

Phase 1 Archaeological Reconnaissance Survey
For Proposed Nehantic Highlands Subdivision,
Holmes Rd & Upper Walnut Hill Rd, East Lyme, CT.

June 2023

Report prepared for:
Kristen Clarke PE & Shelly Harney
207 Clarendon Ave
Southport, NC 28461

Report prepared by:
Sarah Holmes, PhD
Archaeology Consultant
860 501-1446, slh@att.net

Abstract

The Phase I Archaeology Reconnaissance Survey was conducted for the area of potential effect (APE) for the proposed Nehantic Highlands Subdivision along Holmes Rd and Upper Walnut Hill Rd in East Lyme. The 12.4 acre tract will be subdivided into five house lots. The project focused on subsurface testing the access roads into each house lot in addition to the footprint for each structure. The APE is situated in a wooded, lightly developed rural area. Acreage in the interior of each lot is set aside as a conservation easement in addition to three small parcels along Holmes Rd and Upper Walnut Hill Rd deeded to the East Lyme Land Trust. The land had been selectively cleared in 2006 and 2007.

A total of 30 subsurface test pits (STPs) were tested for the survey with STPs placed at 15 meter intervals. One artifact (white glazed earthenware fragment-20th century) was identified in STP T3S15 at 0 to 5 centimeters below surface (cmbs) in disturbed soils. No Pre-Contact Period artifacts or lithics were identified. The soils throughout the APE contained large cobble and rock with some disturbed soils identified by the presence of dense undergrowth and uneven surface terrain.

The Phase I survey determined that additional testing, nor a Phase 2, was recommended for the APE. The proposed house construction and associated access roads will not have an adverse effect on archaeological resources on this particular tract based on the paucity of artifacts and past land use. In turn, the project did not merit nor meet the criteria for National Register eligibility.

Table of Contents

Project Description	5
Fig. 1 Map of the APE in New London County	5
Fig. 2 1997 USGS topographic map of the APE	6
Background Research	6
Criteria for determining archaeological potential	6
Criteria for stratification	7
Pre-Contact Overview	8
Paleo-American Period (12,000-9,500 BP)	8
Archaic Period (10,000-2,700 BP)	8
The Early Archaic Period (9,500-8,000 BP)	8
The Middle Archaic Period (8,000-6,000 BP)	9
Late Archaic Period (6,000-3,700 BP)	9
Terminal Archaic Period (3,700-3,000 BP)	10
The Woodland Period (2,700-450 BP)	10
The Early Woodland Period (2,700-2,000 BP)	10
The Middle Woodland Period (2,000-1,200 BP)	11
Late Woodland Period (1,200-450 BP)	11
Contact Period Overview	12
<i>The Seasonal Round</i>	12
Early Historic Period - East Lyme	13
Table 1 List of National Register properties in East Lyme	14
Historic Maps	15
Fig. 3 1811 Warren & Gillet map	15
Fig. 4 1833 Lester map	15
Fig. 5 1854 Baker map	16
Fig. 6 1859 Clark & Tackabury map	16
Fig. 7 1868 Beers, Ellis & Soule map	17
Fig. 8 1934 Aerial map	17
Fig. 9 1965 Aerial map	18
Environmental setting	19
Table 2 NRCS soil designation chart	19
Fig. 10 NRCS soil map	20
Previous archaeological research in vicinity of East Lyme APE	20

Survey and assessment	21
Fig. 11 & 12 1934 and 1965 cropped aerial maps	22
Fig. 13 Map of subsurface test pits	23
Table 3 Excavation summary	24
Table 4 Artifact catalog	26
Fig 14 Artifact photograph	26
Conclusions and recommendations	27
Bibliography	28
Appendix A	
Site photographs (Fig. 15-22)	35
Appendix B	
March 3, 2023, Letter from OSA	39
July 5, 2023 Approval letter from OSA	41
Appendix C	
Map of proposed subdivision (James Bernardo Land Surveying, LLC)	42

Project Description

The proposed Nehantic Highlands Subdivision includes five house lots within a 12.4 acre parcel. There are four house lots accessed from Holmes Rd containing approximately 2.07 acres each and the fifth lot off Upper Walnut Hill Rd measures 4.13 acres. In a letter dated March 3, 2023, State Archaeologist Dr. Sarah Sportman, from the Office of State Archaeology (OSA), requested a Phase 1 Archaeology Reconnaissance Survey be conducted within the Area of Potential Effect (APE). The subdivision is situated within a wooded area adjacent to light development and includes a conservation easement within the interior border of each parcel and three small parcels deeded to the East Lyme Land Trust along Holmes Rd and Upper Walnut Hill Rd. There are several archaeological sites identified within a one mile radius of Holmes Rd. Many of these sites are associated with the proposed Route 11 corridor. The APE is situated within close proximity to wetlands to the north and south and the Cranberry Meadow Brook. The wetlands and NRCS soil maps suggest this area has a high potential for identifying archaeological sites, and indigenous sites in particular.

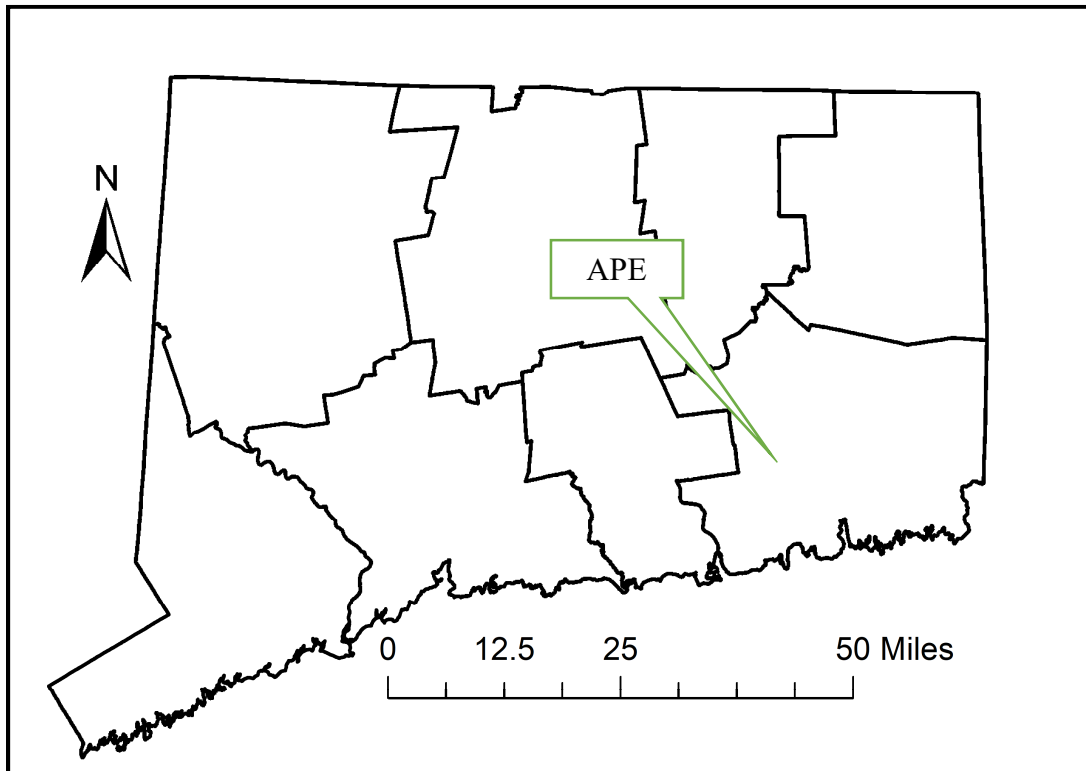


Fig. 1: Connecticut county map on APE in New London County (magic.lib.uconn.edu)

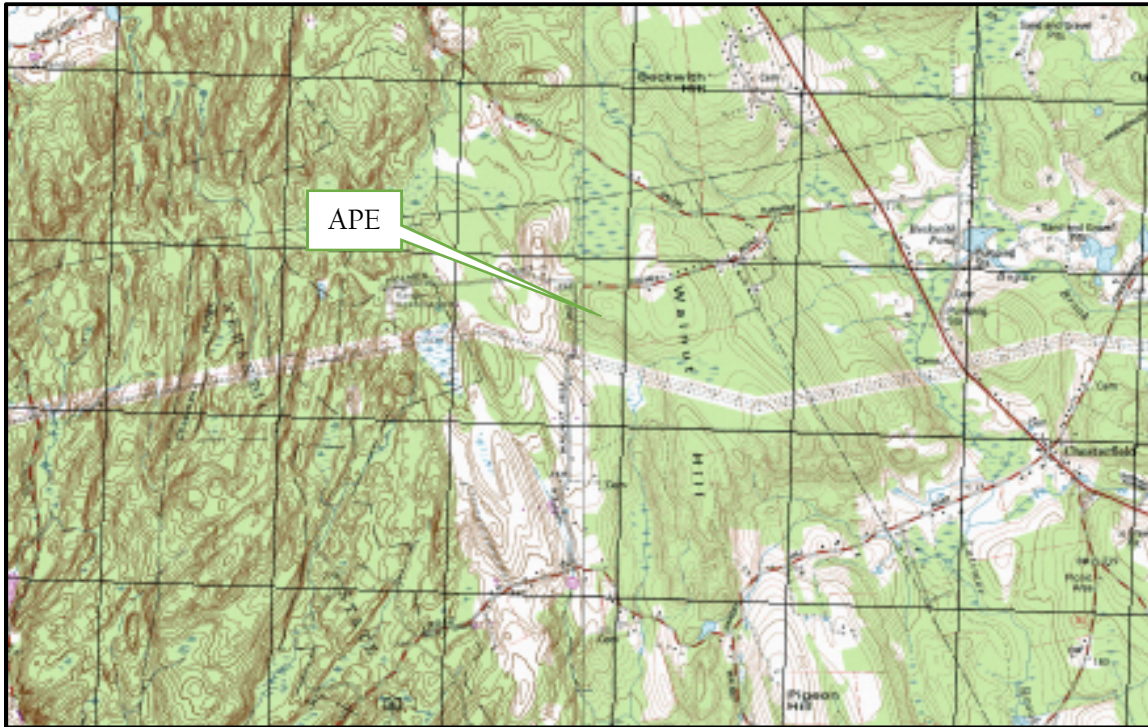


Fig. 2 1997 USGS topographic map of APE location (magic.lib.uconn.edu)

Background Research

The background research for the proposed subdivision consists of a review of the following sources:

- Archaeological site files and reports archived for the Connecticut State Historic Preservation Office (SHPO) and the Office of the State Archaeologist (OSA).
- Local town histories, state documents, maps identifying historic period Indigenous and Euro-American sites and structures within or immediately adjacent to the project area.

Criteria for Determining Archaeological Potential

Pre-contact, contact and historic period sites are rarely visible on the surface and are typically located through subsurface testing. The presence of Native American sites and some early colonial sites is predicted by implementing models based on known site locations in Connecticut and throughout southern New England. These sites correlate with environmental criteria based on geology, soils, and topography as listed below. The criteria include:

- 1) Known archaeological sites within or immediately adjacent to the project area.
- 2) National Register properties within or adjacent to the project area.
- 3) Distance from a fresh water source
- 4) Soil characteristics such as slope, drainage, texture and suitability for cultivation.
- 5) Topographic features such as degree of slope, aspect and elevation.
- 6) Proximity to raw material sources such as a lithic quarry, pond or wetland.
- 7) Proximity to areas of historic and modern development
- 8) Degree of disturbance from plowing, gravel mining, and modern construction.

Criteria for Stratification

The Phase I survey entails a walkover of the project area to identify visible cultural or natural features on the landscape. Cultural features include stonewalls, stone piles, and house foundations. Natural (geological) features include bodies of water, streams, swampland and rock shelters that represent a landscape conducive to human site selection.

To locate archaeological sites, project areas are typically stratified (divided) into sections with low, moderate and high sensitivity. Topographic and surficial geology maps compiled by the United States Geological Survey and soil data compiled by the United States Department of Agriculture are used to delineate areas of well-drained soils and minimal slope. Areas with less than a 5% slope, with moderate to well-drained soils within 150 meters of a wetland or stream are considered to be of high potential. Areas further from a water source with poorly drained soils or excessive slope are considered less sensitive. These levels of sensitivity are categorized as follows:

High. Undisturbed areas less than 150 meters (450ft) from a water source, on moderate to well-drained soils and slopes less than 5% are subjected to a more intensive program of systematic subsurface testing including additional judgment test pits when considered necessary.

Moderate. Areas greater than 150 meters (450ft) from a water source on moderate to well-drained soils on slopes between 5-8% are subjected to systematic subsurface testing.

Low. Areas that are poorly drained, in excess of 8% slope or have been disturbed are not subsurface tested.

The preliminary walkover determines the testing strategy when required and placement of the subsurface test pits when warranted. For the East Lyme APE, the soils were inspected through subsurface testing on the proposed driveways and within the footprint of each structure.

Pre-Contact Overview

Paleoindian Period (12,500-9,500 BP)

In the Northeast, the Paleoindian Period dates from 12,500 to 9,500 BP, during the final glacial period known as the Younger Dryas. This was a time marked by a return to severe glacial conditions (McWeeney 1999). The earliest archaeological evidence for human occupation in the New England region dates to approximately 12,500 BP (Singer 2017). Sites from this period are characterized by distinctive fluted points and flaked stone assemblages dominated by unifacial tools.

The archaeological record reflects a settlement system based primarily on small, highly mobile social groups seasonally dispersed in search of resources. Their diet consisted of a wide range of food sources, including small and large game, fish, wild plant foods, and perhaps currently extinct megafauna (Meltzer 1988; Jones 1998). Caribou likely played a significant, if seasonal, role in subsistence. However, small game, fish, fowl, reptiles and wetland tubers were also important components of the diet at this time.

Data reflecting Paleoindian Period land use patterns and subsistence activities in the Northeast is relatively scarce (Spiess, Wilson and Bradley 1998). Few intact Paleoindian sites have been found in Connecticut. To date, five sites have been investigated and published in detail: the Templeton Site in Washington (Moeller 1980, 1984), three on the Mashantucket Pequot Reservation: the Hidden Creek Site (Jones 1997), the Ohomowauke Site and a third within 100 meters of the Ohomowauke Site (Singer). The fifth, the Dr. Brian D. Jones site, was identified in Avon in 2019. A small number of additional sites have received more cursory attention. Upwards of 50 fluted points have been recovered as isolated finds across Connecticut. The scarcity of identified sites in the region indicates that population density was likely very low at this time. The small size of sites dating to this period, and the high degree of landscape disturbance over the past 12,500 years, contributes to poor site visibility overall.

Archaic Period (9,500-2,700 BP)

The Archaic Period dating from 9,500 to 2,700 BP in the Northeast is characterized by generalist hunter-gatherer populations utilizing a variety of seasonally available resources. The period is subdivided into the Early, Middle, Late and Terminal Archaic Periods on the basis of associated changes in environment, projectile point styles and inferred adaptations (Snow 1980; McBride 1984). Each sub-period is discussed below.

The Early Archaic Period (9,500-8,000 BP)

Pollen evidence indicates a gradual trend toward a warmer climate beginning around 10,000 BP (McWeeney 1999). By this time Pleistocene megafauna had disappeared and given way to modern game species such as moose, muskrat and beaver. It is feasible deer was not abundant until the end of this period when oak began to dominate upland forests. Plant and animal resources became more predictable and abundant as the climate stabilized, permitting Early Archaic populations to utilize a wider range of seasonal resources. Population density remained low during this period as reflected in the sparse representation of Early Archaic sites in the regional archeological record. This

low representation could be due to changing environmental conditions deeply burying, inundating or destroying many early sites through erosion, or due to the difficulty of recognizing Early Archaic assemblages (Funk 1997, Jones 1998).

Stone tool assemblages dating to the Early Archaic period have been recovered from several sites in the Northeast and indicate this period can be characterized by a number of distinct episodes. The most poorly understood period between 9,500 and 9,000 BP reflects the local Late Paleoindian and intrusive southern Piedmont Tradition Early Archaic influences. A quartz lithic industry in which projectile points are extremely rare occurs locally between roughly 9,000 and 8,500 BP as demonstrated at the Sandy Hill Site on the Mashantucket Pequot Reservation (Forrest 1999). The period concludes with the appearance of a temperate forest-adapted culture utilizing bifurcate-based projectile points typically manufactured from non-regional materials (Jones 1998, 1999). The Dill Farm Site in East Haddam is one of the best-documented bifurcate sites in Connecticut (Pfeiffer 1986). Archaeological investigations at this site identified cooking and refuse features, quartz flakes, retouched tools, bifurcate-based projectile points, and subsistence remains including charred nuts and mammal bone associated with a radiocarbon date of 8560 +/- 270 BP.

The Middle Archaic Period (8,000-6,000 BP)

Pollen evidence indicates a trend toward a warmer, drier climate during the Middle Archaic Period, as well as the development of alluvial terraces along Connecticut's major river systems (Jones 1999). Most modern nut tree species established themselves during this period providing a new food resource for human foragers and many game animals including deer, turkey and bear. Evidence of Middle Archaic Period occupation in Connecticut is more widely documented than for the preceding periods and indicates specialized seasonal activity in different resource zones during a period of population increase (McBride 1984; Jones 1999). The development of grooved axes suggests the increased importance of wood being used as a raw material, while the presence of pebble net sinkers on some regional sites implies a growing reliance on marine and riverine resources (Dincauze 1976; Snow 1980).

Despite their relative abundance, sites in Connecticut yield limited information on Middle Archaic subsistence and land use patterns (Jones 1999). Archaeological assemblages are characterized by the presence of Neville and Stark projectile points and large flake tools. The settlement patterns are oriented, at least seasonally, toward large upland interior wetlands (McBride 1984; Jones 1999). The data suggest seasonal re-use of such locales over a long period of time. This pattern is evident at the Dill Farm Site and those around the Great Cedar Swamp on the Mashantucket Pequot Reservation (Jones 1999). Coastal and riverine sites may be poorly documented because of rising sea levels that resulted in deep alluvial burial.

Late Archaic Period (6,000-3,700 BP)

The Late Archaic Period in the Northeast is characterized by an essentially modern distribution of plant and animal populations. This period is considered a time of cultural florescence reflected in evidence of burial ritual, population increase, and long-distance exchange networks (Ritchie 1994; Dincauze 1975; Snow 1980; Cassedy 1999). The Late

Archaic Period is one of the best-known temporal sequences in southern New England. During most of this period, large revisited seasonal settlements are located in riverine areas and along large wetland terraces, while smaller more temporary and special-purpose sites are situated in the interior and uplands (Ritchie 1969a and b, McBride 1984; Cassedy 1997, 1999). The nature and distribution of sites suggest aggregation during summer months, with seasonal dispersal into smaller groups during the cold weather (McBride and Dewar 1981).

Terminal Archaic Period (3,700-3,000 BP)

A transition in settlement and subsistence patterning began to occur with the onset of the Susquehanna Tradition, also referred to as the Terminal Archaic Period (Dincauze 1975). A number of technological innovations appear as well. These include the use of steatite bowls and the rare manufacture of cord-marked and grit-tempered ceramics. Lithic assemblages contain high proportions of chert and other non-local lithics such as argillite, rhyolite and felsite. Regionally available quartzite was commonly used but the use of local quartz became uncommon at this time. Settlement focused on upper river terraces rather than floodplains as well as expansive lacustrine and wetland settings (McBride and Dewar 1981). The interior and uplands were used less extensively (McBride 1984). Human cremation burials were common at this time (Dincauze 1968; Robinson 1996; Leveillee 1999). These changes in technology, lithic material preference and settlement organization may represent the arrival of non-regional peoples or ideas rather than in situ developments, though the debate over the possibility of migration remains active (Robinson 1996: 38-39).

The Woodland Period (2,700-450 BP)

The Woodland Period is characterized by the increased use of clay pottery, celts and non-local raw materials as well as the introduction of bow and arrow technology, smoking pipes and horticulture (Lavin 1984, Feder 1984, 1999). An increase in site size and complexity along with greater sedentism and social complexity was likely the result of an increase in population, particularly at the end of this period (McBride and Dewar 1987; Lavin 1988). The Woodland Period is traditionally subdivided into Early, Middle, and Late periods based on ceramic styles, settlement and subsistence patterns, as well as political and social developments (Ritchie 1969a and b; Snow 1980; Lavin 1984). Despite these changes, most recent scholars see the Woodland Period as a continuation of the traditions and lifeways of the preceding Archaic Period (Feder 1984, 1999).

The Early Woodland Period (2,700-2,000 BP)

Early Woodland regional complexes are generally characterized by stemmed, tapered and rare side-notched point forms; thick, grit-tempered, cord-marked ceramics; tubular pipe-stones; burial ritual; and suggestions of long-distance trade and exchange networks (Lavin 1984; Juli 1999). The Early Woodland Period remains poorly understood and is represented less in the archaeological record than the preceding phases of the Late Archaic. This may be the result of shifts in settlement that promoted the formation of larger, but fewer seasonal aggregation camps. It is possible that incipient horticulture

focused on native plant species (George 1997). The existence of stone pipes suggests the trade of tobacco into the region by this time.

The Middle Woodland Period (2,000-1,200 BP)

The Middle Woodland Period is characterized by increased ceramic diversity in both style and form, continued examples of long-distance exchange, and at its end the introduction of tropical cultigens (Dragoo 1976; Snow 1980; Juli 1999). Much of our current knowledge of the Middle Woodland Period in southern New England is from work done by Ritchie (1994) in New York State. Ritchie noted an increased use of plant foods such as goosefoot (*Chenopodium sp.*), which he suggested had a substantial impact upon social and settlement patterns. Ritchie further noted an increased frequency and size of storage facilities during the Middle Woodland Period, which may reflect a growing trend toward sedentism (Ritchie 1994; Snow 1980). At this time jasper tool preforms imported from eastern Pennsylvania are entering the region through broad exchange networks (Luedtke 1987).

Settlement patterns in Connecticut indicate an increased frequency of large sites adjacent to tidal marshes and wetlands along the Connecticut River, a decrease in large upland occupations and a corresponding increase in upland temporary camps (McBride 1984). This may indicate reduced residential mobility from earlier time periods and is likely due to the development of modern tidal marshes in low-lying riverine areas by 2,000 BP. The tidal marshes supported a wide variety of terrestrial and aquatic animal and plant resources, allowing for longer residential stays (McBride 1984).

Late Woodland Period (1,200-450 BP)

The Late Woodland Period is characterized by the increasing and intensive use of maize, beans, and squash and changes in ceramic technology, form, style, and function. Settlement patterns reflect population aggregation in villages along coastal and riverine locales and the eventual establishment of year-round villages. However, the use of the upland-interior areas by small, domestic units or organized task groups on a temporary and short-term basis remains apparent as does this trend toward fewer and larger villages near coasts and rivers. It has been hypothesized that these changes can be attributed to the introduction of maize, beans, and squash, but it is unclear how important cultigens were to the aboriginal diet of southern New England groups, especially those with access to coastal resources (Ritchie 1994; Ceci 1980; McBride 1984; McBride and Dewar 1987; Bendremer and Dewar 1993; Chilton 1999). Although sites clearly demonstrate the use of tropical cultigens in the Connecticut River Valley, wild plant and animal resources were still a primary component of the aboriginal diet. The use of imported chert increases over time in the Connecticut River Valley implying social, economic, and/or political ties to the Hudson Valley region. Ceramic style affinities also suggest western ties at the end of this period (Feder 1999).

Activities associated with a more sedentary subsistence pattern, such as the cultivation of maize, beans, and squash, resulted in the development of a more complex social organization. Regional variation between various tribal entities is reflected in stylistic design elements found on pottery in particular. Prior to this time, the populations were

fairly mobile, loosely based kin-groups that required little, if any, form of centralized authoritative power. Leadership roles were determined on a case-by-case basis and often shifted according to circumstance. This began to change with increasing sedentism.

Contact Period Overview

The Seasonal Round

Although the European trading networks impacted the daily lives of many Indigenous communities throughout southern New England, they continued to practice many of their traditional subsistence strategies. Archaeological sites in the area of coastal New England, as well as locations throughout Connecticut, reflect a series of occupations taking place within specific resource areas on an annual and seasonal basis. As with other coastal groups, the Nehantic, Mohegan, Pequot, and Narragansett settled closer to the coastline and riverbanks to fish and gather mollusks in the spring, summer, and autumn months. Large amounts of shell found along the coastline of Connecticut attest to these activities taking place. The coastal marshlands provided rushes and cattails, the necessary raw materials for making basketry and matting. By mid-April many groups cultivated maize, beans, squash, and tobacco in the fields adjacent to their settlements. Indigenous plants were collected, such as nuts, berries, herbs, and tubers. Fishing was also an integral part of the seasonal round where stone and wooden weirs were built to divert fish into enclosures. In the colder months, foodstuffs cached away from summer habitations were utilized. As winter months approached, family groups or bands removed from the immediate coast further inland to wooded areas where archaeological sites reflect the presence of smaller temporary hunting camps.

In contrast to the end of the Late Woodland, after European contact, cultural rather than environmental factors influenced the subsistence patterns of local Indigenous peoples (Ceci 1979). The impact from European trading networks, Native wampum production and the fur trade disrupted the balance of power in the years just prior to the Pequot War in 1637 (McBride 1994:44). After contact, European trade affected Indigenous populations who opted to shift their settlements to one geographical area to intercept and negotiate with their trading partners. This was certainly the case for inland groups along the Connecticut River and its tributaries. The same applied to coastal dwelling peoples such as the Nehantic, Mohegan, and Pequot who constructed fortified villages for protection while vying for trade (Ceci 1979). Fortifications were often occupied on a continual basis for at least a segment of the population, possibly housing the sachem's family. However, other horticultural activities took place within close proximity of these structures.

The socio/political organization of groups such as the Nehantic, Mohegan, Pequot and Narragansett were becoming more highly stratified during the Contact Period. Larger village sites were made up of several lineages whose sachem was a close family relation. The Nehantic, Mohegan, and Pequot leaders served as hereditary chief sachems with several sachems under their jurisdiction. Although the title of sachem was routinely passed down to the male heirs, women did acquire this elevated status. It is important to

note infectious disease introduced by European voyagers decimated local Indigenous communities and disrupted traditional leadership roles observed just after contact. Women's authority was reflected in their land rights to horticultural fields, therefore an indication of matrilineal social organization.

Early Historic Period in East Lyme

East Lyme's original bounds were once within the Town of Saybrook. Referred to as Saybrook's lands on the east side of the Connecticut River, this territory was eventually set off to establish the towns of Lyme and subsequently East Lyme. Several boundary disputes occurred during these early years of settlement. In 1671, Lyme landholders were in conflict over their eastern bound with the inhabitants of New London. The General Court intervened in 1672 to resolve the issue and in the same year, the Court established the Nehantic reservation at Black Point (Stark 1976). In the 17th century, the Nehantic settlements included a fort at Black Point and another at the head of the Niantic River. After the Pequot War in 1637, the Nehantic sachem Sassyouss granted John Winthrop, Jr. permission to settle along the west bank of the Thames River where he founded Pequot Plantation, known today as New London.

Town proprietors were granted the authority by the General Court to oversee and divide the common lands. From 1660 to 1702, Lyme underwent four land divisions. At this time, the settlement patterns in Lyme/East Lyme were a collection of dispersed homestead farms. The first highways in Lyme included the road that crossed over the river to Giants Neck dating to 1687 and the Old Post Rd that ran from New London to Lyme. Descriptions of the natural environment and of land-use in the land records indicate the local economy of East Lyme focused on farming, raising livestock, dairying, logging and the cultivation orchards. By the 1750's wharves were built along the Lieutenant River to accommodate the West Indian trade industry. (ibid.)

East Lyme, and the villages of Flanders and Niantic, were eventually incorporated in 1839. Early 18th and 19th century maps note several active mill sites in existence such as cider, grist and sawmills throughout East Lyme and along the Pattagansett River. Flanders, in particular was a center for woolen production. In the northern reaches of East Lyme, in the vicinity of Holmes Rd, the economy focused on logging, tanning and charcoal production. Other nineteenth century industries in the area included quarrying, commercial fishing, shipbuilding and ice production. The seashore communities along the coast in Niantic became popular summer resort destinations for urban dwellers with the expansion of the railroads that not only moved goods to market but supported regional tourism.

Table 1: List of National Register Properties in East Lyme

National Register Properties and Districts in East Lyme, Ct			
Property	Address	Date	Comments
Thomas Avery House	33 Society Rd	1845-1846	aka Smith-Harris House, Greek revival farmhouse
William Gorton Farm	14 West Lane	18-19th century	farm buildings, farm dates to 17th century
Thomas Lee House	156 Giant's Neck Rd	1660-1664	
Morton Freeman Plant Hunting Lodge	56 Stone Ranch Rd	1908	
Rocky Neck Pavilion	Lands End Rocky Neck State Park	1930s	Depression era
Samuel Smith House	82 Plants Dam Rd	1700-1730s	Cape style dwelling

Historic Maps

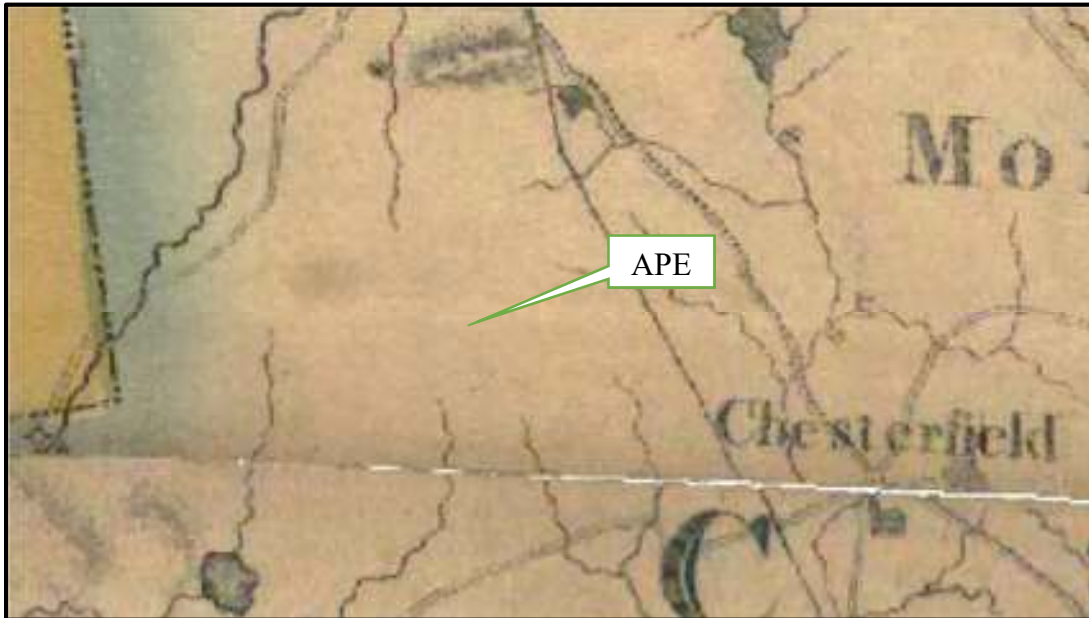


Fig. 3 1811 Warren & Gillet map identifies gristmills and sawmills present in the 19th century in the vicinity of northern East Lyme. (magic.lib.uconn.edu)

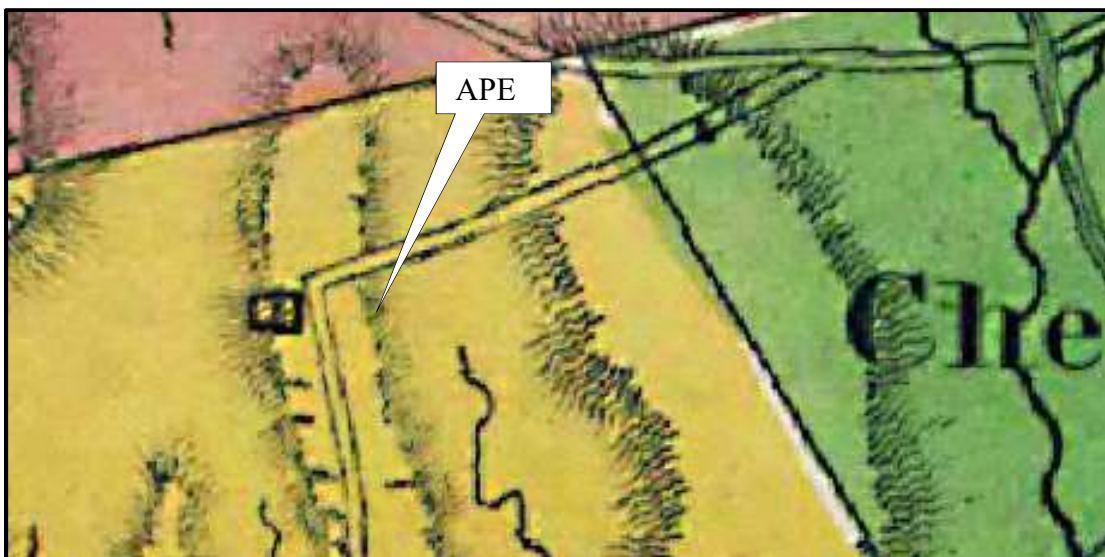


Fig 4 1833 Lester map identifies district school on the west side of Upper Walnut Hill Rd. Several 19th century historic maps locate the school on north side of Holmes Rd. (magic.lib.uconn.edu)



Fig. 5 1854 Baker map locates school on north side of Holmes Rd and dwellings associated with R. Williams and J. Fitch just off the APR. (magic.lib.uconn.edu)

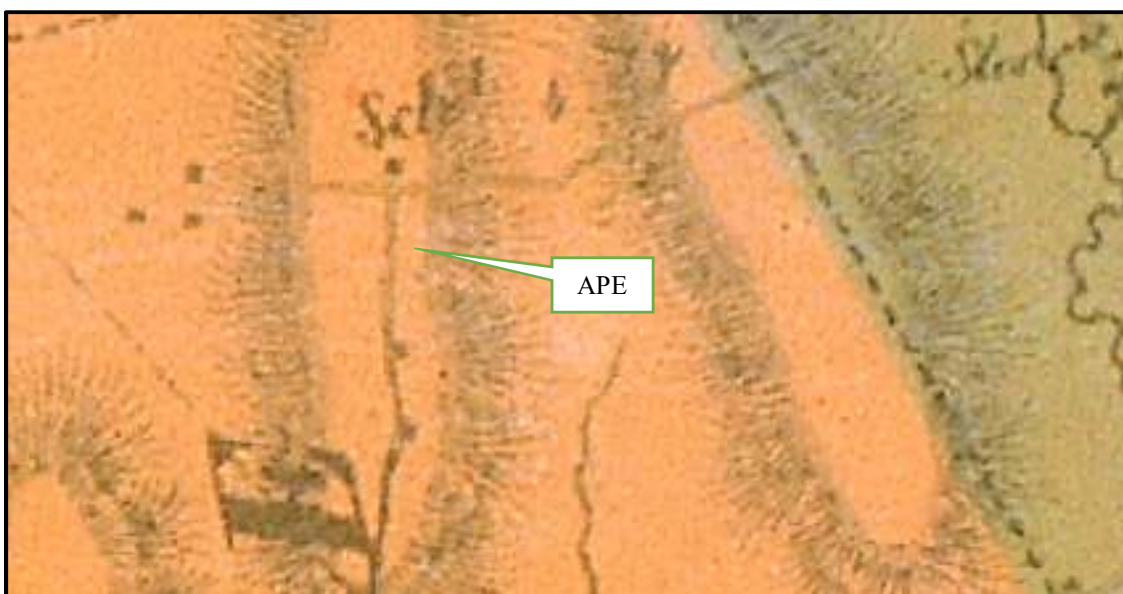


Fig. 6 1859 Clark & Tackabury map identifies a structure in close proximity to APE (magic.lib.uconn.edu)

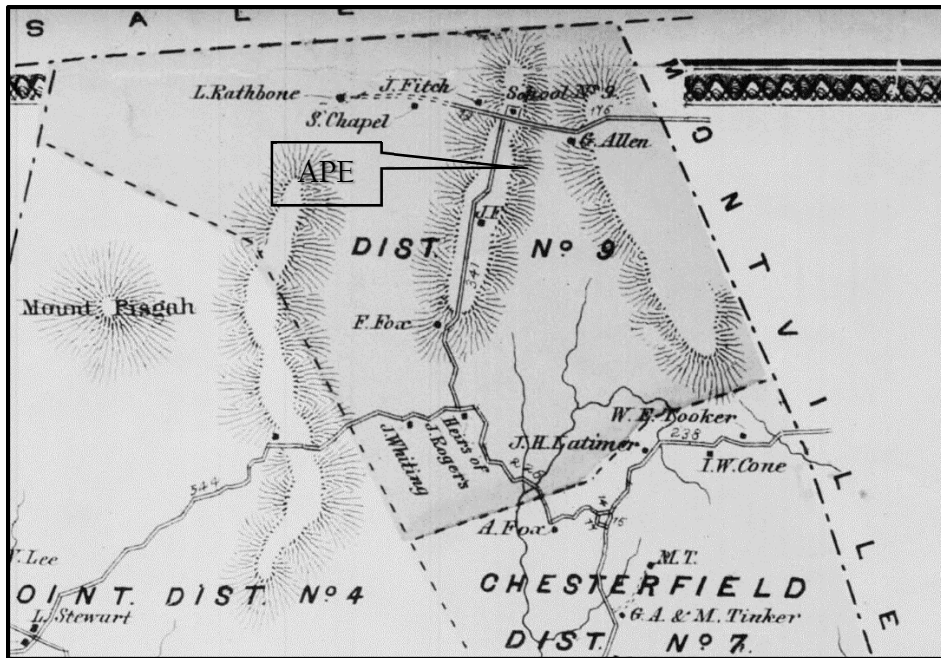


Fig. 7 1868 Beers, Ellis, Soule map identifies school on north side of Holmes Rd. (Peterson 1868 - magic.lib.uconn.edu)



Fig. 8 1934 aerial indicates APE as undeveloped farmland (magic.lib.uconn.edu)



Fig. 9 1965 aerial indicates APE as a wooded area.
(<https://libguides.ctstatelibrary.org/hg/aerialphotos>)

Environmental setting

The topography of the Nehantic Highlands APE slopes slightly downhill toward Holmes Rd to the north and levels out on Lots 1 thru 4. The proposed access road and house on Lot 5 is situated on relatively flat terrain, however topography on the northern section of this lot slopes upwards of 15% and is partially within the conservation easement. The deciduous flora consists of laurel, oak, maple and beech trees with an undergrowth of green briar, fern and invasive multiflora. The visual inspection of the terrain indicates the presence of some disturbed soils, in particular along the edge of Holmes Rd and Upper Walnut Hill Rd. Green briar and multiflora suggest the soils have been displaced and disturbed in the recent past.

The NRCS web soil survey map and soil chart for the Holmes Rd and Upper Walnut Hill Rd APE identified six soil types for the APE ranging from Canton and Charlton very stony fine sandy loams with up to an 8% slope to Woodbridge very stony fine sandy loam with 3 to 15 % slopes. The subsurface testing identified a majority of the APE as

stony to very stony making it difficult to test. The Munsell color chart designations noted for soils during testing were within a 10yr hue for the topsoil/A1 which ranged from dark brown to medium brown sandy to silty loam. The B1/B2 horizon ranged from dark yellow brown to yellow brown sandy loams with and without gravel and rock. The C horizon contained light grey to olive coarse sand with gravel and rock. Some of the surface soils were disturbed.

Table 2: NRCS soil designations (<http://websoilsurvey.usda.gov>)

Soil ID	Soil
3	Ridgebury, Leicester and Whitman soils, 0-8% slopes, extremely stony
46B	Woodbridge fine sandy loam, 0-8 % slopes, very stony
47C	Woodbridge fine sandy loam, 3-15 % slopes, extremely stony
61B	Canton and Charlton fine sandy loams, 0-8% slopes, very stony
62D	Canton and Charlton fine sandy loams, 15-35% slopes, extremely stony
85B	Paxton and Montauk fine sandy loams, 3-8% slopes, very stony

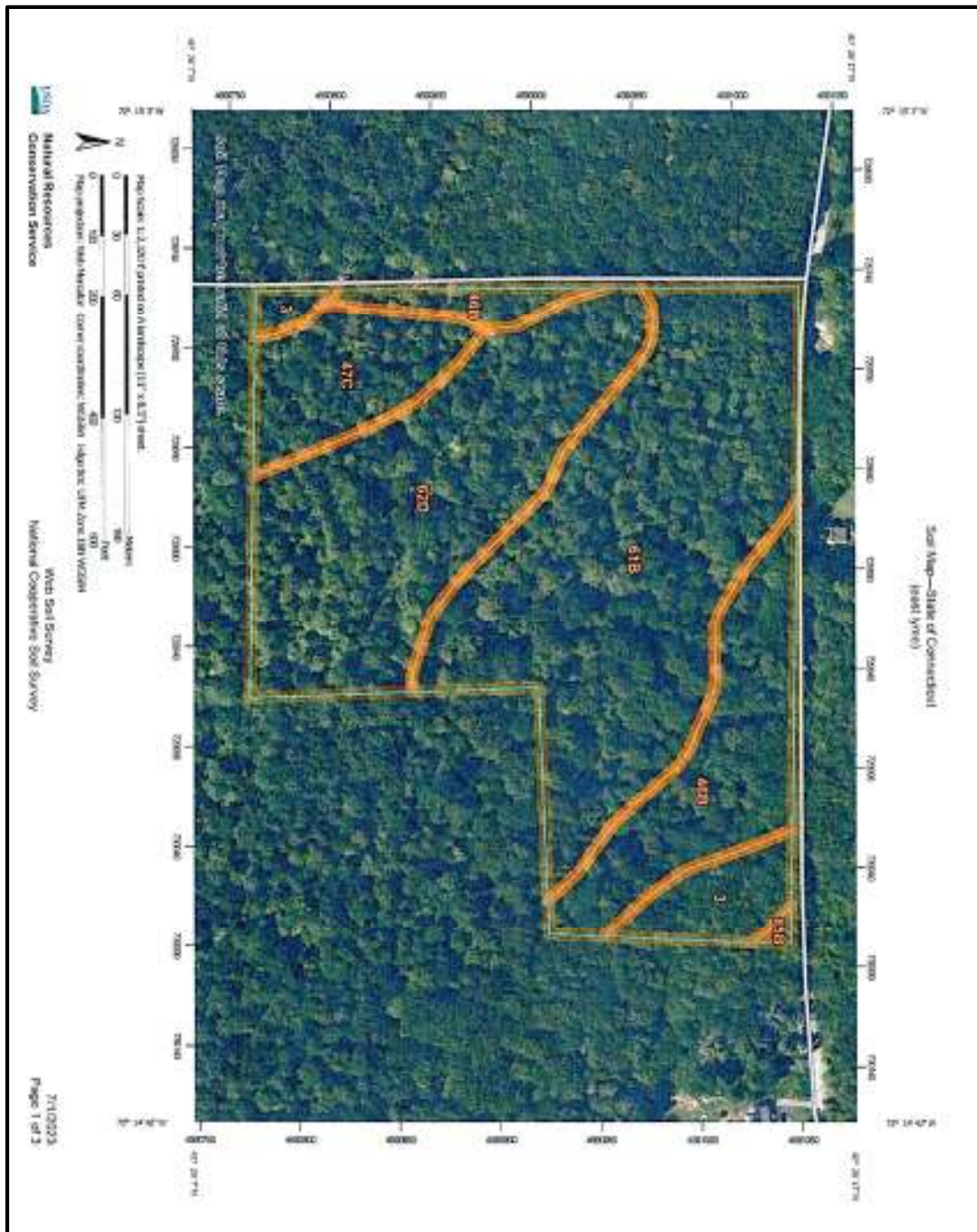


Fig. 10 NRCS soils map - approximate bounds (<https://websoilsurvey.usda.gov>)

Previous Archaeological Research and Historical Review

The current APE is located at the northern section of East Lyme adjacent to the Salem and Montville (Chesterfield) town lines. Archaeological records and sites reports archived at the State Historic Preservation Office (SHPO) note previous archaeological

surveys conducted within the northeastern section of East Lyme. As mentioned above, upwards of 40 archaeological sites were identified in the past within a two mile radius of the current APE and along the proposed RTE 11 corridor. Several Pre-Contact sites date back to as early as the Archaic Period through to the Woodland Period (10,000 thru 450BP). Archaeological features on these landscapes include rock-shelters, campsites and hearths. Artifact assemblages consist of aboriginal pottery and various lithic materials such as quartz, quartzite, argillite, chert, basalt and jasper. Diagnostic artifacts include projectile points dating to the Late Archaic.

Historic sites range in date from the early 18th century to the 20th century. Many are remnants of homestead farms and include abandoned house foundations, cellar holes, mill works, charcoal mounds and stonewall bounded fields. Artifact assemblages from these sites are historic ceramics identified as creamware, stoneware, pearlware, redware, in addition to kaolin pipes, bone and shell. The economy of this inland area focused on logging, tanning and charcoal production.

Survey and Assessment Strategy for the Phase 1

The subsurface testing focused on the areas directly impacted by the proposed construction that included the centerline of the access roads and within the footprint of each structure. The testing interval was 15 meters. East transect (T1-5) began 15 meters off of Holmes and Upper Walnut Hill Rds. A total of 30 STPs were tested with only one STP containing an historic ceramic (20th century earthenware). As mentioned above, there is evidence of displaced soils throughout the APE, in particular along the edge of Holmes and Upper Walnut Hill Rds where soils have been visibly disturbed, possibly due to the road being paved, widened or graded. Refer to aerial photographs below in Fig. 11 & 12.

In the interior of each lot, where the structures will be built, there is visible evidence of ground disturbance based on the characteristic thick brush and briar present on the landscape. There is an existing road or pathway on Lot 5 off Upper Walnut Hill Rd where the newly proposed driveway/access road will be constructed. Only one anomaly was identified at the edge of the entrance to Lot 5, on north side of the above mentioned road or path where a cluster of stone and cobble was noted. The 1859 Clark & Tackabury map (Fig. 6) is the only map that indicates a structure might have been present along this section of Upper Walnut Hill Rd. On closer inspection, no artifacts were identified on the surface in this area. It is feasible this disturbance resulted from road improvements such as widening and curbing that displaced a portion of a stonewall where soils and debris were bulldozed off to the edge of the road, similar to what is apparent along Holmes Rd. The only historic features identified on the APE were the stone walls along Upper Walnut Hill Rd, although the 1932 aerials suggest the lots along Holmes Rd may have been bordered with stonewalls. No subsurface features were identified such as storage pits or hearths, nor lithic or Pre-Contact Period artifacts.



Fig. 11 1934 cropped image indicates either a wall or trench existed along the edge of Holmes Rd. (magic.lib.uconn.edu)

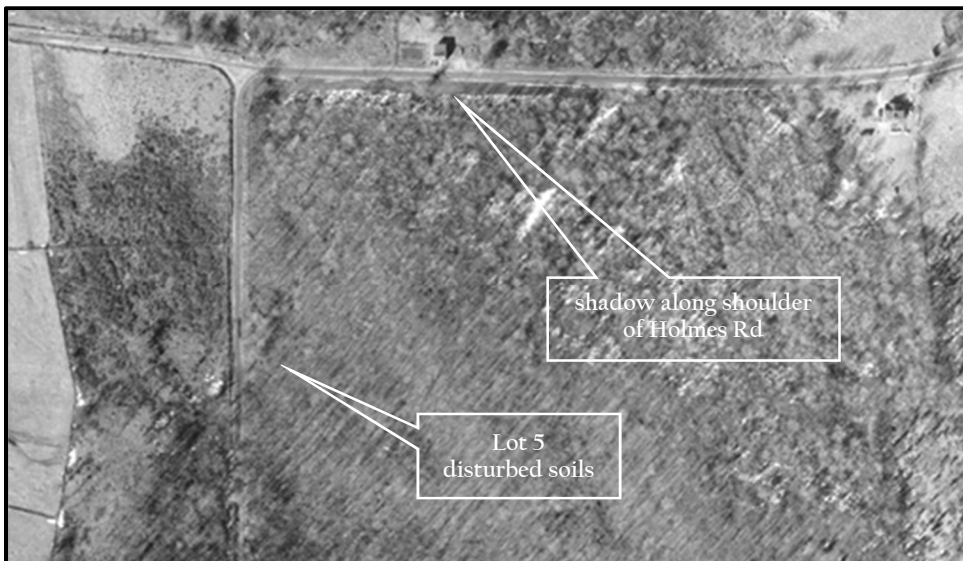


Fig. 12 Distinct shadow along shoulder of Holmes Rd suggest a trench or soils displaced as a result of roadwork, paving or grading. This disturbance is visible today. Also note area of disturbance adjacent to where cobble was identified on Lot 5. (<https://libguides.ctstatelibrary.org/hg/aerialphotos>)

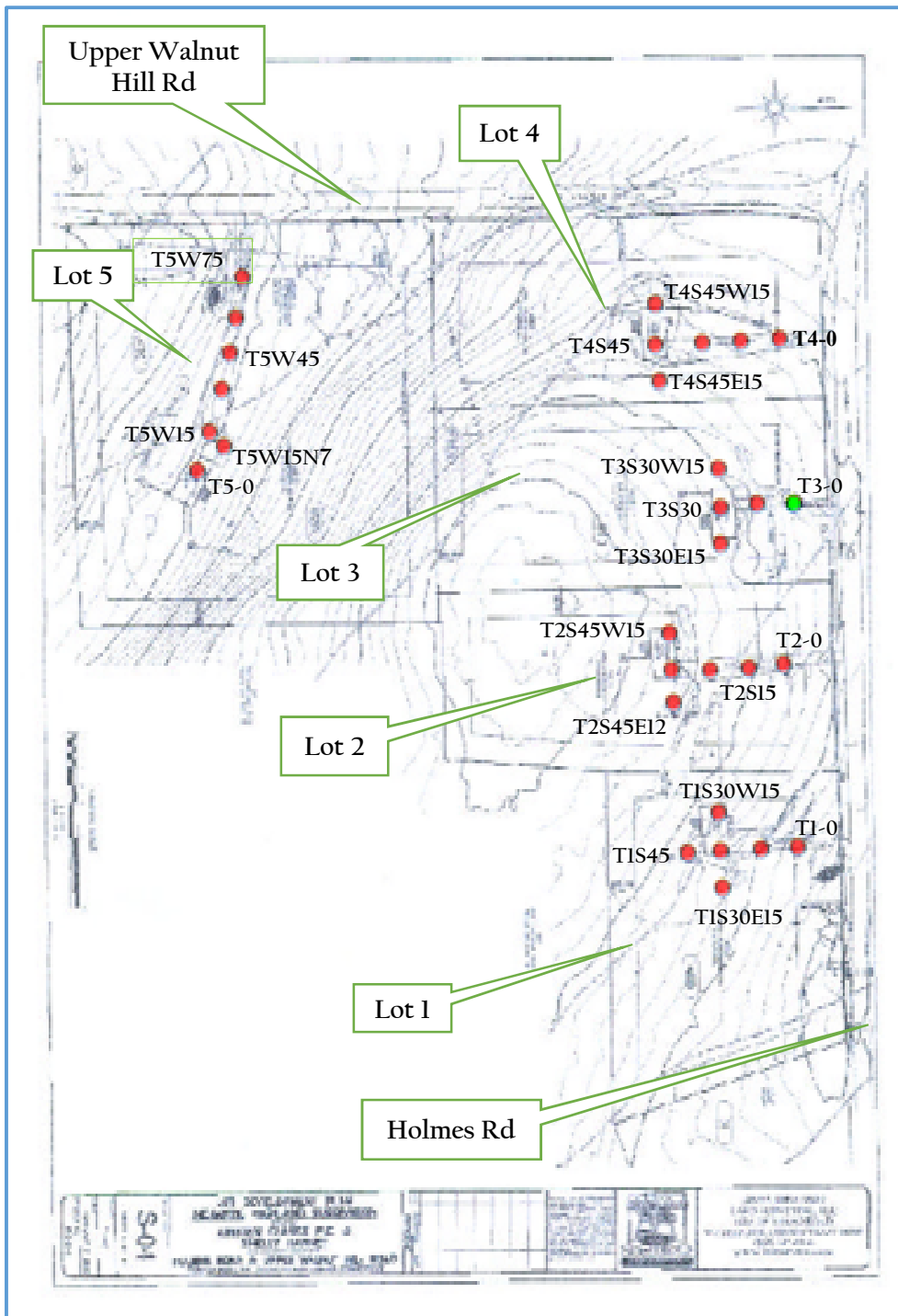


Fig. 13 Placement of subsurface test pits for Phase 1. Green STP at T3-0 contained one ceramic artifact (base map: James Bernardo Land Surveying, LLC)

Table 3: Excavation Summary

Excavation Summary								
STP#	Bags	AP soils	Depth	BI soils	Depth BI	B2-C soils	Depth B2/C	Comments
T1-0	0	disturbed						soils bulldozed back from Holmes Rd, Lot 1 access road
T1S15	0	disturbed						Lot 1
T1S30	0	bn sd lm w/gr 10yr 4/3	0-22 cmbs	yw bn sd w/ gr 10yr 4/6	22-60 cmbs	lt gy sd 10yr 6/2		rock, Lot 1 access road
T1S45	0	bn slt lm 10yr 4/3 w/ cobble	0-15 cmbs	yw bn sd w/gr 10yr 4/6	15-68 cmbs	lt yw crs sd 10yr 6/4	68-70 cmbs	Lot 1
T1S30W15	0	bn slt lm 10yr 4/3	0-21 cmbs	yw bn sd 10yr 4/6	21-64 cmbs	lt gy sd 10yr 6/2	64 cmbs	Lot 1
T1S30E15	0	bn slt lm w/ rock 10yr 4/3	0-24 cmbs	yw bn fn sd 10yr 4/6	24-42 cmbs			Lot 1
T2-0	0	disturbed						soils bulldozed back from Holmes Rd, Lot 2 access road
T2S15	0	dense root						Lot 2 access road
T2S30	0	bn slt lm 10yr 4/3 w/ rock	0-20 cmbs	yw bn sd 10yr 4/6	20-60 cmbs	lt gy sd 10yr 6/2	60 cmbs	Lot 2 access road
T2S45	0	bn slt lm 10yr 4/3 w/ cobble	0-32 cmbs	yw bn sd w/gr 10yr 5/6	32-68 cmbs	lt gy sd 10yr 6/2	68-78 cmbs	Lot 2
T2S45W15	0	bn slt lm 10yr 4/3	0-24 cmbs	yw bn sd 10yr 5/6	24-64 cmbs	lt gy sd 10yr 6/2	64 cmbs	Lot 2
T2S45E12	0	bn slt lm 10yr 4/3	0-26 cmbs	yw bn sd 10yr 5/6	26-64 cmbs	gy crs sd 10yr 5/1	64-65 cmbs	Lot 2, moved 3 meter west of perc test
T3-0	0	disturbed						soils bulldozed back from Holmes Rd Lot 3 access road

Excavation Summary								
STP#	Bags	AP soils	Depth	BI soils	Depth BI	B2-C soils	Depth B2/C	Comments
T3S15	1	bn sd lm 10yr 4/3/disturbed soils	0-40 cmbs					Lot 3 access road, ceramic @0-5 cmbs
T3S30	0	bn sd lm 10yr 4/3 w/rock	0-25 cmbs	yw bn sd lm 10yr 5/4 w/rock	25-46 cmbs			Lot3 access road/rock
T3S30W15	0	bn sd lm 10yr 4/3	0-24 cmbs	yw bn sd lm 10yr 5/4	24-52 cmbs	lt gy sd 10yr 5/1	52-53 cmbs	Lot 3
T3S30E15	0	bn slt lm w/rk 10yr 4/3	0-24 cmbs	yw bn sd w/rk 10yr 5/4	24-42 cmbs			Lot 3. rock
T4-0	0	disturbed						Lot 4 access road, soils bulldozed back from Holmes Rd
T4S15	0	bn slt lm 10yr 4/3	0-29 cmbs	yw bn sd 10yr 5/6	29-64 cmbs			Lot 4 access road, rock
T4S30	0	bn slt lm 10yr 4/3	0-15 cmbs	yw bn sd 10yr 5/4	15-52 cmbs			Lot 4 access road,
T4S45	0	bn sd lm 10yr 4/5	0-24 cmbs	yw bn sd 10yr 5/4	24-44 cmbs			Lot 4/rock,
T4S45W15	0	bn sd lm 10yr 5/3	0-25 cmbs					Lot 4, rock-buried ledge
T4S45E15	0	bn sd lm 10yr 4/3	0-26 cmbs	dk yw bn sd 10yr 4/4	26-58 cmbs	lt gy sd 10yr 5/1	58 cmbs	Lot 4
T5-0	0	bn sd lm 10yr 5/3	0-21 cmbs	dk yw bn sd 10yr 4/4	21-54 cmbs	lt gy sd 10yr 5/1	54 cmbs	Lot 5
T5W15	0	bn sd lm w/gr 10yr 4/3	0-21 cmbs	yw bn sd 10yr 5/4	21-28 cmbs			Lot 5 access road, 2.5 meter north of perc test
T5W15N7	0	bn slt lm 10yr 4/3	0-27 cmbs	yw bn sd 10yr 5/4	27-68 cmbs	lt gy sd 10yr 5/1	68 cmbs	Lot 5 - J1
T5W30	0	bn slt lm 10yr 4/3	0-12 cmbs	yw bn sd 10yr 5/4	12-33 cmbs			Lot 5, rock

Excavation Summary								
STP#	Bags	AP soils	Depth	BI soils	Depth BI	B2-C soils	Depth B2/C	Comments
T5W45	0	bn slt lm 10yr 5/3	0-22 cmbs	yw bn sd 10yr 5/4	22-78 cmbs	lt gy sd 10yr 5/1	78 cmbs	Lot 5
T5W60	0	disturbed						Lot 5, cobble
T5W75	0	disturbed						Lot 5, cobble

Table 4: Artifact Catalog

Table 3: Artifact Catalog									
ID #	STP#	Phase	Artifact	Qty	Material	Description	Depth	Soil	Comments
1.0	T3-0	1	ceramic	1	earthenware	white glazed earthenware base fragment	0-5 cmbs	disturbed	Lot 3, 20 th century ceramic



Fig. 14 White glazed earthenware base (20th century) from T3S15 @0-5 cmbs/disturbed soils

Conclusions and Recommendations

Subsurface testing for the proposed five house lots focused on the access roads and the footprint for each structure. A total of 30 subsurface test pits (STPs) were tested with only one STP T3-0 yielding an historic ceramic (20th century earthenware). Nothing else of significance was noted other than a pile of cobble and rock on the north side of an existing path or dirt road at entrance to Lot 5 off Upper Walnut Hill Rd. Also, dense cobble and rock was present at interface throughout the APE. There was evidence throughout the APE, along Holmes Rd in particular, of an overburden or disturbed soils displaced or bulldozed along the shoulder of the road likely due to paving or grading. There had been selected cutting of trees dating back to 2006 and 2007.

The house construction will be setback off of Holmes and Upper Walnut Hill Rds and only a portion of each lot will be impacted by the construction. The Phase I Archaeology Reconnaissance survey determined the five lot subdivision should not have an adverse effect on archaeological resources within East Lyme nor meet the criteria to be considered for the National Register eligibility.

Bibliography

Bellantoni, Nicholas

1995 *Distribution of Paleoindian Cultural Material in Connecticut*. Paper presented at the Archaeological Society of Connecticut Annual Spring Meeting.

Bendremer, Jeffrey and Robert Dewar

1993 The Advent of Maize Horticulture in New England. In *Corn and Culture in the Prehistoric New World, University of Minnesota Publications in Anthropology, No 5*, edited by Sissel Johannessen, Christine A. Hastorf, Westview Press, Boulder.

Cassedy, Daniel F.

1997 *From the Erie Canal to Long Island Sound: Technical Synthesis of the Iroquois Pipeline Project, 1989-1993*. Garrow and Associates, Inc., Atlanta.

1999 The Archaic Florescence: The Late and terminal Archaic Periods of Connecticut as seen from the Iroquois Pipeline. *Bulletin of the Archaeological Society of Connecticut* 62:125-139.

Caulkins, Frances Manwaring

1852 History of New London, Connecticut from the First Survey of the Coast in 1612 to 1852. New London, Ct.: Published by Author.

1866 History of Norwich Connecticut From Its Possession By The Indians, To The Year 1866. Published by the author. (<http://archive.org>)

Ceci, Lynn

1979

1980 Maize Cultivation in Coastal New York: The Archaeological, Agronomical and Documentary Evidence. *North American Archaeologist* 1(1): 45-74.

Chilton, Elizabeth

1999 Mobile Farmers of Pre-Contact Southern New England: The Archaeological and Ethnohistorical Evidence. *Current Northeast Paleoethnobotany*, edited by J. Hart, pp. 157-176. New York State Museum, No. 494, Albany.

DeForest, John, W.

1852 History of the Indians of Connecticut. Reprint. Native American Book Publishers. Brighton, Michigan.

Dincauze, Dena F.

1968 Cremation Cemeteries in Eastern Massachusetts. Cambridge, Ma.: Peabody Museum.

- 1975 The Late Archaic Period in Southern New England. *Arctic Anthropology* 12(2): 23-24.
- 1976 *The Neville Site: 8,000 Years at Amoskeag*. Peabody Museum Monographs 4. Harvard University, Cambridge.
- Douglas-Lithgow, R.A.
- 1909 Native Place Names of Connecticut. Applewood Books, Bedford, MA. reprint.
- Dragoo, D.
- 1976 Some Aspects of Eastern North American Prehistory. A Review of 1975. *American Antiquity* 41(1).
- Feder, Kenneth L.
- 1984 Pots, Plants, and People: The Late Woodland Period in Connecticut. *Bulletin of the Archaeological Society of Connecticut* 47:99-111.
- 1994 A Village of Outcasts: Historical Archaeology and Documentary Research at the Lighthouse Site. Mayfield Publishing Co., Mountainview, Ca.
- 1999 The Late Woodland Revisited: The Times, They Were A-Changin' (But Not That Much). *Bulletin of the Archaeological Society of Connecticut* 62: 155-174.
- Forrest, Daniel
- 1999 Beyond Presence and Absence: Establishing Diversity in Connecticut's Early Holocene Archaeological Record. *Bulletin of the Archaeological Society of Connecticut* 62:79-99.
- Funk, Robert E.
- 1997 Holocene or Hollow Scene? The Search for the Earliest Archaic Cultures in New York State. *The Review of Archaeology* 17(1):11-24.
- George, David
- 1997 Late Prehistoric Archaeo-botany of Connecticut: Providing a Context for the Transition to Maize Agriculture. *Bulletin of the Archaeological Society of Connecticut* 60:13-28.
- Holmes, Sarah L.
- 2007 "In Behalf of Myself and My People": Mashantucket Pequot Strategies in Defense of Their Land Rights. Ph.D. dissertation in Anthropology, University of Connecticut.
- Hurd, Hamilton D.
- 1882 History of New London County. J.W. Lewis & Co. Philadelphia (<http://arhive.org>)

Jones, Brian D.

- 1997 The Late Paleoindian Hidden Creek Site in Southeastern Connecticut. *Archaeology of Eastern North America* 25:45-80.
- 1998 Human Adaptation to the Changing Northeastern Environment at the End of the Pleistocene: Implications for the Archaeological Record. Ph.D. dissertation, University of Connecticut. Available from University Microfilms, Ann Arbor, No. 9906705.
- 1999 The Middle Archaic Period in Connecticut: The View from Mashantucket. *Bulletin of the Archaeological Society of Connecticut* 62:101-123.
- 2004 Paleoindian Population Dynamics in New England: Possible Typological Consequences. In *Hunters and Gatherers in Theory and Archaeology*, edited by G. Crothers. Center for Archaeological Investigations, Occasional Paper No. 31. Carbondale: Southern Illinois University.
- 2007 The Simple and the Complex: Two Middle Archaic Small Upland Lithic Sites in (2002) North Stonington, Connecticut. In *Current Approaches to the Analysis and Interpretation of Small Lithic Sites in the Northeast*, edited by C. B. Reith, pp 77-88. New York State Museum: Albany.

Jones, Brian D. and Daniel T. Forrest

- 2003 Life in a Postglacial Landscape: Settlement-Subsistence Change During the Pleistocene-Holocene Transition in Southern New England. In *Geoarchaeology of Landscapes in the Glaciated Northeast* edited by David L. Cremeens and John P. Hart. New York State Museum Bulletin 497. University of the State of New York, The State Education Department, Albany, New York.

Juli, Harold

- 1999 Current Perspectives on Early and Middle Woodland Archaeology in Connecticut. *Bulletin of the Archaeological Society of Connecticut* 62:141-153.

Lavin, Lucianne

- 1984 Connecticut Prehistory: A Synthesis of Current Investigations. *Bulletin of the Archaeological Society of Connecticut* 47:5-40.
- 1988 Coastal Adaptations in Southern New England and Southern New York. *Archaeology of eastern North America* 16:101-120.

Leveillee, Alan

- 1999 Transitional Archaic Ideology as Reflected in Secondary Burials at the Millbury III Cremation Complex. *Archaeology of Eastern North America* 27:157-184.

Luedtke, Barbara E.

- 1987 The Pennsylvania Connection: Jasper at Massachusetts Sites. *Bulletin of Massachusetts Archaeological Society* 48:37-47.

McBride, Kevin A.

- 1984 *Prehistory of the Lower Connecticut River Valley*. Doctoral dissertation, University of Connecticut. University Microfilms, Ann Arbor.
- 1994 The Source and Mother of the Fur Trade: Native-Dutch Relations in Eastern New Netherland. *Enduring Traditions: The Native Peoples of New England*. Laurie Weinstein ed. Westport, Ct.: Bergin & Garvey.

McBride, Kevin A. and Robert Dewar

- 1981 Prehistoric Settlement in the Lower Connecticut River Valley. *Man in the Northeast* 22:37-66.
- 1987 Agriculture and Cultural Evolution: Causes and Effects in the Lower Connecticut River Valley. In *Emergent Horticultural Economies in the Eastern Woodlands*, edited by W. Keegan, pp. 305-328. Center for Archaeological Investigations, University of Illinois, Carbondale.
- 1990 The Historical Archaeology of the Mashantucket Pequots, 1637-1900: A Preliminary Analysis. *The Pequots in Southern New England: The Fall and Rise of an American Indian Nation*. Laurence M. Hauptman and James D. Wherry, eds. Norman: University of Oklahoma.

McWeeney, Lucinda

- 1999 A Review of Late Pleistocene and Holocene Climate Changes in Southern New England. *Bulletin of the Archaeological Society of Connecticut* 62:3-18.

Meltzer, David J.

- 1988 Late Pleistocene Human Adaptations in Eastern North America. *Journal of World Prehistory* 2(1):1-52.

Moeller, Roger W. eds.

- 1990 Experiments and Observations on the Terminal Archaic of the Middle Atlantic region. Archaeological Services, Bethlehem, Ct.

Moeller, Roger W.

- 1980 6LF21: A Paleo-Indian Site in Western Connecticut. American Indian Archaeological Institute, Washington, Connecticut.
- 1984 Regional Implications of the Templeton Site for Paleo-Indian Lithic Procurement and Utilization. *North American Archaeologist* 5(3):236-246.

Nicholas, G.P.

- 1991 Putting wetlands into perspective. *Man in the Northeast* 42:29-38r.

Pfeiffer, John

- 1986 Dill Farm Locus One: Early and Middle Archaic Components in Southern New England. *Bulletin of the Archaeological Society of Connecticut* 49:19-35.

Pollock, Stephen G. et.al.

- 1998 *Chert from the Munsungun Lake Formation (Maine) in Palaeoamerican Archaeological Sites in Northeastern North America: Recognition of its Occurrence and Distribution*. *Journal of Archaeological Science* (1999) 26, 269-293.

Ritchie, William A.

- 1969a *The Archaeology of Martha's Vineyard*. The Natural History Press. Garden City, New York.

- 1969b *The Archaeology of New York State*. The Natural History Press. Garden City, New York.

- 1971 The Archaic in New York. *New York State Archaeological Association Bulletin* 52:2-12.

- 1994 *The Archaeology of New York State, Revised Edition*. Purple Mountain Press, Fleischmanns, NY.

Robinson, Brian S.

- 1996 Archaic Period Burial Patterning in the Northeast. *The Review of Archaeology, Special Issue* 17(1):33-44.

Singer, Zachary L.

- 2017 The Paleoindian Occupation of Southern New England: Evaluating Sub-Regional Variation in Paleoindian Lifeways in the New England - Maritimes Region. Doctoral Dissertation, University of Connecticut.

Snow, Dean

- 1980 *The Archaeology of New England*. Academic Press New York.

Spiess, Arthur E., D. B. Wilson and J. Bradley

- 1998 Paleoindian Occupation in the New England-Maritimes Region: Beyond Cultural Ecology. *Archaeology of Eastern North America* 26:201-264.

Stark, Bruce P.

- 1976 Lyme Connecticut, From Founding to Independence. Printed by author.

Sullivan III, A.P.

- 1992 Investigating the Archaeological Consequences of Short-Duration Occupations. *American Antiquity* 57(1):99-115.

Thorson, R.M., and McWeeney, L.
n.d. Lake-Level Changes Near the Southeastern Laurentide Limit. Unpublished manuscript in possession of the authors.

Webb, T. III, P.J. Bartlein, S.P., and Anderson, K.H.
1993 Vegetation, Lake Levels, and Climate in Eastern North America for the Past 18,000 Years. In *Global Climates Since the Last Glacial Maximum*, 415-467.

Will, Richard T.
1998 Some Recent Paleoindian Finds from Maine. Paper presented March 15 at the 38th Northeastern Anthropological Association Meetings, Orono.

Archaeological Surveys

1985, An Archaeological Sensitivity Study of the Proposed Route II Corridor, also covers Salem, Montville and Waterford; NPS NADB #CT-80, CHPC no. 287

1988, Interim Report, Phase II Intensive Archaeological Survey, Sanitary Sewer System Project, CHPC no. 377

1989, An Archaeological Survey of Route II, also covers Salem, Montville, Waterford and New London, CHPC no. 411

1989, Revised Interim Report, Phase II Intensive Archaeological Survey, Sanitary Sewer System Project, CHPC no. 436

2002, Phase I Archaeological Reconnaissance Survey for Stone's Ranch, CHPC no. 1209

2003, Phase I Archaeological Survey Report of the Proposed Stone's Ranch Firehouse, CHPC no. 1251

2006, Historic Resource Evaluation, Phase I Archaeological Reconnaissance Survey, Phase II Intensive Archaeological Investigations, Route 82/85/11 Corridor, Salem, Montville, East Lyme and Waterford, 2 volumes, CHPC no. 1531

2007, Phase IB Cultural Resources Reconnaissance Survey of the Proposed Walnut Hill Chase Housing Subdivision located at the Intersection of Grassy Hill Road and Walnut Hill Road, CHPC no. 1554

2007, Phase IA Cultural Resources Assessment & Phase IB Cultural Resources Reconnaissance Survey of Proposed Sewer Lines and Associated Facilities in the Pine Grove Community, CHPC no. 1569

2007, Phase IA Cultural Resources Assessment Survey of the Proposed Orvedal Property Subdivision [located on Holmes Road], CHPC no. 1614

2008, Phase I Cultural Resources Reconnaissance Survey of Lot 123 of the Proposed Walnut Hill Chase Subdivision, CHPC no. 1631

2010, Phase I Archaeological Assessment Survey for Proposed Subdivision, Scott Road, CHPC no. 1832

Internet sources:

<https://www.ct.gov/deep>

<https://cteco.uconn.edu/viewers/index.htm>

<https://libguides.ctstatelibrary.org/hg/aerialphotos> (1965 aerials, RG 079:4 East Lyme: Keystone Aerial Surveys, Inc.)

www.magic.lib.uconn.edu

<https://websoilsurvey.nrcs.usda.gov>

Appendix A: Site photographs



Fig. 15 At Lot 1 facing west over Holmes Rd



Fig. 16 Lot 1 facing southward



Fig. 17 Lot 2 facing southward



Fig. 18 Lot 3 facing southward



Fig. 19 Lot 4 facing southward



Fig. 20 Facing southeast toward stone wall off Upper Walnut Hill Rd and Lot 4 western bound.



Fig. 21 Lot 5 facing east over existing path/road, clearly disturbed landscape



Fig. 22 Lot 5 facing northeast slightly off APE at beginning of path off Upper Walnut Hill Rd, rock and cobble from resulting from ground disturbance.

Appendix B Letters from OSA



March 3, 2023

Mr. Gary Goeschel
Director of Planning
108 Pennsylvania Ave
Niantic, CT 06357-1510

Re: Proposed Subdivision, Holmes Road, East Lyme

Dear Mr. Goeschel:

The Office of State Archaeology (OSA) reviewed the project plans for the proposed subdivision on Holmes Road in the town of East Lyme. The planned project includes development of a six-lot residential subdivision on approximately 12.4 acres along Holmes and Upper Walnut Hill roads. Four of the planned lots will be accessed from Holmes Road and two from Upper Walnut Hill Road. The property abuts open-space land owned by the East Lyme Land Trust. The land proposed for development is situated in an area of light residential development and is currently wooded. Development plans include division of the larger property into six lots, and construction of a single-family house, driveway, and associated utilities and infrastructure on each.

OSA examined state archaeological site files and reports, USDA soil maps, historic maps, LIDAR imagery, and aerial photographs to assess the archaeological sensitivity of the project area. The proposed development area is situated on Walnut Hill, just north of Cranberry Meadow Brook, and south of wetlands North of Holmes Road. Soils in the proposed development area primarily consist of stony Woodbridge and Canton and Charlton fine sandy loams, 0 to 8 percent slopes. The project area is located to the west of the former proposed Route 11 corridor. Archaeological surveys of this corridor identified several pre-colonial period Indigenous archaeological sites less than one mile from the project area. The previously identified sites cluster near wetlands, reflecting the importance of such landscapes to local Indigenous settlement patterns.

Given the proximity of Cranberry Meadow Brook and the wetlands to the north and south of the project area, the property is considered sensitive for archaeological resources. OSA recommends that a Phase IB archaeological reconnaissance survey be completed prior to the start of development activities. The survey should be conducted in accordance with State Historic Preservation Office standards summarized in the state's *Environmental Review Primer for Connecticut Archaeological Resources*, (<https://portal.ct.gov/-/media/DECD/Historic-Preservation/Environmental-Review-Primer-for-CTs-Archaeological-Resources.pdf?la=en>). A list of Cultural Resource Management firms trained to undertake such a survey is included with this letter. This survey would consist of an historical and environmental background review of the property to better document its past use and soil conditions, and a visual inspection of the property to assess the potential for intact soils and archaeological deposits, and the excavation of a limited number of archaeological shovel test pits to establish the presence or absence of archaeological remains within the project area. If artifacts or cultural features suggesting the potential presence of a significant archaeological resource are encountered, some additional testing may be required to establish the site's National Register eligibility. Should the finds be determined to be insignificant, no further work would be required. The results of the survey can be presented to my office as a condensed memorandum report for review.

OFFICE OF STATE ARCHAEOLOGY
CONNECTICUT STATE MUSEUM OF NATURAL HISTORY & DEPARTMENT OF ANTHROPOLOGY
1000 N. 204 WASHINGTON STREET
STORRS, CONNECTICUT 06269-1109
Sarah.Scottman@uconn.edu PHONE: 860.405.7004
(Fax: 860.405.7000)

cc: State Planning Board

Should you have any questions, feel free to contact me at sarah.sportman@uconn.edu or (860) 617-6884.

Sincerely,



Sarah P. Sportman, Ph.D.
Office of State Archaeology

Cc: Kristen Clarke, PE; Catherine Labadia and Cory Atkinson, CTSHPO

OFFICE OF STATE ARCHAEOLOGY
CONNECTICUT STATE MUSEUM OF NATURAL HISTORY & DEPARTMENT OF ANTHROPOLOGY
100NN 224 MANFIELD ROAD
STORRS, CONNECTICUT 06269-1178
Sarah.Sportman@uconn.edu phone: 860 617 6884
5786 40001 000



July 5, 2023

Mr. Gary Goeschel
Director of Planning
108 Pennsylvania Ave
Niantic, CT 06357-1510

CC: Dr. Sarah Holmes, Archaeological Consultant, Kristen Clarke, PE, Shelly Harney

Re: Proposed Nehantic Highlands Subdivision, Holmes Rd & Upper Walnut Hill Rd, East Lyme, CT

Dear Mr. Goeschel:

The Office of State Archaeology (OSA) reviewed the draft technical report for a Phase I Archaeological Reconnaissance Survey of the proposed subdivision project at Holmes and Upper Walnut Hill roads in the town of East Lyme, prepared and submitted to OSA by Sarah Holmes, Ph.D. in July 2023. The wooded, 12.4-acre tract will be subdivided into five house lots, with acreage in each parcel set aside as conservation easements and three small parcels along Holmes Road and Upper Walnut Hill Road will be deeded to the East Lyme Land Trust.

The archaeological survey focused on subsurface testing the access roads into each house lot, with a total of 30 subsurface test pits (STPs) placed at 15-meter intervals. The soils throughout the APE contained large cobbles and rock with some disturbed soils identified by the presence of dense undergrowth and uneven surface terrain, likely the result of selective clearing of the property in 2006-2007. The archaeological testing resulted in the recovery of a single artifact, a sherd of relatively modern white glazed earthenware, which was found just below the surface. No evidence of pre-colonial Indigenous cultural materials was recovered and no evidence of historic or pre-colonial archaeological features was encountered. Based on the results of the Phase 1 survey, Dr. Holmes recommended that no additional archaeological testing is necessary.

As the subsurface archaeological investigation did not identify any significant archaeological sites or deposits, OSA concurs with Dr. Holmes's recommendation that no additional archaeological work is merited within the project area, as it is unlikely to yield significant information about the past. The project may proceed as planned.

If you have any questions please feel free to contact me by phone at 860-617-6884 or by email at sarah.sportman@uconn.edu.

Sincerely,

Sarah P. Sportman, Ph.D.
State Archaeologist

OFFICE OF STATE ARCHAEOLOGY
CONNECTICUT STATE MUSEUM OF NATURAL HISTORY & DEPARTMENT OF ANTHROPOLOGY
UCONN, 354 WINFIELD ROAD
STORRS, CONNECTICUT 06269-1116
Sarah.Sportman@uconn.edu PHONE: 860/617-6884
OSA.UCONN.EDU

06-000000-00000000

Appendix C: Map of proposed Nehantic Highlands Subdivision - James Bernardo Land Surveying, LLC

