedar Lawn Cemetery	Historic Structure	Eligible	0.36
10303.000807	East Hampton High School	Historic Structure	Not Eligible	0.40
10372.000441	Gas Station	Historic Structure	Not Eligible	0.57
10372.000258	Clause Residence	Historic Structure	Listed	0.59
10372.000256	Pagel Residence	Historic Structure	Listed	0.71

RESOURCE USN NO.	RESOURCE NAME	RESOURCE TYPE	NRHP ELIGIBILITY	DISTANCE FROM APE
10372.000257	Kerr Residence	Historic Structure	Listed	0.68
10372.000255	Lachman Residence	Historic Structure	Listed	0.69
10372.000254	Synagogue Of E. Hampton	Historic Structure	Listed	0.70
10372.000253	Abrahamsen Residence	Historic Structure	Listed	0.76
10372.000444	Gates Of The Grove / Jewish Center Of The Hamptons	Historic Structure	Undetermined	0.70
10372.000251	Dowdney Residence	Historic Structure	Listed	0.81
10372.000250	Tillinghast Residence	Historic Structure	Listed	0.84
10372.000249	Burr Residence	Historic Structure	Listed	0.87
10372.000248	Bock Residence	Historic Structure	Listed	0.82
10372.000013	Osborne House	Historic Structure	Listed	0.82
10372.000012	Thomas & Mary Nimmo Moran House & Studio	Historic Structure	Listed	0.84
10372.000011	THIRD HOUSE (Village Of East Hampton)	Historic Structure	Listed	0.84
10372.000010	The Old Tyler Place	Historic Structure	Listed	0.82
10372.000017	Jenny Wren	Historic Structure	Listed	0.91
10372.000016	Robertson Residence	Historic Structure	Listed	0.92
10372.000015	Pondside Aldrich Residence	Historic Structure	Listed	0.93
10372.000014	The Hedges Inn	Historic Structure	Listed	0.96
10372.000027	Mill Cottage	Historic Structure	Listed	0.93
10372.000009	The Gables	Historic Structure	Listed	0.81
10372.000008	Maidstone Arms Hotel	Historic Structure	Listed	0.79
10372.000007	Old Parsonage	Historic Structure	Listed	0.78
10372.000005	Williams Hedges House	Historic Structure	Listed	0.77
10372.000020	Ezekial Howes House	Historic Structure	Listed	0.87
10372.000021	St Luke's Episcopal Church Rectory	Historic Structure	Listed	0.85
10372.000033	Village Green And South End Burial Ground	Historic Structure	Listed	0.83
10372.000022	John Howard Payne House	Historic Structure	Listed	0.86
10372.000029	Pantigo Mill	Historic Structure	Listed	0.88
10372.000031	St Luke's Church	Historic Structure	Listed	0.88
10303.000856	180 Sag Harbor Turnpike, East Hampton	Historic Structure	Eligible	0.65
10309.000208	Long Pond Prehistoric Site	SHPO Archaeology Sites	Undetermined	0.05

RESOURCE USN NO.	RESOURCE NAME	RESOURCE TYPE	NRHP ELIGIBILITY	DISTANCE FROM APE
10309.000300	A. Edwards Historic Site	SHPO Archaeology Sites	Undetermined	0.26
10309.000302	J. Edwards Site	SHPO Archaeology Sites	Undetermined	0.82

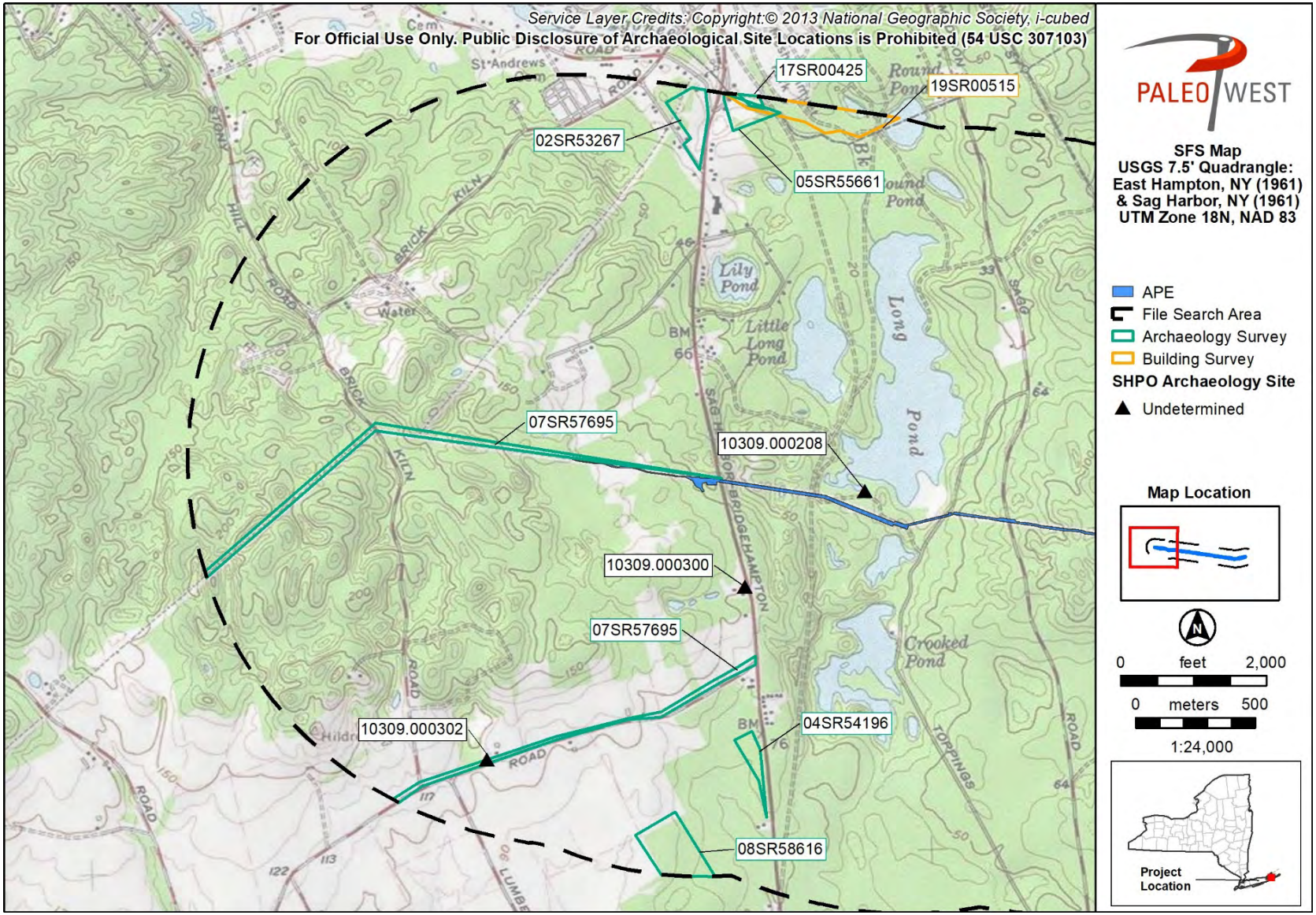


Figure 3. Site file search of a one mile radius around the APE (A).

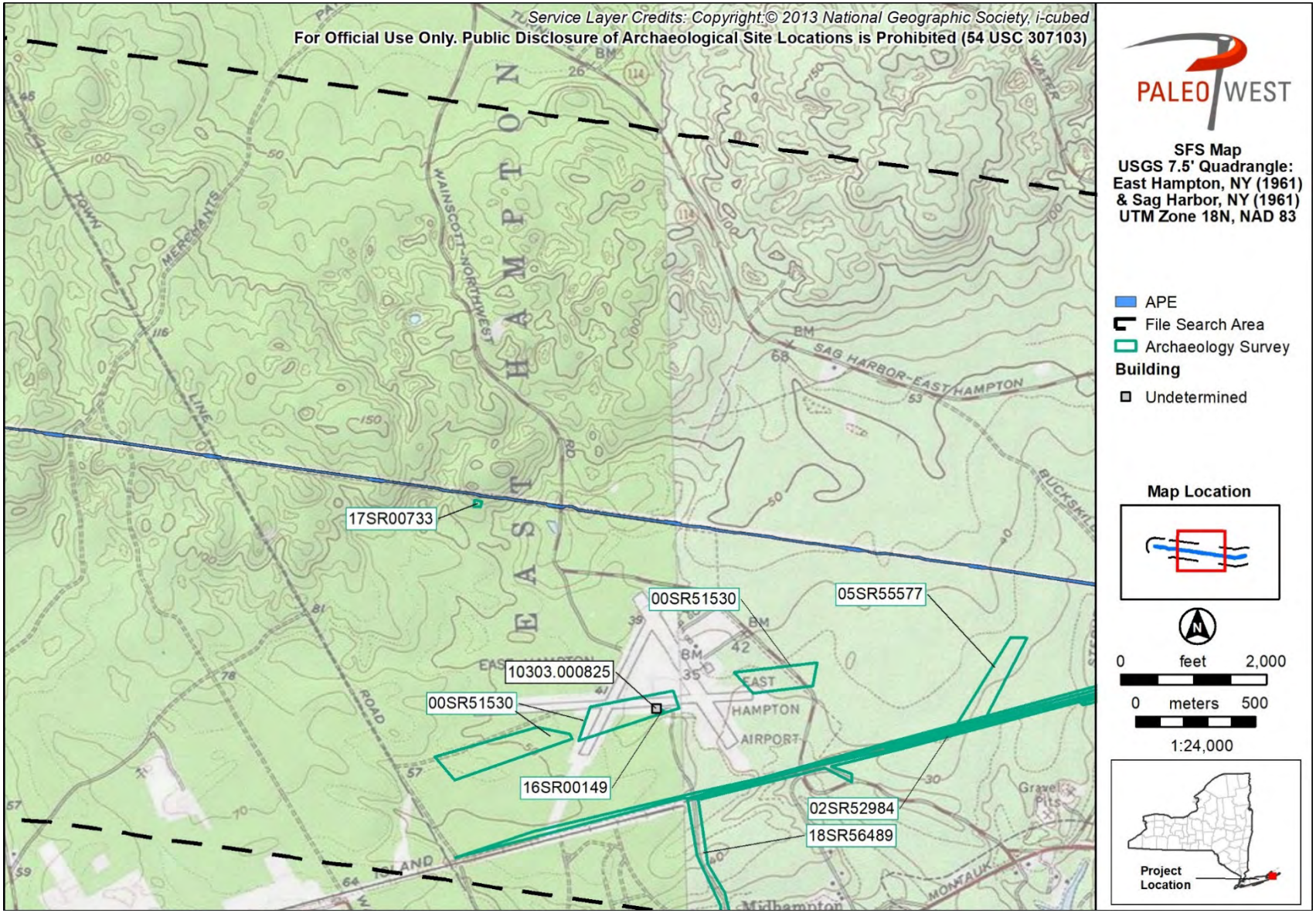


Figure 4. Site file search of a one mile radius around the APE (B).

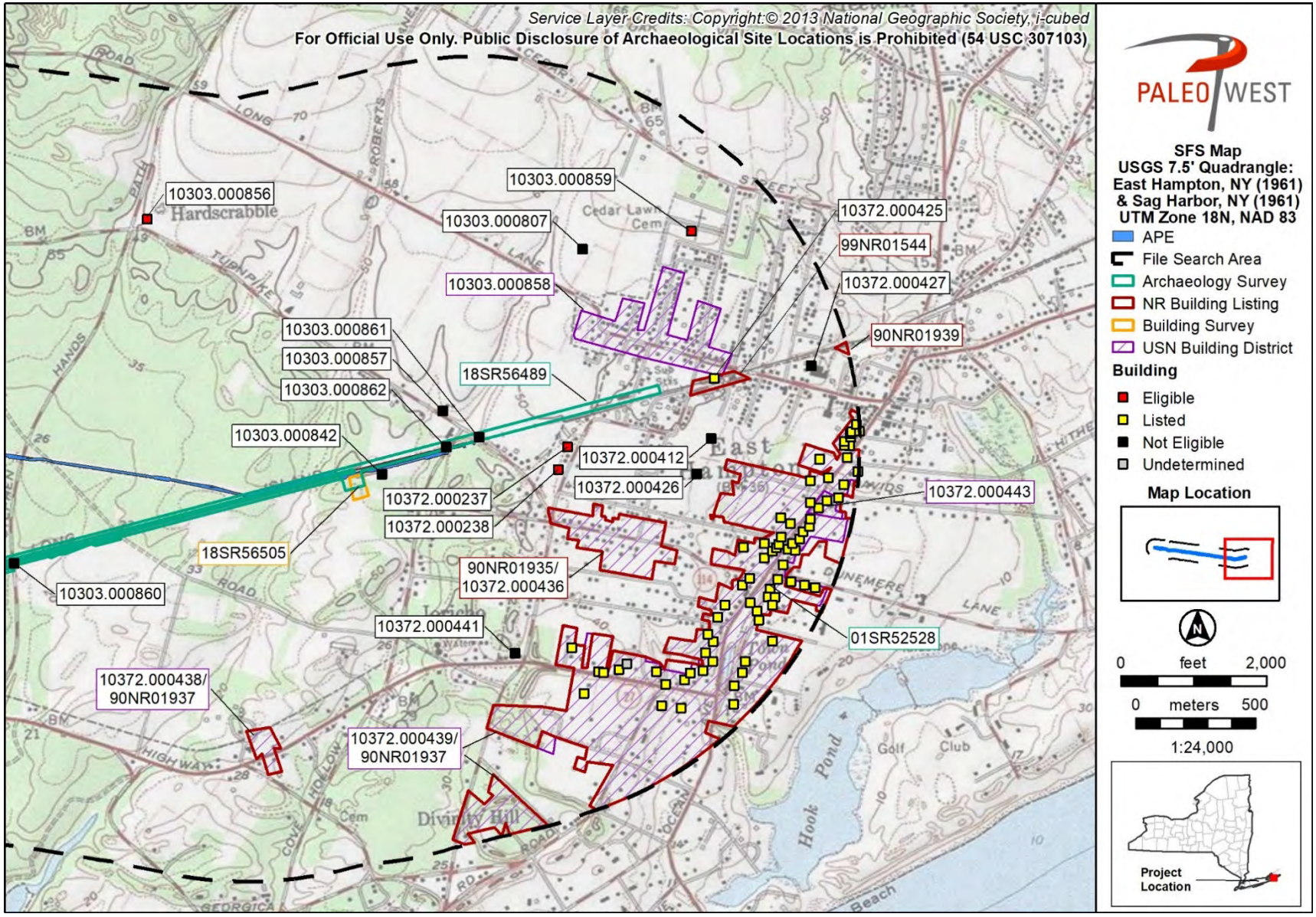


Figure 5. Site file search of a one mile radius around the APE (C).

RESEARCH DESIGN AND METHODS

A site file search conducted on the NY CRIS online geodatabase revealed ninety-one [91] historic resources, eight [8] building districts, and fifteen [15] previous surveys within a one mile buffer of the APE. There are no previously recorded resources within the APE itself. Historic research indicates that the general area has been settled by Europeans as early as the 1640s with a sharp increase in development following construction of the LIRR in the late nineteenth century. Historic structures are common in East Hampton, to the east of the APE. PaleoWest concurs with SHPO/OPRHP that most of the ground disturbances associated with the project will occur within soils characterized by extensive prior disturbance, with no archaeological potential. In addition, most of the project route has limited archaeological sensitivity due to excessive distance from permanent water. However, portions of the project fall within soils lacking evidence of extensive prior soil disturbance, and in locations with high archaeological sensitivity (see Figure 2).

Areas of high sensitivity, where archaeological sites are most likely to be identified, are defined as those: (1) within 100-m (328 ft) of permanent water (rivers, streams, wetlands, ponds and lakes and hydric soils) and on slopes equal to or less than 12%; (2) within or near to known archaeological sites; and (3) locations of standing or demolished historic structures. Hydric soils are included to account for areas that may not be currently near water but were in the past. The 100-m cut off from water is based on data presented by Robert E. Funk in his 1993 *Archaeological Investigations in the Upper Susquehanna Valley, New York State.*

Based on the results of the Phase IA survey, PaleoWest conducted Phase IB subsurface testing of the 0.90 acre laydown area and along approximately 2.67 mi (4.3 km) of the APE in two areas of high archaeological sensitivity that lack evidence of extensive prior soil disturbance (Figure 6, Figure 7). The APE is 15 ft wide, resulting in a total of 5.79 acres (2.34 ha) included in Phase IB testing. Phase IB investigations conformed to the 1994 New York Archaeological Council Standards and consisted of a pedestrian survey of these portions of the APE at a 1 m transect interval and a total of 276 pre-plotted STPs. The interval between STPs did not exceed 15 m (49 ft). The STPs were 30 cm (12 in) in diameter excavated in natural stratigraphic layers to culturally sterile subsoils or to 1 m (ca. 3 ft) in depth. All excavated soil was screened through ¼-in hardware cloth to facilitate the recovery of artifacts. Soil texture was recorded using standardized terminology and soil colors recorded using Munsell© soil color charts. Locations of STPs were recorded using a GPS unit with differential corrections applied.

PaleoWest employed a fully digital data collection workflow during field investigations. All images and data were collected digitally using iPad tablets and smartphones connected to office servers over high-speed cellular data networks. Collecting data in the field over cellular networks allows data to be available to all members of the crew on site, as well as all off-site PaleoWest staff, in real time. As data are entered in the field, a PaleoWest data manager concurrently checks and cleans records, allowing us to address potential issues in the datasets while excavations are still open and fresh in the excavators' memories and before crews leave the field. The database system used for data collection in the field provides the platform for data collection and management through analysis and reporting

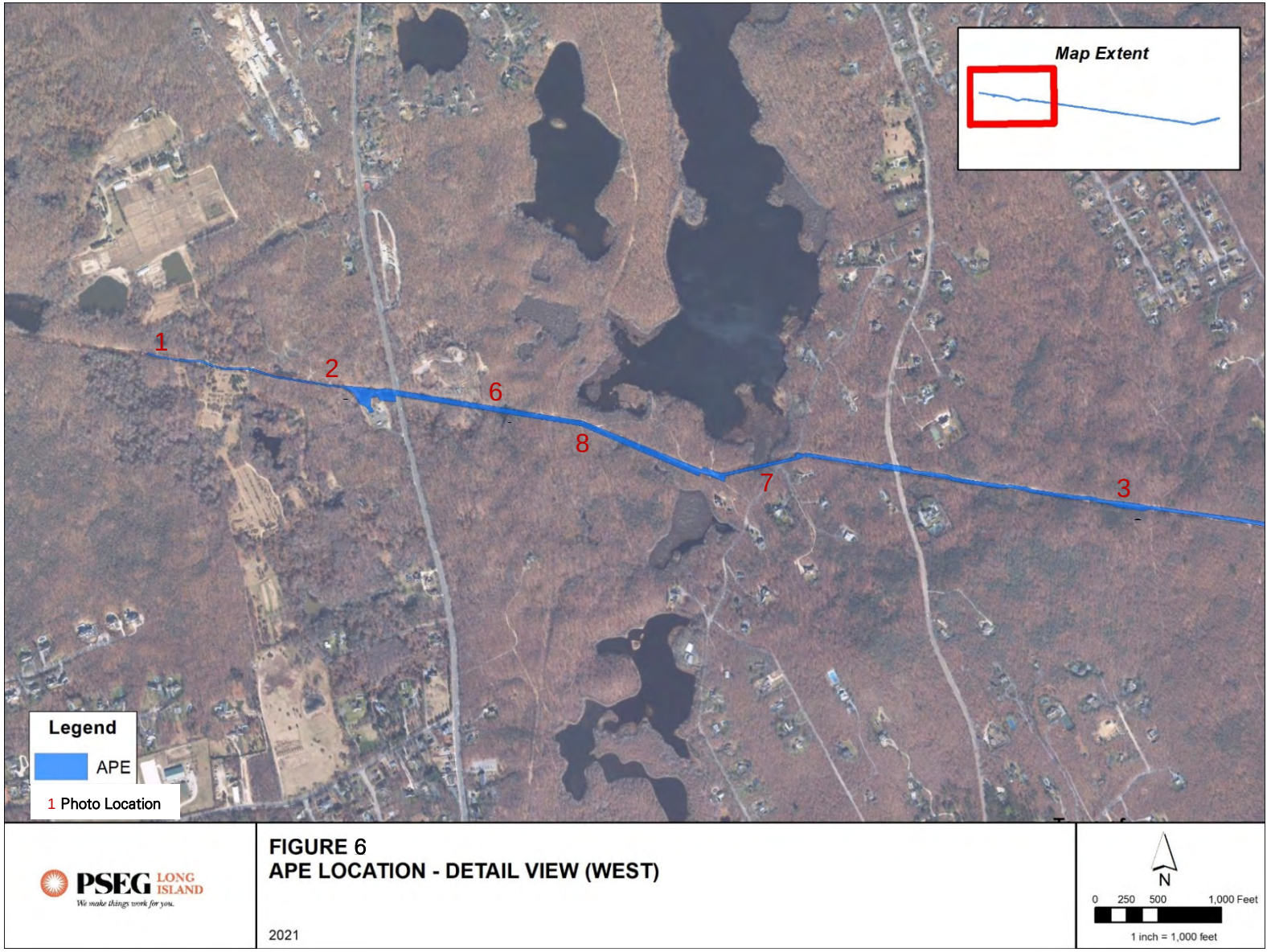


Figure 6. APE Location detail (west) with photo locations.

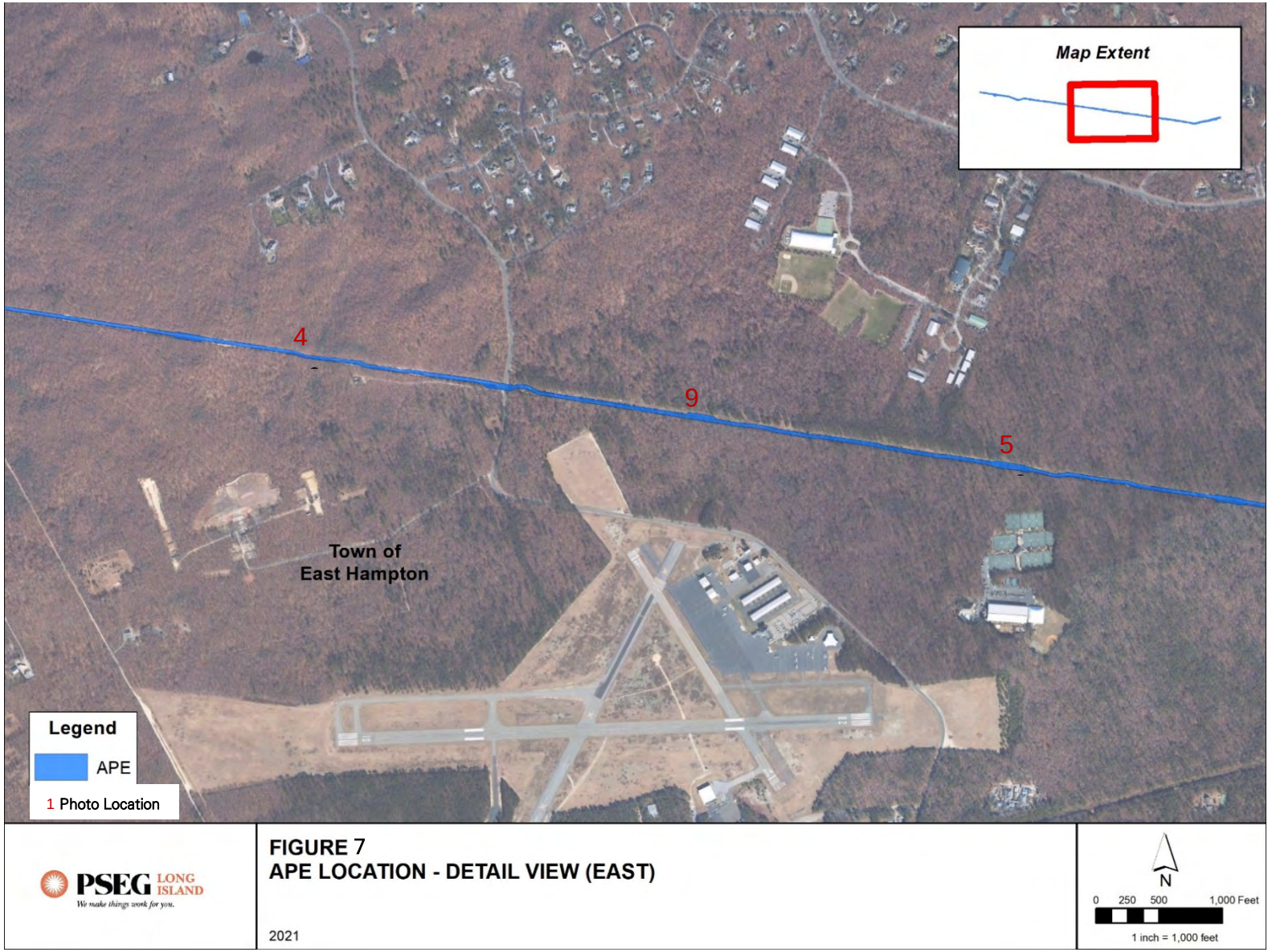


Figure 7. APE Location detail (east) with photo locations.

SURVEY RESULTS

PaleoWest conducted fieldwork in two sessions from July 12-19, 2021 and August 9-13, 2021. Lawrence Chiatti (MA) served as Field Director with Matt Jameson (MA) and Joe Pellrine (BA) as Field Technicians. Phase IB investigations consisted of a pedestrian survey of the APE at a 1 m transect interval and a total of 276 STPs at 15 m intervals (Figure 8-Figure 12). The project area is characterized by a cleared sandy track surrounded by dense vegetation (Photo 1-Photo 5). The landscape has some areas of slope and low areas of wetland. Of the 276 pre-plotted STPs, 19 STPs were not excavated due to disturbances including standing water, slope, road construction, and buried utilities (Photo 6-Photo 7). The remaining 257 STPs were negative for cultural material. No cultural material was recovered in the course of pedestrian survey or excavation and no new sites were identified. A comprehensive STP results table is included as Appendix B and STP locations are outlined in Appendix C.

The typical soil profile encountered in the western portion of the APE consisted of a shallow very pale brown loamy sand (10YR 8/3) over dark yellowish brown sand (10YR 4/6) with a subsoil of brownish yellow sand (10YR 6/8) (Photo 8). Soils in eastern area were typically characterized by dark yellowish brown loamy sand (10YR 4/6) over a subsoil of brownish yellow sand (10YR 6/8) (Photo 9).

Photo 1. Project overview from the western extent of western area, facing east.

Photo 2. Project overview of laydown area, facing west.

Photo 3. Project overview from the eastern extent of western area, facing west.

Photo 4. Project overview from western extent of eastern area, facing east.

Photo 5. Project overview from eastern extent of eastern area, facing west.

Photo 6. Project overview of STPs 137-142 not excavated due to slope and standing water. Power line structure in background is location of STP 143, facing east.

Photo 7. Project overview of STPs 238-241 not excavated due to wetlands, facing east.

Photo 8. Profile of STP 166, typical for the western area.

Photo 9. Profile of STP 76, typical for the eastern area.

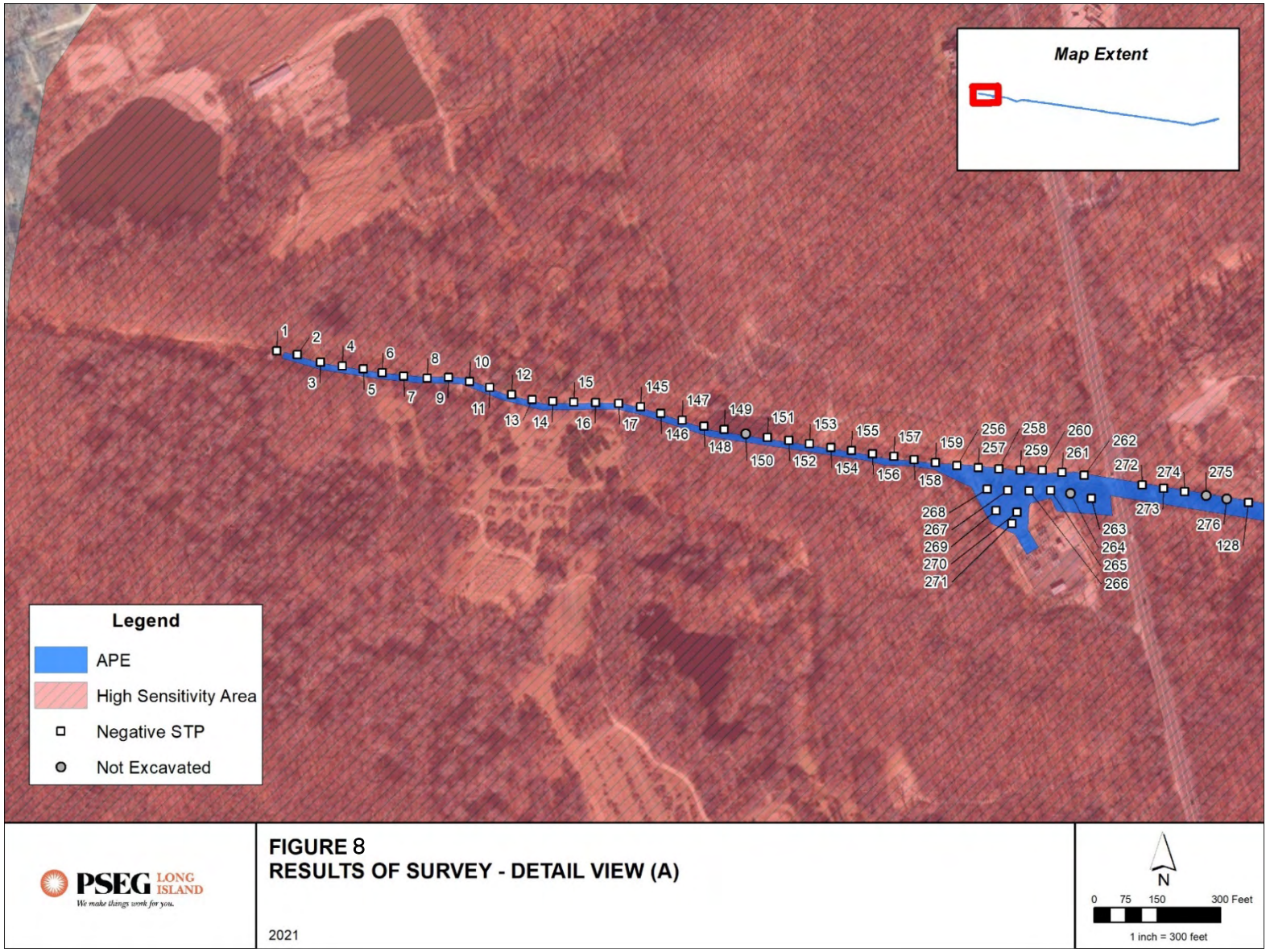


Figure 8. Results of survey detail view (A).

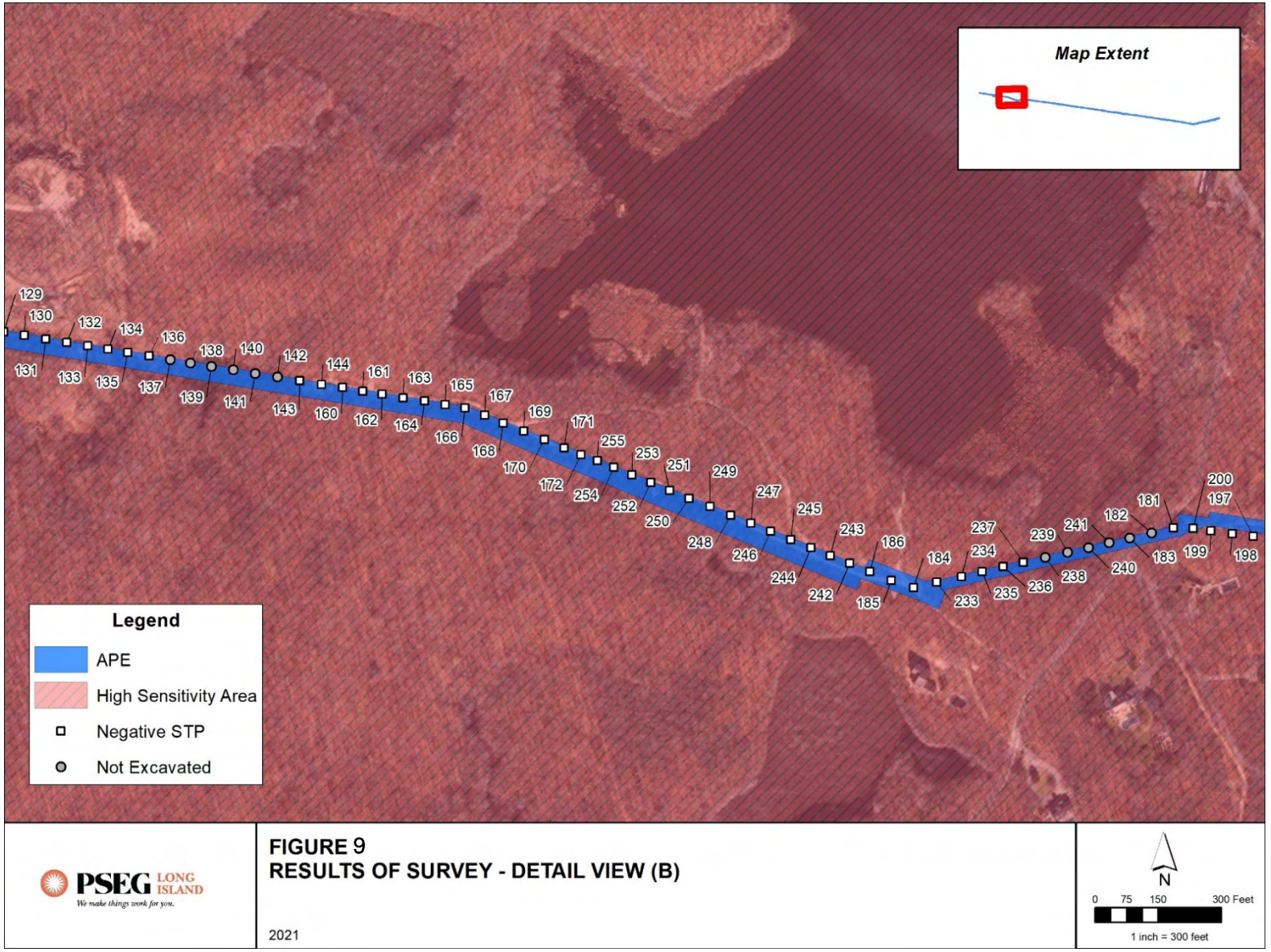


Figure 9. Results of survey detail view (B).

Figure 10. Results of survey detail view (C).

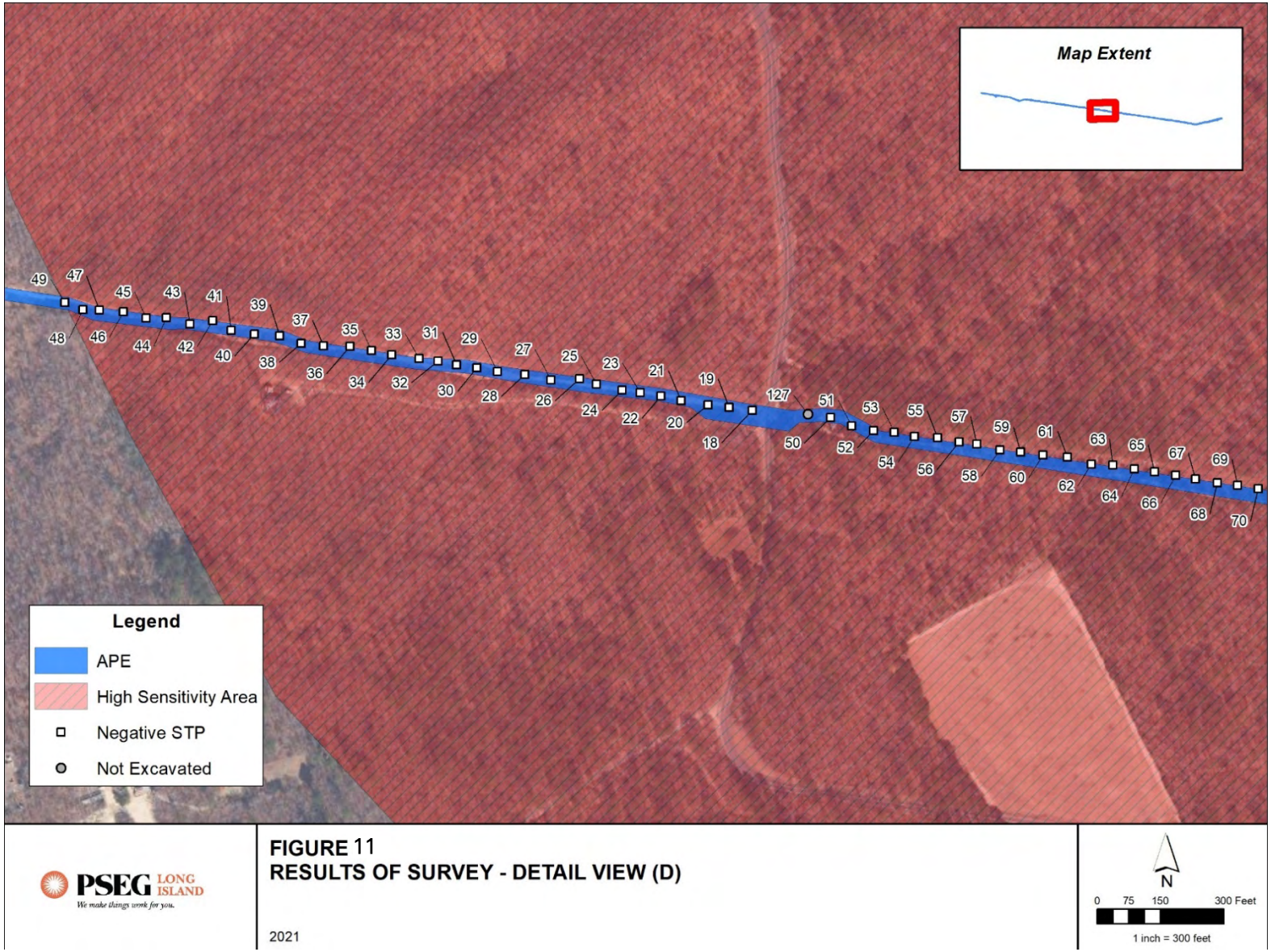


Figure 11. Results of survey detail view (D).

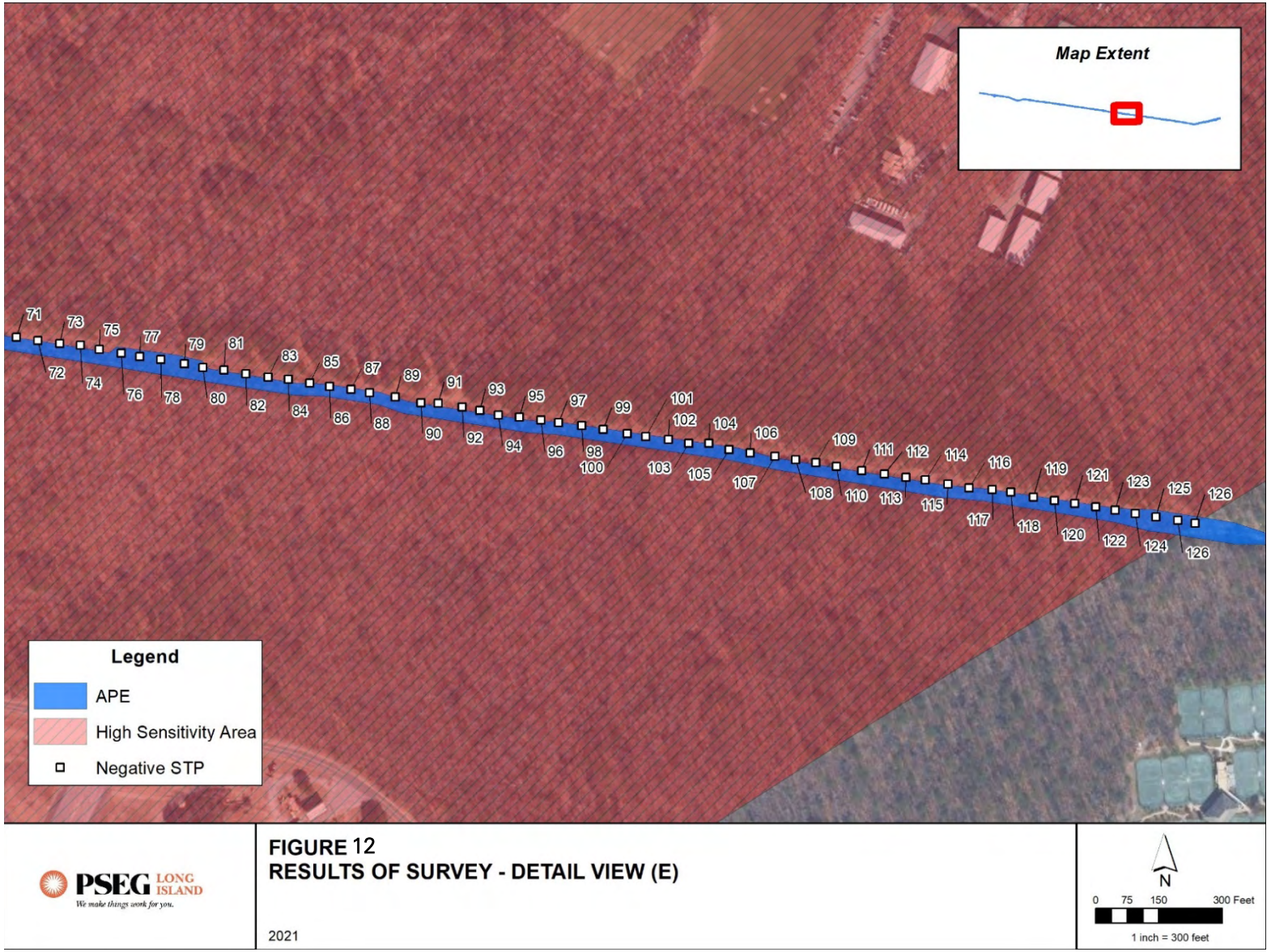


Figure 12. Results of survey detail view (E).

RECOMMENDATIONS

PaleoWest completed a Phase IA & B survey in advance of the proposed Bridgehampton to Buell New 69 kV Underground Cable project in the towns of Southampton and East Hampton in Suffolk County, New York for GEI on behalf of PSEG Long Island.

PaleoWest conducted subsurface testing at the laydown area and along approximately 2.67 mi (4.3 km) or a total of 5.79 acres (2.34 ha) of the APE in two areas of high archaeological sensitivity that lacked evidence of extensive prior soil disturbance. Phase IB investigations consisted of a pedestrian survey of these portions of the APE at a 1 m transect interval and a total of 276 STPs. No cultural materials were recovered in the course of excavation. The survey resulted in the documentation of no new archaeological sites. The Phase I archaeological survey established that the proposed action should have no effect on cultural resources eligible for the State Register or National Register of Historic Places. PaleoWest recommends no additional archaeological investigation within the APE.

REFERENCES

Bayles, Richard M.

1874 Historical and Descriptive Sketches of Suffolk County and its Towns, Villages, Hamlets, Scenery, Institutions of Important Enterprise With a Historical Outline of Long Island. Self-Published.

Binford, Lewis R.

1980 Willow Smoke and Dogs' Tails: Hunter-Gatherer Settlement Systems and Archaeological Site Formation. *American Antiquity* 45(1):4–20.

Boyd, Glenda F.

1962 The Transitional Phase on Long Island. *American Antiquity* 27(4):473–478.

Brasser, T.J.

1978 Early Indian-European Contacts. In *Handbook of North American Indians, Vol. 15, Bruce G. Trigger, editor*. Washington D.C.: Smithsonian Institution Press, 78-88.

Broyles, B.J.

1971 *Second Preliminary Report: The St. Albans Site, Kanawha County, West Virginia*. Report of Investigations No. 3. Geologic and Economic Survey, Morgantown, West Virginia.

Cadwell, D.H.

1986 Surficial Geologic Map of New York, Lower Hudson Sheet. New York State Museum.

Cantwell, Anne-Marie and Diana diZerega Wall

2001 *Unearthing Gotham: The Archaeology of New York City.* Yale University Press, New Haven and London.

Carbone, Victor.

1976 *Environment and Prehistory in the Shenandoah Valley*. PhD Dissertation, Catholic University of America, Washington, D.C.

Ceci, Lynn

1977 *The Effect of European Contact and Trade on the Settlement Pattern of Indians in Coastal New York, 1524-1665*. Ph.D. dissertation, Department of Anthropology, City University of New York Graduate Center, New York.

1990 Radiocarbon Dating "Village" Sites in Coastal New York: Settlement Pattern Change in the Middle to Late Woodland. *In Man in the Northeast* 39:1–28.

CITY/SCAPE: Cultural Resource Consultants

1994 Caribe Village Site. 65, 67, 69, & 71 South Fourth Street, Williamsburgh, Kings County, New York Phase IB Archaeological Field Survey Report.

Custer, Jay F.

1984 *Delaware Prehistoric Archaeology: An Ecological Approach*. University of Delaware Press, Newark, Delaware.

Fisher, D.W., Isachsen, & Rickard

1970 Bedrock Geologic Map of New York, Lower Hudson Sheet. New York State Museum and Science Service.

Funk, Robert E.

1965 The Archaic of the Hudson Valley–New Evidence and New Interpretations. Pennsylvania Archaeologist, Vol. XXXV, Nos. 3–4:139–160.

Funk, Robert E., and J.E. Pfeiffer

1988 Archaeological and Paleoenvironmental Investigations on Fishers Island, New York: A Preliminary Report. Bulletin of the Archaeological Society of Connecticut 51:69–110.

Gwynne, Gretchen Anderson

1982 The Late Archaic Archaeology of Mount Sinai Harbor New York: Human Ecology, Economy and Residence Pattern of the Southern New England Coast. Ph.D. Dissertation, State University of New York at Stony Brook, Stony Brook.

1985 The Rudge-Breyer Site: A Late Archaic Long Island Base Camp? The Bulletin 91:1-12.

Hazelton, Henry

1925 *The Boroughs of Brooklyn and Queens and Counties of Nassau and Suffolk, Long Island, New York, Volume II.* Lewis Historical Publishing, Port Washington, NY.

Hill, Matthew E.

2007 A Moveable Feast: Variation in Faunal Resource Use Among Central and Western North American Paleoindian Sites. *American Antiquity* 72(3):417–438

Justice, Noel D.

1995 *Stone Age Spear and Arrow Points of the Midcontinental and Eastern United States.* Indiana University Press, Bloomington.

Karr, Ronald Dale, editor

1999 *Indian New England 1524-1674. A Compendium of Eyewitness Accounts of Native American Life.* Branch Line Press, Pepperell, Massachusetts.

Kaeser, Edward

1978 The Oakland Lake Site (Har-13-4). The Coastal Archaeology Reader, Vol 2, edited by Gaynell Levine, pp. 263-288. Readings in Long Island Archaeology and Ethnohistory. Suffolk County Archaeological Association, Stony Brook.

Keene, Robert

1983 A History of Southampton. *Suffolk County Tercentenary 1683-1983.* Southampton, NY.

Kelly, Robert L.

1983 Hunter-Gatherer Mobility Strategies. *Journal of Anthropological Research* 39(3):277–306.

Kitchel, Nathaniel

2008 Paleoindian Paleoethnobotany on New Hampshire's Northwest Coast: Charred Plant Remains from the Colebrook Site, 27CO38. Unpublished Master's Thesis on File at Northern Arizona University.

Kuehn, Steven R.

1998 New Evidence for Late Paleoindian-Early Archaic Subsistence Behavior in the Western Great Lakes. *American Antiquity* 63(3):457–476.

Kupperman, Karen Ordahl

2000 *Indians and English: Facing off in Early America.* Cornell University Press, Ithaca and London.

Lavin, L.

1988 The Morgan Site, Rocky Hill, Connecticut: A Late Woodland Farming Community in the Connecticut River Valley. *Bulletin of the Archaeological Society of Connecticut* 51:7–21.

Lightfoot, Kent G., and Robert M. Cerrato

1988 Prehistoric Shellfish Exploitation in Coastal New York. *Journal of Field Archaeology* 15(2):141–149.

Lepper, B.T. and R. Bonnichsen (eds.)

2004 *New Perspectives on the First Americans.* Texas A&M Press, College Station.

Luke, Myron and Venables, Robert

1976 *Long Island in the American Revolution*. New York State American Revolution Bicentennial Commission, Albany, NY.

Munsell, W.W. & Co.

1882 *History of Queens County New York*. Press of George Macnamara, NY, NY.

New York Archaeological Council (NYAC)

1994 Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State.

Office of Parks, Recreation and Historic Preservation (OPRHP)

2005 New York State Historic Preservation Office (SHPO) Phase I Archaeological Report Format Requirements.

Pagaloulatos, Peter

1986 *Terminal Archaic Settlement and Subsistence Patterns in the Connecticut River Valley.* PhD Dissertation, University of Connecticut. University Microfilms, Ann Arbor.

2009 Late/Terminal Archaic Mortuary Practices in the Northeastern United States. *North American Archaeologist 30(3): 221-258*.

Ritchie, William A.

1936 New Evidence Relating to the Archaic Occupation of New York. *Researches and Transactions of the New York State Archaeological Association* 8(1).

1959 *The Stony Brook Site and its Relation to Archaic and Transitional Cultures on Long Island*. New York State Museum and Science Service, Bulletin No. 372. Albany.

1969 *The Archaeology of Martha's Vineyard.* Garden City, NY: The Natural History Press.

1994 *The Archaeology of New York State*. *Purple Mountain Press.* Fleischmanns, New York.

Rothschild, Nan A., and Lucianne Lavin

1978 The Kaeser Site: A Stratified Shell Midden in the Bronx, New York. *Bulletin and Journal of Archaeology for New York State* (70:1-27).

Sassaman, Kenneth E., and R. Jerald Ledbetter

1996 Middle and Late Archaic Architecture. In *Archaeology of the Mid-Holocene Southeast* edited by Kenneth E. Sassaman and David G. Anderson. University Press of Florida.

Salwen, Bert

1962 Sea Levels and Archaeology in the Long Island Sound Area. *American Antiquity* 28(1):46–55.

1968 Muskeeta Cove 2: A Stratified Woodland Site on Long Island. *American Antiquity* 33(3):322–340.

1977 Introduction. In *Early Papers in Long Island Archaeology. Readings in Long Island Archaeology and Ethnohistory, Vol. 1.* Suffolk County Archaeological Association. Stony Brook, New York.

1978 Indians of Southern New England and Long Island: Early Period. In *Handbook of North American Indians, Vol. 15, Bruce G. Trigger, editor*. Washington D.C.: Smithsonian Institution Press, 160-176.

Saxon, W.

1973 The Paleo-Indian on Long Island*. New York State Archaeological Association Bulletin* 57:1–11.

Seeman, M.F., N. E. Nilsson, G.L. Summers, L.L. Morris, P.J. Barans, E. Dowd, and M.E. Newman

2008 Evaluating protein residues on Gainey phase Paleoindian tools. *Journal of Archaeological Science* 35 (2008):2742–2750.

Smith, George Arthur

1952 A Fluted Point from Long Island, N.Y. *American Antiquity* 17(3):263–264.

Soil Survey Staff

2020 Web Soil Survey. Natural Resources Conservation Service, United States Department of Agriculture https://websoilsurvey.sc.egov.usda.gov, accessed 9/15/2020.

Stone, Gaynell

1983 *The Shinnecock Indians: A Cultural History.* Readings in Long Island Archaeology and Ethnohistory, Volume VI. Ginn Custom Publishing, MA.

Tanski, Jay

2012 Long Island's Dynamic South Shore - a Primer on the Forces and Trends Shaping Our Coast. New York Sea Grant.

United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS)

2015 Web Soil Survey. Available at: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed: August 2021.

United States Department of Agriculture Soil Conservation Service (USDA SCS)

1975 Soil Survey of Suffolk County, New York. United States Department of Agriculture, Washington, DC.

United States Geological Survey (USGS)

1961 East Hampton, NY 7.5' Quadrangle. Department of the Interior, Washington D.C.

1961 Sag Harbor, NY 7.5' Quadrangle. Department of the Interior, Washington D.C.

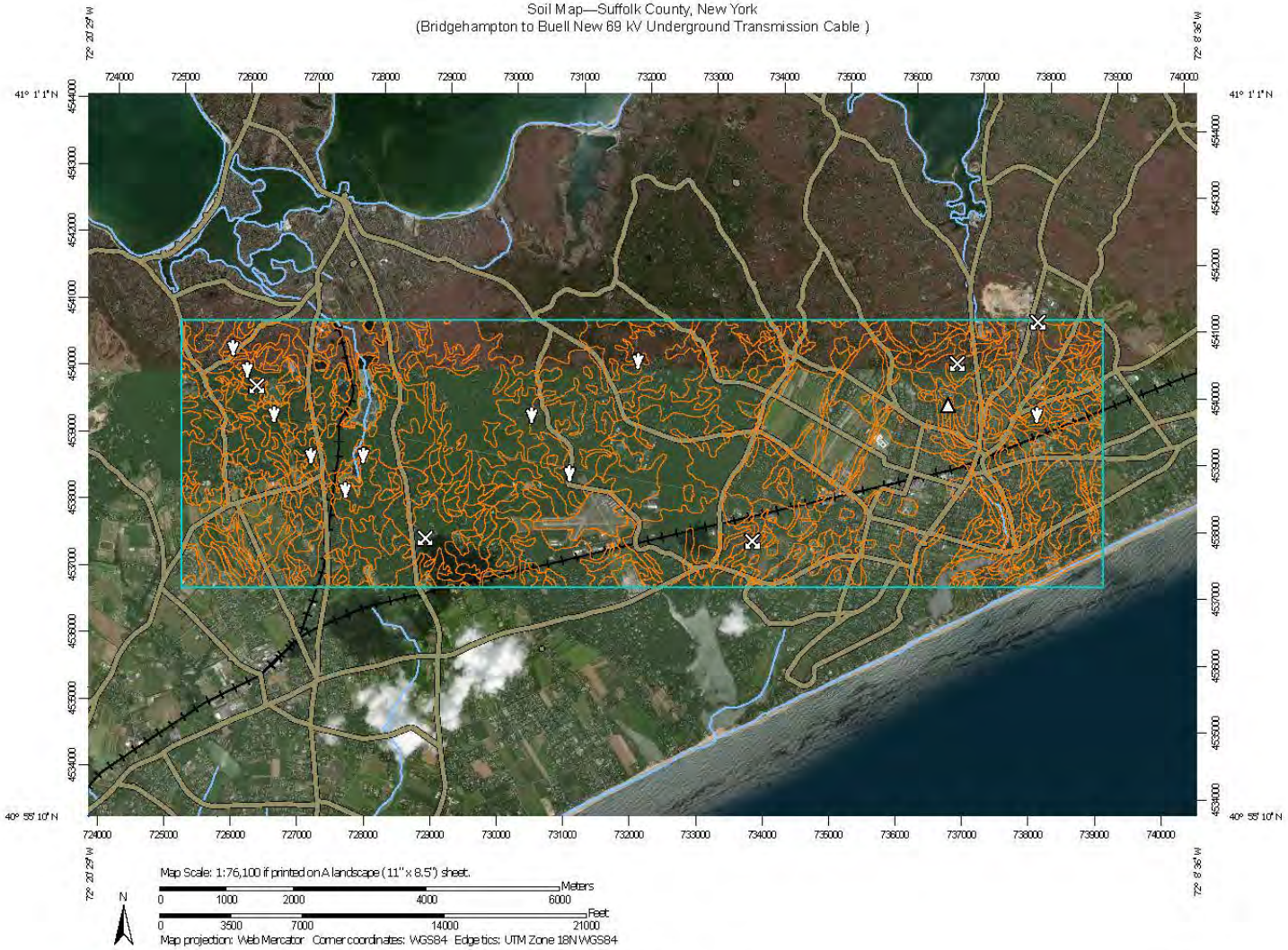
Werner, Ben, Jr.

1982 The Strong's Neck Site. In *The Second Coastal Archaeology Reader*, edited by James Truex, pp. 202-213. Readings in Long Island Archaeology and Ethnohistory. Vol. 5. Suffolk County Archaeology Association, Stony Brook.

Wyatt, R.J.

1977 The Archaic on Long Island. In *Amerinds and Their Paleoenvironments in the Northeast*, edited by W. Newman and B. Salwen, (401-409). Annals of the New York Academy of Sciences 288.

Appendix A.
APE Soil Typology


Soil Map—Suffolk County, New York
(Bridgehampton to Buell New 69 kV Underground Transmission Cable)
Map Scale: 1:76,100 if printed on A landscape (11" x 8.5") sheet.
Meters
0 1000 2000 4000 6000
Feet
0 3500 7000 14000 21000
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84
N
Natural Resources
Conservation Service
Web Soil Survey
National Cooperative Soil Survey
5/4/2021
Page 1 of 4

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Suffolk County, New York
Survey Area Data: Version 18, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Sep 8, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
At	Atsion sand	0.1	0.0%
Bd	Berryland mucky sand	22.5	0.2%
BgA	Bridgehampton silt loam, 0 to 2 percent slopes	1,767.4	12.9%
BgB	Bridgehampton silt loam, 2 to 6 percent slopes	600.5	4.4%
Bm	Bridgehampton silt loam, graded	40.2	0.3%
Bs	Beaches, sand	19.4	0.1%
Ca	Canadice silt loam	15.8	0.1%
CpA	Carver and Plymouth sands, 0 to 3 percent slopes	1,536.3	11.2%
CpC	Carver and Plymouth sands, 3 to 15 percent slopes	3,514.5	25.6%
CpE	Carver and Plymouth sands, 15 to 35 percent slopes	1,065.1	7.8%
CuB	Cut and fill land, gently sloping	151.4	1.1%
CuC	Cut and fill land, sloping	20.9	0.2%
De	Deerfield loamy fine sand, 0 to 3 percent slopes	16.0	0.1%
Fs	Fill land, sandy	26.8	0.2%
Gp	Gravel pits	119.4	0.9%
HaA	Haven loam, 0 to 2 percent slopes	168.8	1.2%
HaB	Haven loam, 2 to 6 percent slopes	165.8	1.2%
HaC	Haven loam, 6 to 12 percent slopes	49.9	0.4%
He	Haven loam, thick surface layer	52.5	0.4%
HVU	Hooksan-Verrazano-Urban land complex, 0 to 8 percent slopes	56.7	0.4%
Ma	Made land	18.7	0.1%
MkB	Montauk loam, 3 to 8 percent slopes	23.8	0.2%
MkC	Montauk loam, 8 to 15 percent slopes	2.3	0.0%
MnB	Montauk loamy sand, 3 to 8 percent slopes	42.7	0.3%
MnC	Montauk loamy sand, 8 to 15 percent slopes	2.6	0.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PlA	Plymouth loamy sand, 0 to 3 percent slopes	1,375.3	10.0%
PlB	Plymouth loamy sand, 3 to 8 percent slopes	679.3	4.9%
PlC	Plymouth loamy sand, 8 to 15 percent slopes	78.0	0.6%
PmB3	Plymouth gravelly loamy sand, 3 to 8 percent slopes, eroded	5.2	0.0%
PmC3	Plymouth gravelly loamy sand, 8 to 15 percent slopes, eroded	12.2	0.1%
PsA	Plymouth loamy sand, silty substratum, 0 to 3 percent slopes	986.8	7.2%
PsB	Plymouth loamy sand, silty substratum, 3 to 8 percent slopes	375.0	2.7%
Ra	Raynham loam	45.0	0.3%
RdA	Riverhead sandy loam, 0 to 3 percent slopes	189.5	1.4%
RdB	Riverhead sandy loam, 3 to 8 percent slopes	76.1	0.6%
SdA	Scio silt loam, sandy substratum, 0 to 2 percent slopes	26.6	0.2%
SdB	Scio silt loam, sandy substratum, 2 to 6 percent slopes	4.0	0.0%
SwA	Swansea muck, 0 to 1 percent slopes, coastal lowland	66.5	0.5%
Ur	Urban land	26.6	0.2%
W	Water	181.4	1.3%
Wd	Walpole sandy loam, coastal lowland, 0 to 3 percent slopes	6.0	0.0%
We	Wareham loamy sand	31.3	0.2%
Totals for Area of Interest		**13,740.2**	**100.0%**

Appendix B.
STP Results

STP Results Table

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
01	I:0-5	10YR4/4 dark yellowish brown sandy clay loam	NCM	
01	II:5-25	10YR3/4 dark yellowish brown clay loam	NCM	
01	III:25-35	10YR5/3 brown clay	NCM	Mottled with 7.5yr4/6
02	I:0-12	10YR6/3 pale brown loamy sand	NCM	
02	II:12-30	10YR4/2 dark grayish brown loamy sand	NCM	
02	III:30-40	10YR7/8 yellow sand	NCM	
03	I:0-10	10YR3/3 dark brown sand	NCM	
03	II:10-25	10YR6/6 brownish yellow sand	NCM	
03	III:25-70	10YR7/3 very pale brown sand	NCM	
04	I:0-5	10YR4/2 dark grayish brown loamy sand	NCM	
04	II:5-40	10YR7/6 yellow sand	NCM	
04	III:40-65	10YR8/3 very pale brown sand	NCM	
05	I:0-20	10YR3/3 dark brown sand	NCM	
05	II:20-70	10YR5/8 yellowish brown sand	NCM	With 20% gravels
05	III:70-80	10YR6/4 light yellowish brown sand	NCM	
06	I:0-15	10YR4/2 dark grayish brown sandy clay loam	NCM	
06	II:15-30	10YR7/6 yellow silty clay	NCM	
07	I:0-8	10YR3/3 dark brown sandy clay loam	NCM	
07	II:8-38	10YR4/3 brown silty clay	NCM	
07	III:38-48	10YR5/3 brown clay	NCM	
08	I:0-10	10YR4/2 dark grayish brown sandy clay loam	NCM	
08	II:10-30	10YR6/6 brownish yellow silty clay	NCM	Modern glass
08	III:30-40	10YR8/3 very pale brown clay	NCM	
09	I:0-23	10YR3/3 dark brown sandy loam	NCM	
09	II:23-70	5YR4/6 yellowish red sand	NCM	With 5% gravels
09	III:70-80	5YR5/8 yellowish red sand	NCM	Compact
10	I:0-10	10YR4/4 dark yellowish brown loamy sand	NCM	Plastic and modern ceramic insulator
10	II:10-60	5YR5/6 yellowish red sand	NCM	
10	III:60-70	5YR6/6 reddish yellow sand	NCM	
11	I:0-35	10YR4/2 dark grayish brown loamy sand	NCM	60% gravels
11	II:35-45	10YR2/2 very dark brown sand	NCM	Rock refusal
12	I:0-25	10YR4/3 brown loamy sand	NCM	
12	II:25-35	10YR6/3 pale brown sand	NCM	
13	I:0-27	10YR3/3 dark brown loamy sand	NCM	
13	II:27-67	5YR4/6 yellowish red sand	NCM	Rock impasse
14	I:0-25	10YR4/3 brown loamy sand	NCM	
14	II:25-40	10YR6/3 pale brown sand	NCM	
15	I:0-25	10YR3/3 dark brown sand	NCM	
15	II:25-85	5YR4/6 yellowish red sand	NCM	10% gravels
16	I:0-7	10YR4/3 brown loamy sand	NCM	
16	II:7-20	10YR6/3 pale brown sand	NCM	
16	III:20-70	10YR5/2 grayish brown sand	NCM	

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
17	I:0-48	10YR3/3 dark brown loamy sand	NCM	Fill with mottled Stratum II
17	II:28-80	10YR4/6 dark yellowish brown sand	NCM	5% gravels
18	I:0-20	10YR4/6 dark yellowish brown sand	NCM	
18	II:20-32	10YR4/2 dark grayish brown loamy sand	NCM	
18	III:32-60	10YR7/8 yellow sand	NCM	
19	I:0-15	10YR4/3 brown sand	NCM	Likely fill
19	II:15-20	10YR3/3 dark brown sand	NCM	
19	III:20-34	10YR4/4 dark yellowish brown sand	NCM	
19	IV:34-57	5YR4/6 yellowish red sand	NCM	
20	I:0-7	10YR7/2 light gray sand	NCM	
20	II:7-30	10YR4/4 dark yellowish brown sand	NCM	
20	III:30-50	10YR4/2 dark grayish brown sand	NCM	
20	IV:50-60	10YR4/6 dark yellowish brown sand	NCM	
21	I:0-70	10YR5/4 yellowish brown sand	NCM	10% gravels, likely fill
22	I:0-5	10YR3/2 very dark grayish brown loamy sand	NCM	Root disturbance
22	II:5-17	10YR4/2 dark grayish brown sand	NCM	
22	III:17-35	10YR4/6 dark yellowish brown sand	NCM	Root at base
23	I:0-25	10YR3/3 dark brown loamy sand	NCM	With roots
23	II:25-40	7.5YR5/8 strong brown sand	NCM	
24	I:0-10	10YR3/2 very dark grayish brown loamy sand	NCM	
24	II:10-23	10YR4/2 dark grayish brown sand	NCM	
24	III:23-50	10YR4/6 dark yellowish brown sand	NCM	
25	I:0-20	10YR4/3 brown loamy sand	NCM	With roots
25	II:20-50	10YR5/8 yellowish brown sand	NCM	
26	I:0-15	10YR4/2 dark grayish brown sand	NCM	
26	II:15-65	10YR4/6 dark yellowish brown sand	NCM	
27	I:0-30	10YR5/3 brown loamy sand	NCM	With roots
27	II:30-45	10YR5/8 yellowish brown sand	NCM	
28	I:0-7	10YR4/3 brown loamy sand	NCM	
28	II:7-17	10YR4/2 dark grayish brown sand	NCM	
28	III:17-40	10YR4/6 dark yellowish brown sand	NCM	
29	I:0-10	10YR4/3 brown loamy sand	NCM	With roots
29	II:10-30	10YR5/8 yellowish brown sand	NCM	
30	I:0-10	10YR4/2 dark grayish brown sand	NCM	
30	II:10-60	10YR6/8 brownish yellow sand	NCM	
31	I:0-40	10YR4/3 brown loamy sand	NCM	
31	II:40-70	10YR5/8 yellowish brown sand	NCM	
32	I:0-4	10YR8/2 very pale brown sand	NCM	
32	II:0-14	10YR4/2 dark grayish brown sand	NCM	
32	III:14-34	10YR6/8 brownish yellow sand	NCM	
33	I:0-30	10YR5/8 yellowish brown sand	NCM	Deflated
34	I:0-8	10YR4/2 dark grayish brown sand	NCM	
34	II:8-34	10YR6/8 brownish yellow sand	NCM	
35	I:0-12	10YR4/3 brown loamy sand	NCM	With roots

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
35	II:12-23	10YR5/8 yellowish brown sand	NCM	
36	I:0-5	10YR3/2 very dark grayish brown sand	NCM	Decomposed plant material
36	II:5-20	10YR4/2 dark grayish brown sand	NCM	
36	III:20-45	10YR6/8 brownish yellow	NCM	
37	I:0-15	10YR4/3 brown loamy sand	NCM	With roots
37	II:15-30	10YR5/8 yellowish brown sand	NCM	
38	I:0-3	10YR3/2 very dark grayish brown sand	NCM	Decomposed root material
38	II:3-10	10YR4/6 dark yellowish brown sand	NCM	
38	III:10-25	10YR6/8 brownish yellow sand	NCM	
39	I:0-15	10YR5/8 yellowish brown sand	NCM	With roots
39	II:15-30	10YR4/6 dark yellowish brown sand	NCM	Ant nest
40	I:0-10	10YR4/3 brown sand	NCM	
40	II:10-25	10YR4/6 dark yellowish brown sand	NCM	Bioturbation
41	I:0-28	10YR4/6 dark yellowish brown sand	NCM	60% gravels
42	I:0-15	10YR4/6 dark yellowish brown sand	NCM	
42	II:15-35	10YR6/8 brownish yellow sand	NCM	
43	II:5-20	10YR5/8 yellowish brown sand	NCM	With roots
43	I:0-5	10YR4/3 brown loamy sand	NCM	With roots
44	I:0-5	10YR4/2 dark grayish brown sand	NCM	Heavy roots
44	II:5-15	10YR4/6 dark yellowish brown sand	NCM	Heavy roots
45	I:0-45	10YR4/3 brown loamy sand	NCM	With roots
45	II:45-55	10YR5/8 yellowish brown sand	NCM	
46	I:0-15	10YR4/6 dark yellowish brown sand	NCM	Modern garbage
46	II:15-30	10YR6/8 brownish yellow sand	NCM	
47	I:0-20	10YR4/3 brown loamy sand	NCM	With roots
47	II:20-35	10YR5/8 yellowish brown sand	NCM	
48	I:0-20	10YR4/6 dark yellowish brown sand	NCM	
48	II:20-40	10YR6/8 brownish yellow sand	NCM	
49	I:0-20	10YR4/3 brown loamy sand	NCM	With roots
49	II:20-30	10YR5/8 yellowish brown sand	NCM	
50	I:0-13	10YR4/6 dark yellowish brown sand	NCM	Insulator piece found
50	II:13-33	10YR6/8 brownish yellow sand	NCM	
51	I:0-40	10YR4/3 brown loamy sand	NCM	Mixed with stratum II
51	II:40-55	10YR5/8 yellowish brown sand	NCM	
52	I:0-45	10YR4/6 dark yellowish brown sand	NCM	
52	II:45-55	10YR6/8 brownish yellow	NCM	
53	I:0-55	10YR4/3 brown loamy sand	NCM	With roots
53	II:55-70	10YR5/8 yellowish brown sand	NCM	
54	I:0-7	10YR8/2 very pale brown sand	NCM	
54	II:7-20	10YR4/6 dark yellowish brown sand	NCM	
54	III:20-40	10YR6/8 brownish yellow sand	NCM	
55	I:0-30	10YR4/3 brown loamy sand	NCM	
55	II:30-50	10YR5/8 yellowish brown sand	NCM	
56	I:0-10	10YR8/2 very pale brown sand	NCM	

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
56	II:10-20	10YR4/6 dark yellowish brown sand	NCM	
56	III:20-40	10YR6/8 brownish yellow sand	NCM	
57	I:0-22	10YR4/2 dark grayish brown loamy sand	NCM	2 shreds of modern ceramic flower pot at surface
57	II:22-45	10YR5/8 yellowish brown sand	NCM	
58	I:0-20	10YR4/2 dark grayish brown sand	NCM	
58	II:20-35	10YR6/8 brownish yellow sand	NCM	
59	I:0-20	10YR4/2 dark grayish brown loamy sand	NCM	With roots
59	II:20-40	10YR5/8 yellowish brown sand	NCM	
60	I:0-5	10YR3/2 very dark grayish brown loamy sand	NCM	Decomposed roots
60	II:5-25	10YR4/6 dark yellowish brown sand	NCM	
60	III:25-42	10YR6/8 brownish yellow sand	NCM	
61	I:0-20	10YR4/3 brown loamy sand	NCM	Mottled with Stratum III
61	II:20-30	10YR4/2 dark grayish brown loamy sand	NCM	
61	III:30-50	10YR5/8 yellowish brown sand	NCM	
62	I:0-7	10YR8/2 very pale brown sand	NCM	
62	II:7-20	10YR4/6 dark yellowish brown sand	NCM	
62	III:20-44	10YR6/8 brownish yellow sand	NCM	
63	I:0-45	10YR4/2 dark grayish brown loamy sand	NCM	With roots
63	II:45-65	10YR5/8 yellowish brown sand	NCM	
64	I:0-10	10YR8/2 very pale brown sand	NCM	
64	II:10-35	10YR4/6 dark yellowish brown sand	NCM	Cable running at the base of stratum II (visible in photo)
64	III:35-55	10YR6/8 brownish yellow sand	NCM	
65	I:0-20	10YR4/2 dark grayish brown loamy sand	NCM	With roots
65	II:20-35	10YR5/8 yellowish brown sand	NCM	
66	I:0-5	10YR8/2 very pale brown sand	NCM	
66	II:5-15	10YR4/6 dark yellowish brown sand	NCM	
66	III:15-35	10YR6/8 brownish yellow sand	NCM	
67	I:0-23	10YR4/3 brown loamy sand	NCM	With roots
67	II:23-35	10YR5/8 yellowish brown sand	NCM	
68	I:0-6	10YR4/2 dark grayish brown loamy sand	NCM	
68	II:6-16	10YR4/6 dark yellowish brown sand	NCM	
68	III:16-36	10YR6/8 brownish yellow sand	NCM	
69	I:0-10	10YR4/2 dark grayish brown loamy sand	NCM	
69	II:10-20	10YR5/8 yellowish brown sand	NCM	
70	I:0-17	10YR4/2 dark grayish brown loamy sand	NCM	
70	II:17-30	10YR6/8 brownish yellow sand	NCM	
71	I:0-23	10YR4/3 brown loamy sand	NCM	With roots
71	II:23-35	10YR5/8 yellowish brown sand	NCM	
72	I:0-26	10YR4/6 dark yellowish brown sand	NCM	
72	II:26-38	10YR6/8 brownish yellow sand	NCM	
73	I:0-19	10YR4/2 dark grayish brown loamy sand	NCM	With roots
73	II:19-32	10YR5/8 yellowish brown sand	NCM	
74	I:0-34	10YR4/6 dark yellowish brown sand	NCM	

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
74	II:34-44	10YR4/6 dark yellowish brown	NCM	
75	I:0-19	10YR4/3 brown loamy sand	NCM	
75	II:19-30	10YR5/8 yellowish brown sand	NCM	
76	I:0-25	10YR4/6 dark yellowish brown loamy sand	NCM	
76	II:25-36	10YR6/8 brownish yellow sand	NCM	
77	I:0-10	10YR4/2 dark grayish brown loamy sand	NCM	With roots
77	II:10-25	10YR5/8 yellowish brown sand	NCM	
78	I:0-8	10YR4/2 dark grayish brown loamy sand	NCM	
78	II:8-18	10YR6/8 brownish yellow sand	NCM	
79	I:0-11	10YR4/3 brown loamy sand	NCM	With roots
79	II:11-25	10YR5/8 yellowish brown sand	NCM	
80	I:0-12	10YR4/2 dark grayish brown sand	NCM	
80	II:12-32	10YR6/8 brownish yellow sand	NCM	
81	I:0-10	10YR4/3 brown loamy sand	NCM	
81	II:10-20	10YR5/8 yellowish brown sand	NCM	
82	I:0-17	10YR4/6 dark yellowish brown sand	NCM	
82	II:17-30	10YR6/8 brownish yellow sand	NCM	
83	I:0-10	10YR4/3 brown loamy sand	NCM	
83	II:10-20	10YR5/8 yellowish brown sand	NCM	
84	I:0-10	10YR4/6 dark yellowish brown loamy sand	NCM	
84	II:10-20	7.5YR6/8 reddish yellow	NCM	
85	I:0-15	10YR4/2 dark grayish brown loamy sand	NCM	With roots
85	II:15-30	10YR5/8 yellowish brown sand	NCM	
86	I:0-13	10YR4/6 dark yellowish brown sand	NCM	
86	II:13-33	10YR6/8 brownish yellow sand	NCM	
87	I:0-15	10YR4/3 brown loamy sand	NCM	
87	II:15-30	10YR5/8 yellowish brown sand	NCM	
88	I:0-7	10YR4/2 dark grayish brown loamy sand	NCM	
88	II:7-22	10YR4/6 dark yellowish brown sand	NCM	
88	III:22-32	10YR6/8 brownish yellow sand	NCM	
89	I:0-12	10YR4/3 brown loamy sand	NCM	
89	II:12-25	10YR5/8 yellowish brown sand	NCM	
90	I:0-7	10YR4/2 dark grayish brown loamy sand	NCM	
90	II:7-20	10YR4/6 dark yellowish brown sand	NCM	
90	III:20-35	10YR6/8 brownish yellow	NCM	
91	I:0-12	10YR4/3 brown loamy sand	NCM	
91	II:12-25	10YR5/8 yellowish brown sand	NCM	
92	I:0-8	10YR4/2 dark grayish brown loamy sand	NCM	
92	II:8-33	10YR4/6 dark yellowish brown sand	NCM	
92	III:33-48	10YR6/8 brownish yellow sand	NCM	
93	I:0-12	10YR4/3 brown loamy sand	NCM	
93	II:10-25	10YR5/8 yellowish brown sand	NCM	
94	I:0-25	10YR4/6 dark yellowish brown sand	NCM	
94	II:25-35	10YR6/8 brownish yellow sand	NCM	

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
95	I:0-14	10YR4/3 brown loamy sand	NCM	With roots
95	II:14-33	10YR5/8 yellowish brown sand	NCM	
96	I:0-25	10YR4/6 dark yellowish brown sand	NCM	
96	II:25-36	10YR6/8 brownish yellow sand	NCM	
97	I:0-8	10YR4/2 dark grayish brown loamy sand	NCM	With roots
97	II:8-22	10YR5/8 yellowish brown sand	NCM	
98	I:0-3	10YR4/2 dark grayish brown loamy sand	NCM	Decomposed root
98	II:3-18	10YR4/6 dark yellowish brown sand	NCM	
98	III:18-28	10YR6/8 brownish yellow sand	NCM	
99	I:0-10	10YR4/2 dark grayish brown loamy sand	NCM	
99	II:10-25	10YR5/8 yellowish brown sand	NCM	
100	I:0-20	10YR4/6 dark yellowish brown sand	NCM	
100	II:20-30	10YR6/8 brownish yellow sand	NCM	
101	I:0-14	10YR4/2 dark grayish brown loamy sand	NCM	
101	II:14-30	10YR5/8 yellowish brown sand	NCM	
102	I:0-20	10YR3/6 dark yellowish brown sand	NCM	
102	II:20-30	10YR6/8 brownish yellow sand	NCM	
103	I:0-15	10YR4/2 dark grayish brown loamy sand	NCM	With roots
103	II:15-30	10YR5/8 yellowish brown sand	NCM	
104	I:0-3	10YR4/2 dark grayish brown loamy sand	NCM	
104	II:3-10	10YR4/6 dark yellowish brown sand	NCM	
104	III:10-20	10YR6/8 brownish yellow sand	NCM	
105	I:0-15	10YR4/2 dark grayish brown loamy sand	NCM	With roots
105	II:15-30	10YR5/8 yellowish brown sand	NCM	
106	II:12-12	10YR4/2 dark grayish brown	NCM	Stopped due to root impasse
106	I:0-12	10YR4/2 dark grayish brown loamy sand	NCM	
107	I:0-15	10YR4/2 dark grayish brown loamy sand	NCM	With roots
107	II:15-30	10YR5/8 yellowish brown sand	NCM	
108	I:0-5	10YR4/2 dark grayish brown loamy sand	NCM	
108	II:5-20	10YR4/6 dark yellowish brown sand	NCM	
108	III:35-	10YR6/8 brownish yellow sand	NCM	
109	I:0-20	10YR4/2 dark grayish brown loamy sand	NCM	With roots
109	II:20-37	10YR5/8 yellowish brown sand	NCM	
110	I:0-16	10YR4/6 dark yellowish brown sand	NCM	
110	II:16-26	7.5YR2.5/1 black sand	NCM	Root burning?
110	III:26-36	10YR6/8 brownish yellow sand	NCM	
111	I:0-20	10YR4/2 dark grayish brown loamy sand	NCM	With roots
111	II:20-40	10YR5/8 yellowish brown sand	NCM	
112	I:0-15	10YR4/6 dark yellowish brown sand	NCM	
112	II:15-30	10YR6/8 brownish yellow	NCM	
113	I:0-20	10YR4/2 dark grayish brown loamy sand	NCM	With roots
113	II:20-40	10YR5/8 yellowish brown sand	NCM	
114	I:0-23	5YR4/6 yellowish red sand	NCM	
114	II:23-43	5YR6/8 reddish yellow sand	NCM	

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
115	I:0-20	10YR4/2 dark grayish brown loamy sand	NCM	
115	II:20-30	10YR5/8 yellowish brown sand	NCM	
116	I:0-15	10YR4/6 dark yellowish brown sand	NCM	
116	II:15-25	10YR6/8 brownish yellow sand	NCM	
117	I:0-17	10YR4/2 dark grayish brown loamy sand	NCM	With roots
117	II:17-27	10YR5/8 yellowish brown sand	NCM	
118	I:0-25	10YR4/6 dark yellowish brown sand	NCM	
118	II:25-42	10YR6/8 brownish yellow sand	NCM	
119	I:0-14	10YR4/2 dark grayish brown loamy sand	NCM	
119	II:14-28	10YR5/8 yellowish brown sand	NCM	
120	I:0-15	10YR4/6 dark yellowish brown sand	NCM	
120	II:15-35	10YR6/8 brownish yellow sand	NCM	
121	I:0-15	10YR4/2 dark grayish brown loamy sand	NCM	With roots
121	II:15-30	10YR5/8 yellowish brown sand	NCM	
122	I:0-12	10YR4/6 dark yellowish brown sand	NCM	
122	II:12-25	10YR6/8 brownish yellow sand	NCM	
123	I:0-10	10YR4/2 dark grayish brown loamy sand	NCM	
123	II:10-25	10YR5/8 yellowish brown sand	NCM	
124	I:0-15	10YR4/6 dark yellowish brown sand	NCM	
124	II:15-25	10YR6/8 brownish yellow sand	NCM	
125	I:0-12	10YR4/2 dark grayish brown loamy sand	NCM	
125	II:12-25	10YR5/8 yellowish brown sand	NCM	
126	I:0-15	10YR4/6 dark yellowish brown sand	NCM	
126	II:15-25	10YR6/8 brownish yellow sand	NCM	
127			Not Excavated	Push piles from building guard rail
128	I:0-15	10YR4/2 dark grayish brown loamy sand	NCM	Modern garbage and glass throughout
128	II:15-30	10YR6/8 brownish yellow	NCM	
129	I:0-30	10YR4/3 brown loamy sand	NCM	
129	II:30-40	10YR5/8 yellowish brown sand	NCM	With large cobbles
130	I:0-8	10YR4/2 dark grayish brown loamy sand	NCM	Modern garbage and glass
130	II:8-33	10YR4/6 dark yellowish brown sand	NCM	
130	III:33-43	10YR6/8 brownish yellow sand	NCM	
131	I:0-15	10YR4/3 brown loamy sand	NCM	Modern brown bottle glass
131	II:15-30	10YR5/8 yellowish brown sand	NCM	
132	I:0-20	10YR5/2 grayish brown sand	NCM	Modern fill
132	II:20-35	10YR8/3 very pale brown sand	NCM	Modern fill
132	III:35-60	10YR5/2 grayish brown sand	NCM	Modern fill, terminated due to stones at base
133	I:0-20	10YR4/2 dark grayish brown loamy sand	NCM	Ferrous metal in profile
133	II:20-30	10YR5/8 yellowish brown sand	NCM	
134	I:0-25	10YR4/2 dark grayish brown loamy sand	NCM	Modern garbage and glass
134	II:25-37	10YR6/8 brownish yellow sand	NCM	
135	I:0-15	10YR4/3 brown loamy sand	NCM	
135	II:15-25	10YR5/8 yellowish brown sand	NCM	

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
136	I:0-15	10YR4/6 dark yellowish brown sand	NCM	
136	II:15-25	10YR6/8 brownish yellow sand	NCM	
137			Not Excavated	Slope and standing water
138			Not Excavated	Slope and standing water
139			Not Excavated	Slope and standing water
140			Not Excavated	Slope and standing water
141			Not Excavated	Slope and standing water
142			Not Excavated	Slope and standing water
143	I:0-17	10YR4/2 dark grayish brown loamy sand	NCM	Modern brown bottle glass
143	II:1-35	10YR5/8 yellowish brown sand	NCM	
144	I:0-10	10YR4/6 dark yellowish brown sand	NCM	
144	II:10-20	10YR6/8 brownish yellow sand	NCM	
145	I:0-10	10YR4/2 dark grayish brown loamy sand	NCM	
145	II:10-25	10YR5/8 yellowish brown sand	NCM	
146	I:0-12	10YR4/6 dark yellowish brown sand	NCM	
146	II:12-25	10YR6/8 brownish yellow sand	NCM	
147	I:0-12	10YR4/2 dark grayish brown loamy sand	NCM	
147	II:12-25	10YR5/8 yellowish brown sand	NCM	
148	I:0-15	10YR4/6 dark yellowish brown sand	NCM	
148	II:15-27	10YR6/8 brownish yellow sand	NCM	
149	I:0-10	10YR4/4 dark yellowish brown loamy sand	NCM	
149	II:10-20	10YR5/8 yellowish brown sand	NCM	
149	III:20-30	10YR4/4 dark yellowish brown sand	NCM	50% gravels
149	IV:30-40	10YR5/8 yellowish brown sand	NCM	Large cobbles
150			Not Excavated	Standing water
151	I:0-10	10YR4/3 brown loamy sand	NCM	
151	II:10-27	10YR5/8 yellowish brown sand	NCM	
152	I:0-4	10YR4/2 dark grayish brown loamy sand	NCM	
152	II:4-14	10YR4/6 dark yellowish brown sand	NCM	
152	III:14-24	10YR6/8 brownish yellow sand	NCM	
153	I:0-15	10YR4/3 brown loamy sand	NCM	50% gravels
153	II:15-25	10YR5/8 yellowish brown sand	NCM	50% gravels
154	I:0-8	10YR8/3 very pale brown loamy sand	NCM	
154	II:8-24	10YR4/6 dark yellowish brown sand	NCM	Terminated early due to rocks at base
155	I:0-10	10YR4/3 brown loamy sand	NCM	
155	II:10-23	10YR5/8 yellowish brown sand	NCM	
156	I:0-8	10YR4/2 dark grayish brown loamy sand	NCM	
156	II:10-30	10YR4/6 dark yellowish brown sand	NCM	
156	III:30-40	10YR6/8 brownish yellow sand	NCM	
157	I:0-25	10YR5/8 yellowish brown sand	NCM	
158	I:0-10	10YR4/6 dark yellowish brown sand	NCM	
158	II:10-30	10YR6/8 brownish yellow sand	NCM	
159	I:0-35	10YR4/3 brown loamy sand	NCM	

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
159	II:35-50	10YR5/8 yellowish brown sand	NCM	
160	I:0-20	10YR4/6 dark yellowish brown sand	NCM	
160	II:20-46	10YR6/8 brownish yellow sand	NCM	
161	I:0-35	10YR4/3 brown loamy sand	NCM	With roots, 40% gravels
161	II:35-45	10YR5/8 yellowish brown sand	NCM	
162	I:0-28	10YR4/6 dark yellowish brown loamy sand	NCM	Heavy concentration of stones
163	I:0-60	10YR4/2 dark grayish brown loamy sand	NCM	With roots
164	I:0-8	10YR4/2 dark grayish brown loamy sand	NCM	Heavy root disturbance
164	II:8-28	10YR4/6 dark yellowish brown loamy sand	NCM	Roots down to base
164	III:28-35	10YR6/8 brownish yellow sand	NCM	
165	I:0-25	10YR4/3 brown loamy sand	NCM	With roots
165	II:25-35	10YR5/8 yellowish brown sand	NCM	
166	I:0-5	10YR8/3 very pale brown loamy sand	NCM	
166	II:5-55	10YR4/6 dark yellowish brown sand	NCM	
166	III:55-65	10YR6/8 brownish yellow sand	NCM	
167	I:0-35	10YR4/3 brown loamy sand	NCM	Steel rebar in wall
168	I:0-10	10YR8/3 very pale brown loamy sand	NCM	
168	II:10-25	10YR4/6 dark yellowish brown sand	NCM	
168	III:25-47	10YR6/8 brownish yellow sand	NCM	
169	I:0-17	10YR4/3 brown loamy sand	NCM	
169	II:17-35	10YR5/8 yellowish brown sand	NCM	
170	I:0-28	10YR4/6 dark yellowish brown sand	NCM	
170	II:28-45	10YR6/8 brownish yellow sand	NCM	
171	I:0-2	10YR4/2 dark grayish brown loamy sand	NCM	
171	II:2-12	10YR5/8 yellowish brown sand	NCM	
172	I:0-5	10YR8/3 very pale brown loamy sand	NCM	
172	II:5-20	10YR4/6 dark yellowish brown sand	NCM	
172	III:20-30	10YR6/8 brownish yellow sand	NCM	
173	I:0-6	10YR4/2 dark grayish brown loamy sand	NCM	With roots
173	II:6-30	10YR5/8 yellowish brown sand	NCM	
174	I:0-22	10YR5/2 grayish brown loamy sand	NCM	
174	II:22-42	10YR6/8 brownish yellow sand	NCM	
175	I:0-5	10YR4/2 dark grayish brown loamy sand	NCM	
175	II:5-28	10YR5/8 yellowish brown sand	NCM	
176	I:0-12	10YR8/3 very pale brown loamy sand	NCM	
176	II:12-22	10YR4/6 dark yellowish brown sand	NCM	
176	III:22-42	10YR6/8 brownish yellow sand	NCM	
177	I:0-10	10YR4/2 dark grayish brown loamy sand	NCM	
177	II:10-30	10YR5/8 yellowish brown sand	NCM	
178			Not Excavated	Road disturbance
179			Not Excavated	Road disturbance
180	I:0-3	10YR8/3 very pale brown loamy sand	NCM	
180	II:3-17	10YR4/6 dark yellowish brown sand	NCM	

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
180	III:17-32	10YR6/8 brownish yellow sand	NCM	
181	I:0-10	10YR4/2 dark grayish brown loamy sand	NCM	
181	II:10-20	10YR5/8 yellowish brown sand	NCM	
182			Not Excavated	Road disturbance
183			Not Excavated	Slope
184	I:0-13	10YR4/6 dark yellowish brown loamy sand	NCM	
184	II:13-28	10YR6/8 brownish yellow sand	NCM	
185	I:0-11	10YR4/2 dark grayish brown loamy sand	NCM	
185	II:11-30	10YR5/8 yellowish brown sand	NCM	
186	I:0-18	10YR4/6 dark yellowish brown sand	NCM	
186	II:18-40	10YR6/8 brownish yellow sand	NCM	
187	I:0-22	10YR5/2 grayish brown sand	NCM	
187	II:22-32	10YR6/8 brownish yellow sand	NCM	
188	I:0-25	10YR5/3 brown Sand	NCM	With roots
188	II:25-43	10YR5/6 yellowish brown sand	NCM	
189	I:0-20	10YR5/1 gray sand	NCM	With roots
189	II:20-36	10YR6/8 brownish yellow sand	NCM	
190	I:0-10	10YR4/2 dark grayish brown sand	NCM	
190	II:10-30	10YR5/6 yellowish brown sand	NCM	
191	I:0-9	10YR5/2 grayish brown sand	NCM	
191	II:9-35	10YR6/4 light yellowish brown sand	NCM	
192	I:0-30	10YR4/2 dark grayish brown sand	NCM	With large cobbles
192	II:30-40	10YR5/8 yellowish brown sand	NCM	
193	I:0-24	10YR6/4 light yellowish brown sand	NCM	
193	II:24-40	10YR6/6 brownish yellow sand	NCM	
194	I:0-10	10YR4/3 brown sand	NCM	
194	II:10-28	10YR5/6 yellowish brown sand	NCM	
195	I:0-23	10YR6/4 light yellowish brown sand	NCM	
195	II:23-37	10YR6/6 brownish yellow sand	NCM	
196	I:0-17	10YR4/3 brown sand	NCM	
196	II:17-30	10YR5/8 yellowish brown sand	NCM	
197	I:0-21	10YR5/4 yellowish brown sand	NCM	
197	II:21-39	10YR7/6 yellow sand	NCM	
198	I:0-20	10YR4/2 dark grayish brown sand	NCM	
198	II:20-45	10YR5/8 yellowish brown sand	NCM	
199	I:0-26	10YR6/3 pale brown sand	NCM	With roots
199	II:26-38	10YR7/6 yellow sand	NCM	
200	I:0-14	10YR4/2 dark grayish brown sand	NCM	With roots
200	II:14-25	10YR5/8 yellowish brown sand	NCM	
201	I:0-57	10YR5/4 yellowish brown sand	NCM	Disturbed
202	I:0-25	10YR4/3 brown sand	NCM	
202	II:25-35	10YR5/8 yellowish brown sand	NCM	Compact
203	I:0-22	10YR6/4 light yellowish brown sand	NCM	
203	II:22-52	10YR4/2 dark grayish brown sand	NCM	Ferrous metal modern

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
203	III:52-65	10YR6/4 light yellowish brown sand	NCM	
204	I:0-20	10YR4/3 brown sand	NCM	
204	II:20-30	10YR5/8 yellowish brown sand	NCM	
205	I:0-14	10YR5/3 brown sand	NCM	
205	II:14-27	10YR6/4 light yellowish brown sand	NCM	
206	I:0-12	10YR4/3 brown sand	NCM	With roots
206	II:12-30	10YR5/8 yellowish brown sand	NCM	
207	I:0-20	10YR6/4 light yellowish brown sand	NCM	
207	II:20-39	10YR4/3 brown sand	NCM	
207	III:39-52	10YR6/6 brownish yellow sand	NCM	
208	I:0-20	10YR4/3 brown sand	NCM	
208	II:20-30	10YR5/8 yellowish brown sand	NCM	
209	I:0-25	10YR6/6 brownish yellow sand	NCM	
209	II:25-35	10YR5/3 brown sand	NCM	Modern fabric in disturbance
210	I:0-25	10YR4/3 brown sand	NCM	
210	II:25-40	10YR5/8 yellowish brown sand	NCM	
211	I:0-15	10YR6/4 light yellowish brown sand	NCM	
211	II:15-33	10YR6/6 brownish yellow sand	NCM	
212	I:0-15	10YR5/3 brown sand	NCM	
212	II:15-30	10YR5/8 yellowish brown sand	NCM	
213	I:0-14	10YR5/4 yellowish brown sand	NCM	
213	II:14-33	10YR5/8 yellowish brown sand	NCM	
214	I:0-30	10YR4/2 dark grayish brown sand	NCM	
214	II:30-43	10YR5/8 yellowish brown sand	NCM	
215	I:0-19	10YR5/3 brown sand	NCM	
215	II:19-37	10YR6/8 brownish yellow sand	NCM	
216	I:0-20	10YR4/3 brown sand	NCM	
216	II:20-35	10YR5/8 yellowish brown sand	NCM	
217	I:0-14	10YR6/4 light yellowish brown sand	NCM	
217	II:14-31	10YR6/6 brownish yellow sand	NCM	
218	I:0-15	10YR4/2 dark grayish brown sand	NCM	
218	II:15-33	10YR5/8 yellowish brown sand	NCM	
219	I:0-15	10YR6/3 pale brown sand	NCM	
219	II:15-34	10YR6/8 brownish yellow sand	NCM	
220	I:0-48	10YR5/4 yellowish brown sand	NCM	Root impasse
221	I:0-14	10YR6/3 pale brown sand	NCM	
221	II:14-29	10YR6/6 brownish yellow sand	NCM	
222	I:0-10	10YR4/2 dark grayish brown sand	NCM	
222	II:10-28	10YR5/8 yellowish brown sand	NCM	
223	I:0-18	10YR6/3 pale brown sand	NCM	
223	II:18-32	10YR6/6 brownish yellow sand	NCM	
224	I:0-20	10YR5/4 yellowish brown sand	NCM	
224	II:20-30	10YR5/8 yellowish brown sand	NCM	
225	I:0-27	10YR6/3 pale brown sand	NCM	

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
225	II:27-41	10YR7/6 yellow sand	NCM	
226	I:0-20	10YR4/2 dark grayish brown sand	NCM	
226	II:20-30	10YR5/8 yellowish brown sand	NCM	
227	I:0-18	10YR6/3 pale brown sand	NCM	
227	II:18-33	10YR6/6 brownish yellow sand	NCM	
228	I:0-10	10YR4/2 dark grayish brown sand	NCM	
228	II:10-35	10YR5/6 yellowish brown sand	NCM	
229	I:0-19	10YR6/3 pale brown sand	NCM	
229	II:19-33	10YR7/4 very pale brown sand	NCM	
230	I:0-10	10YR4/2 dark grayish brown sand	NCM	
230	II:10-30	10YR5/8 yellowish brown sand	NCM	
231	I:0-11	10YR6/3 pale brown sand	NCM	
231	II:11-28	10YR5/6 yellowish brown sand	NCM	With 15% rocks
232	I:0-15	10YR4/2 dark grayish brown sand	NCM	
232	II:15-30	10YR5/8 yellowish brown sand	NCM	
233	I:0-10	10YR6/3 pale brown sand	NCM	
233	II:10-27	10YR5/4 yellowish brown sand	NCM	
233	III:27-41	10YR6/6 brownish yellow sand	NCM	
234	I:0-20	10YR4/2 dark grayish brown sand	NCM	
234	II:20-37	10YR5/6 yellowish brown sand	NCM	
235	I:0-15	10YR6/3 pale brown sand	NCM	
235	II:15-39	10YR7/6 yellow sand	NCM	
236	I:0-20	10YR4/2 dark grayish brown sand	NCM	
236	II:20-35	10YR5/6 yellowish brown sand	NCM	
237	I:0-17	10YR6/3 pale brown sand	NCM	
237	II:17-30	10YR7/6 yellow sand	NCM	
238			Not Excavated	Wetlands
239			Not Excavated	Wetlands
240			Not Excavated	Wetlands
241			Not Excavated	Slope
242	I:0-15	10YR6/3 pale brown sand	NCM	
242	II:15-29	10YR6/6 brownish yellow sand	NCM	
243	I:0-15	10YR4/2 dark grayish brown sand	NCM	
243	II:15-30	10YR5/8 yellowish brown sand	NCM	
244	I:0-19	10YR6/3 pale brown sand	NCM	
244	II:19-38	10YR7/6 yellow sand	NCM	
245	I:0-15	10YR4/2 dark grayish brown sand	NCM	
245	II:15-30	10YR5/8 yellowish brown sand	NCM	
246	I:0-19	10YR6/3 pale brown sand	NCM	
246	II:19-37	10YR7/6 yellow	NCM	
247	I:0-10	10YR4/2 dark grayish brown sand	NCM	
247	II:10-30	10YR5/8 yellowish brown sand	NCM	
248	I:0-14	10YR6/3 pale brown sand	NCM	
248	II:14-32	10YR7/6 yellow sand	NCM	

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
249	I:0-35	10YR4/3 brown sand	NCM	
249	II:35-50	10YR4/2 dark grayish brown sand	NCM	Root impasse at base
250	I:0-15	10YR6/3 pale brown sand	NCM	
250	II:15-31	10YR7/6 yellow sand	NCM	
251	I:0-22	10YR4/2 dark grayish brown sand	NCM	With roots
251	II:22-33	10YR5/8 yellowish brown sand	NCM	
252	I:0-15	10YR5/3 brown sand	NCM	
252	II:15-30	10YR6/6 brownish yellow sand	NCM	
253	I:0-5	10YR4/2 dark grayish brown sand	NCM	
253	II:5-18	10YR5/6 yellowish brown sand	NCM	
254	I:0-15	10YR6/3 pale brown sand	NCM	
254	II:15-31	10YR7/6 yellow sand	NCM	
255	I:0-14	10YR4/2 dark grayish brown sand	NCM	With roots
255	II:14-24	10YR5/8 yellowish brown sand	NCM	
256	I:0-15	10YR6/3 pale brown sand	NCM	
256	II:15-26	10YR7/6 yellow sand	NCM	
257	I:0-10	10YR4/3 brown sand	NCM	
257	II:10-25	10YR5/6 yellowish brown sand	NCM	20% gravels
258	I:0-18	10YR5/4 yellowish brown sand	NCM	
258	II:18-30	10YR6/4 light yellowish brown sand	NCM	
259	I:0-15	10YR4/3 brown sand	NCM	With roots
259	II:15-30	10YR5/6 yellowish brown sand	NCM	
260	I:0-14	10YR5/4 yellowish brown sand	NCM	
260	II:14-30	10YR5/6 yellowish brown sand	NCM	
261	I:0-10	10YR4/3 brown sand	NCM	With Roots
261	II:10-30	10YR4/6 dark yellowish brown sand	NCM	Modern plastic trash
262	I:0-18	10YR6/3 pale brown sand	NCM	
262	II:18-31	10YR7/6 yellow sand	NCM	
263	I:0-17	10YR4/2 dark grayish brown loamy sand	NCM	
263	II:17-30	10YR5/6 yellowish brown sand	NCM	
264			Not Excavated	Buried utilities
265	I:0-10	10YR4/2 dark grayish brown sand	NCM	
265	II:10-20	10YR5/6 yellowish brown sand	NCM	
266	I:0-18	10YR6/3 pale brown sand	NCM	
266	II:18-30	10YR7/4 very pale brown sand	NCM	
267	I:0-10	10YR4/3 brown sand	NCM	
267	II:10-23	10YR5/8 yellowish brown sand	NCM	
268	I:0-42	10YR6/3 pale brown sand	NCM	
269	I:0-5	10YR4/2 dark grayish brown sand	NCM	
269	II:5-15	10YR5/8 yellowish brown sand	NCM	
270	I:0-10	10YR4/2 dark grayish brown sand	NCM	
270	II:10-20	10YR5/8 yellowish brown sand	NCM	
271	I:0-13	10YR6/3 pale brown sand	NCM	
271	II:13-32	10YR7/6 yellow sand	NCM	

STP Number	Stratum Depth	Munsell Soil Description	Results	Notes
272	I:0-17	10YR4/3 brown sand	NCM	
272	II:17-33	10YR5/6 yellowish brown sand	NCM	
273	I:0-10	10YR4/3 brown sand	NCM	
273	II:10-30	10YR5/8 yellowish brown sand	NCM	
274	I:0-13	10YR5/4 yellowish brown sand	NCM	
274	II:13-29	10YR5/6 yellowish brown sand	NCM	
275			Not Excavated	Slope
276			Not Excavated	Slope

Appendix C.
STP Locations

STP Locations Table

STP Number	STP Result	Easting	Northing
1	Neg	726470	4539310
2	Neg	726484.9	4539307
3	Neg	726501.8	4539302
4	Neg	726517.8	4539299
5	Neg	726533.1	4539297
6	Neg	726546.7	4539295
7	Neg	726562.2	4539292
8	Neg	726579.5	4539291
9	Neg	726594.9	4539292
10	Neg	726610.3	4539289
11	Neg	726625.1	4539285
12	Neg	726640.8	4539280
13	Neg	726655.9	4539276
14	Neg	726670.7	4539275
15	Neg	726685.9	4539275
16	Neg	726701.9	4539275
17	Neg	726718.6	4539274
18	Neg	730956.2	4538669
19	Neg	730939.5	4538670
20	Neg	730924.2	4538672
21	Neg	730904.7	4538675
21	Neg	728687.8	4538992
22	Neg	730890.1	4538678
23	Neg	730875	4538680
24	Neg	730861.8	4538682
25	Neg	730843.2	4538686
26	Neg	730830.9	4538690
27	Neg	730810.2	4538689
28	Neg	730791.3	4538692
29	Neg	730771.6	4538694
30	Neg	730756.4	4538697
31	Neg	730742	4538699
32	Neg	730728.3	4538701
33	Neg	730714.7	4538703
34	Neg	730694.7	4538706
35	Neg	730680.2	4538709
36	Neg	730664.7	4538711
37	Neg	730645.5	4538712
38	Neg	730629.2	4538713
39	Neg	730613.5	4538719

STP Number	STP Result	Easting	Northing
40	Neg	730595.3	4538719
41	Neg	730578.6	4538722
42	Neg	730565	4538729
43	Neg	730548.5	4538726
44	Neg	730531.5	4538731
45	Neg	730516.9	4538730
46	Neg	730500.2	4538734
47	Neg	730482.9	4538736
48	Neg	730471.1	4538736
49	Neg	730457.9	4538741
50	Neg	731013.1	4538664
51	Neg	731028.4	4538658
52	Neg	731044.2	4538655
53	Neg	731059.1	4538654
54	Neg	731073.8	4538651
55	Neg	731090.6	4538650
56	Neg	731106.3	4538647
57	Neg	731119	4538646
58	Neg	731135.7	4538642
59	Neg	731150.8	4538641
60	Neg	731166.9	4538639
61	Neg	731184.7	4538637
62	Neg	731202.1	4538632
63	Neg	731217.5	4538632
64	Neg	731233.3	4538629
65	Neg	731247.9	4538627
66	Neg	731263.2	4538625
67	Neg	731277.6	4538623
68	Neg	731293.4	4538620
69	Neg	731307.9	4538618
70	Neg	731323.1	4538616
71	Neg	731337.1	4538614
72	Neg	731352.6	4538612
73	Neg	731368.6	4538610
74	Neg	731383.4	4538609
75	Neg	731397.3	4538606
76	Neg	731413.1	4538603
77	Neg	731426.6	4538601
78	Neg	731441.7	4538599
79	Neg	731459	4538596

STP Number	STP Result	Easting	Northing
80	Neg	731472.3	4538594
81	Neg	731487.6	4538592
82	Neg	731503.4	4538590
83	Neg	731519.7	4538587
84	Neg	731534.3	4538586
85	Neg	731549.9	4538583
86	Neg	731564.4	4538581
87	Neg	731580	4538579
88	Neg	731593.2	4538577
89	Neg	731612	4538574
90	Neg	731630.6	4538570
91	Neg	731643.2	4538570
92	Neg	731660.5	4538567
93	Neg	731673.3	4538565
94	Neg	731686.8	4538562
95	Neg	731702.1	4538560
96	Neg	731717.5	4538558
97	Neg	731730.5	4538557
98	Neg	731747.2	4538555
99	Neg	731762.7	4538552
100	Neg	731780.1	4538549
101	Neg	731793.6	4538547
102	Neg	731810.1	4538545
103	Neg	731824.9	4538543
104	Neg	731839.4	4538543
105	Neg	731854.1	4538539
106	Neg	731869.3	4538536
107	Neg	731887.5	4538534
108	Neg	731902.2	4538532
109	Neg	731917.1	4538530
110	Neg	731932.1	4538527
111	Neg	731950.4	4538524
112	Neg	731966.9	4538522
113	Neg	731982.5	4538520
114	Neg	731996.5	4538518
115	Neg	732012.8	4538516
116	Neg	732028.1	4538513
117	Neg	732045.1	4538512
118	Neg	732058.6	4538510
119	Neg	732074.9	4538507
120	Neg	732090.3	4538505
121	Neg	732104.8	4538503

STP Number	STP Result	Easting	Northing
122	Neg	732120.1	4538500
123	Neg	732134.1	4538498
124	Neg	732149	4538496
125	Neg	732163.9	4538493
126	Neg	732179.6	4538491
126	Neg	732192.3	4538489
127	No Dig	730996.6	4538666
127	No Dig	730996.6	4538666
127	No Dig	730996.6	4538666
127	No Dig	730996.6	4538666
127	No Dig	730996.6	4538666
128	Neg	727176.5	4539208
129	Neg	727192.6	4539205
130	Neg	727207.8	4539203
131	Neg	727223.4	4539201
132	Neg	727238.6	4539198
133	Neg	727253.8	4539196
134	Neg	727268.4	4539194
135	Neg	727283	4539191
136	Neg	727298.4	4539189
137	No Dig	727313.7	4539187
138	No Dig	727328.3	4539184
139	No Dig	727343.7	4539182
140	No Dig	727359.6	4539180
141	No Dig	727375.5	4539177
142	No Dig	727391.6	4539175
143	Neg	727407.8	4539172
144	Neg	727423.8	4539170
145	Neg	726734.6	4539272
146	Neg	726749.3	4539267
147	Neg	726764.8	4539263
148	Neg	726780.8	4539259
149	Neg	726795.4	4539256
150	No Dig	726811.1	4539253
151	Neg	726826.8	4539251
152	Neg	726842.3	4539249
153	Neg	726857.3	4539247
154	Neg	726873	4539244
155	Neg	726887.9	4539242
156	Neg	726903.2	4539240
157	Neg	726918.7	4539238
158	Neg	726933.3	4539236

STP Number	STP Result	Easting	Northing
159	Neg	726949	4539234
160	Neg	727439	4539168
161	Neg	727453.5	4539165
162	Neg	727467.6	4539163
163	Neg	727483	4539161
164	Neg	727498.5	4539159
165	Neg	727513.5	4539156
166	Neg	727527.9	4539154
167	Neg	727542.1	4539149
168	Neg	727555.7	4539143
169	Neg	727570.6	4539138
170	Neg	727585.7	4539132
171	Neg	727600.1	4539126
172	Neg	727612.4	4539121
173	Neg	728372.3	4539033
174	Neg	728360.2	4539034
175	Neg	728345.7	4539036
176	Neg	728330.6	4539038
177	Neg	728315.4	4539040
178	No Dig	728298.9	4539042
179	No Dig	728283.3	4539044
180	Neg	728267.7	4539046
181	Neg	728042.6	4539073
182	No Dig	728026.8	4539069
183	No Dig	728010.7	4539065
184	Neg	727854.6	4539028
185	Neg	727838.3	4539033
186	Neg	727822.6	4539039
187	Neg	728252.6	4539048
188	Neg	728238	4539050
189	Neg	728222.4	4539052
190	Neg	728207.5	4539054
191	Neg	728192.8	4539056
192	Neg	728177.1	4539058
193	Neg	728161.3	4539060
194	Neg	728145.8	4539062
195	Neg	728130.7	4539064
196	Neg	728115.5	4539065
197	Neg	728100.4	4539068
198	Neg	728085.1	4539069
199	Neg	728069.7	4539071
200	Neg	728056.9	4539073

STP Number	STP Result	Easting	Northing
201	Neg	728387.6	4539031
202	Neg	728402	4539029
203	Neg	728417.1	4539027
204	Neg	728432.3	4539025
205	Neg	728448	4539023
206	Neg	728463.8	4539021
207	Neg	728479.2	4539019
208	Neg	728494.5	4539017
209	Neg	728509.9	4539015
210	Neg	728524.8	4539013
211	Neg	728540.1	4539011
212	Neg	728555.6	4539009
213	Neg	728570.4	4539007
214	Neg	728585.9	4539005
215	Neg	728601.6	4539003
216	Neg	728616.3	4539002
217	Neg	728630.5	4539000
218	Neg	728644.8	4538998
219	Neg	728658.6	4538996
220	Neg	728673.2	4538994
222	Neg	728702.1	4538991
223	Neg	728716.8	4538989
224	Neg	728732	4538987
225	Neg	728747.4	4538985
226	Neg	728762.8	4538983
227	Neg	728777.8	4538981
228	Neg	728793.5	4538979
229	Neg	728810.3	4538977
230	Neg	728825.7	4538975
231	Neg	728841.2	4538972
232	Neg	728856.6	4538970
233	Neg	727871.2	4539032
234	Neg	727889.1	4539036
235	Neg	727904.2	4539040
236	Neg	727919.5	4539043
237	Neg	727934	4539047
238	No Dig	727949.6	4539050
239	No Dig	727965.8	4539055
240	No Dig	727981.2	4539058
241	No Dig	727996	4539062
242	Neg	727807.9	4539045
243	Neg	727793.9	4539050

STP Number	STP Result	Easting	Northing
244	Neg	727779.7	4539056
245	Neg	727765.2	4539061
246	Neg	727750.6	4539067
247	Neg	727736.1	4539073
248	Neg	727721.2	4539079
249	Neg	727706.2	4539085
250	Neg	727691	4539090
251	Neg	727676.8	4539096
252	Neg	727663.3	4539102
253	Neg	727649.3	4539107
254	Neg	727636.1	4539112
255	Neg	727624.2	4539117
256	Neg	726964.5	4539232
257	Neg	726980.1	4539231
258	Neg	726995.1	4539230
259	Neg	727010.7	4539229
260	Neg	727026.4	4539229

STP Number	STP Result	Easting	Northing
261	Neg	727041	4539228
262	Neg	727057	4539226
263	Neg	727062.5	4539209
264	No Dig	727047.2	4539213
265	Neg	727032.7	4539215
266	Neg	727017.2	4539214
267	Neg	727001.8	4539214
268	Neg	726986.8	4539215
269	Neg	726993.4	4539200
270	Neg	727008.6	4539199
271	Neg	727005.1	4539190
272	Neg	727099.3	4539220
273	Neg	727114.8	4539217
274	Neg	727130.1	4539215
275	No Dig	727145.6	4539212
276	No Dig	727160.6	4539210

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