# <u>Exhibit J</u>

Cultural Resources Review

# Connecticut

Department of Economic and Community Development

State Historic Preservation Office

November 17, 2021

Mr. David R. George Heritage Consultants PO Box 310249 Newington, CT 06131

> Subject: Phase IA and Phase IB Cultural Resource Reconnaissance Survey Uncasville Solar 486 Fitch Hill Road Montville (Uncasville), Connecticut ENV-22-0372

Dear Mr. George:

The State Historic Preservation Office (SHPO) has reviewed the cultural resource reconnaissance surveys prepared by Heritage Consultants, LLC (Heritage), dated August 2021. The proposed activities are under the jurisdiction of the Connecticut Siting Council and are subject to review by this office pursuant to the Connecticut Environmental Policy Act (CEPA). The proposed undertaking includes the construction of a solar facility, which is to occupy an approximately 9.87 acre project area. The parcel is located to the east of Fitch Hill Road, and to the north of Falls Brook, with access to be from Fitch Hill Road. The submitted report is well-written, comprehensive, and meet the standards set forth in the *Environmental Review Primer for Connecticut's Archaeological Resources*.

Five previously recorded archaeological sites are located within 1 mile of the project area; however, none will be impacted by the proposed project. No properties listed or formally determined eligible for listing on either the State or National Register are located within one mile of the project area. Three stone wall segments, as well as one stone cluster, were identified within the project parcel; however, neither the stone wall segments nor the stone cluster can be attributed to a specific type, function or time period. The stone cluster will not be directly impacted by construction of the facility.

Following the pedestrian survey, it was determined that the majority of the project area was characterized as having low slopes, well-drained soils, and proximity to a fresh water source,

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Falls Brook, and therefore, retained a moderate to high potential to contain intact archaeological deposits. A Phase IB reconnaissance survey was recommended and completed.

Phase IB of the reconnaissance survey consisted of subsurface testing of areas deemed to have moderate to high archaeological sensitivity during Phase IA, and that would be subject to ground disturbing impacts as part of the proposed undertaking. A total of 208 of 209 planned shovel tests were excavated successfully throughout the proposed work area; an additional 10 delineation shovel tests were excavated throughout the project area. The reconnaissance survey resulted in the identification of two loci: Locus 1 and Locus 2. Based on low density of artifacts and lack of cultural features, neither of the loci possesses sufficient research potential to be eligible for listing on the National Register of Historic Places.

As a result of the information submitted, SHPO concurs with the findings of the report that additional archeological investigations of the project areas are not warranted and that <u>no historic</u> <u>properties will be affected</u> by the proposed activities. However, please be advised that if construction plans change to include previously uninvestigated/undisturbed areas, this office should be contacted for additional consultation.

This office appreciates the opportunity to review and comment upon this project. For additional information, please contact Marena Wisniewski, Environmental Reviewer, at (860) 500-2357 or marena.wisniewski@ct.gov.

Sincerely,

Jonathan hearey

Jonathan Kinney Deputy State Historic Preservation Officer

State Historic Preservation Office

450 Columbus Boulevard, Suite 5 | Hartford, CT 06103 | P: 860.500.2300 | ct.gov/historic-preservation An Affirmative Action/Equal Opportunity Employer An Equal Opportunity Lender PHASE IA CULTURAL RESOURCES ASSESSMENT SURVEY OF THE PROPOSED NORTH SILVERBROOK SOLAR PROJECT AT 486 FITCH HILL ROAD IN UNCASVILLE, CONNECTICUT

**PREPARED FOR:** 



PREPARED BY:



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# Abstract

This report presents the results of a Phase IA cultural resources assessment survey for the proposed North Silverbrook Solar Project at 486 Fitch Hill Road in Uncasville, Connecticut. The study area associated with this facility encompasses approximately 9.87 acres of land located to the east of Fitch Hill Road and to the north of Falls Brook. The current investigation consisted of: 1) preparation of an overview of the region's prehistory, history, and natural setting; 2) a literature search to identify and discuss previously recorded cultural resources in the region; 3) a review of readily available historical maps and aerial imagery depicting the project area to identify potential historical resources and/or areas of past disturbance; and 4) pedestrian survey and photo-documentation of the project area to determine their archaeological sensitivity. Some portions of the project area are characterized by open fields showing signs of plowing, however, intact B-Horizon deposits may still be in place. The low slopes of the project area and the fact that Falls Brook runs past its southern border suggest it would have been a desirable area for Native American use and/or occupation. Historical resources related to the project area's agricultural use also may exist as well. Based on the available data it is the professional opinion of Heritage that the project area retains moderate/high sensitivity for yielding archaeological deposits.

# TABLE OF CONTENTS

CHAPTER I: INTRODUCTION	1
Project Description and Methods Overview	1
Project Results and Management Recommendations Overview	1
Project Personnel	2
CHAPTER II: NATURAL SETTING	3
Introduction	
Ecoregions of Connecticut	
Southeast Hills Ecoregion	3
Hydrology in the Vicinity of the Project Area	
Soils Comprising the Project Area	
Summary	5
Chapter III: Prehistoric Setting	6
Introduction	6
Paleo-Indian Period (12,000 to 10,000 Before Present [B.P.])	6
Archaic Period (10,000 to 2,700 B.P.)	7
Early Archaic Period (10,000 to 8,000 B.P.)	7
Middle Archaic Period (8,000 to 6,000 B.P.)	7
Late Archaic Period (6,000 to 3,700 B.P.)	8
Terminal Archaic Period (3,700 to 2,700 B.P.)	8
Woodland Period (2,700 to 350 B.P.)	9
Early Woodland Period (ca., 2,700 to 2,000 B.P.)	9
Middle Woodland Period (2,000 to 1,200 B.P.)	
Late Woodland Period (ca., 1,200 to 350 B.P.)	
Summary of Connecticut Prehistory	
CHAPTER IV: HISTORICAL OVERVIEW	
Introduction	
Native American History Eri	or! Bookmark not defined.
History of the Town of Montville	
CHAPTER V: PREVIOUS INVESTIGATIONS	15
Introduction	
Previously Recorded Archaeological Sites and National/State Register of F	listoric Places
Properties/Districts in the Vicinity of the Project Area	
Conclusion	
CHAPTER VI: METHODS	
Introduction	
Research Framework	
Archival Research & Literature Review	
Field Methodology and Data Synthesis	

CHAPTER VII: RESULTS OF THE INVESTIGATION & MANAGEMENT RECOMMENDATIONS	
Introduction	
Results of Phase IA Survey	
Overall Sensitivity of the Proposed Project Area	
Project Summary	20
BIBLIOGRAPHY	21

# LIST OF FIGURES

- Figure 1. Excerpt from a USGS 7.5' series topographic quadrangle image showing the location of the project area in Uncasville, Connecticut.
- Figure 2. Copy of the project plans for the proposed solar center in Uncasville, Connecticut.
- Figure 3. Map of soils located in the vicinity of the project area in Uncasville, Connecticut.
- Figure 4. Excerpt from an 1854 historical map showing the location of the project area in Uncasville, Connecticut.
- Figure 5. Excerpt from an 1868 historical map showing the location of the project area in Uncasville, Connecticut.
- Figure 6. Excerpt from a 1934 aerial photograph showing the location of the project area in Uncasville, Connecticut.
- Figure 7. Excerpt from a 1951 aerial photograph showing the location of the project area in Uncasville, Connecticut.
- Figure 8. Excerpt from a 2019 aerial photograph showing the location of the project area in Uncasville, Connecticut.
- Figure 9. Digital map showing the location of previously identified archaeological sites in the vicinity of the project area in Uncasville, Connecticut.
- Figure 10. Digital map depicting the locations of previously identified National/State Register of Historic Places properties in the vicinity of the project area in Uncasville, Connecticut.
- Figure 11. Aerial image showing the locations and directions of photos taken by Heritage personnel during Phase IA survey of the project area in Uncasville, Connecticut.

# LIST OF PHOTOS

- Photo 1. Overview of the project area facing east from the western end of the proposed access road.
- Photo 2. Overview of the project area facing east along the proposed access road.
- Photo 3. Overview of the project area facing west from the center of the proposed access road.
- Photo 4. Overview of the project area facing northeast from the center of the proposed access road.
- Photo 5. Overview of the project area facing northeast from the eastern section of the proposed access road.
- Photo 6. Overview of the project area facing east from the western boundary, where it connects to the proposed access road.
- Photo 7. Overview of the project area facing north from the center of the western boundary.
- Photo 8. Overview of the project area facing south from the northern boundary.
- Photo 9. Overview of the project area facing west from the eastern boundary.
- Photo 10. Overview of the project area facing northeast from the southern boundary.
- Photo 11. Overview of the project area facing northwest from the southern boundary.
- Photo 12. Overview of the project area facing north from the center.
- Photo 13. Overview of the project area facing east from the center.
- Photo 14. Overview of the project area facing south from the center.
- Photo 15. Overview of the project area facing west from the center.

# CHAPTER I INTRODUCTION

This report presents the results of a Phase IA cultural resources assessment survey of the proposed North Silverbrook Solar Project at 486 Fitch Hill Road in Uncasville, Connecticut (Figures 1 and 2). All-Points Technology Corporation (All-Points) requested that Heritage Consultants, LLC (Heritage) complete the assessment survey as part of the planning process for the proposed solar facility. The study area associated with this facility encompasses approximately 9.87 acres of land situated to the east of Fitch Hill Road and to the north of Falls Brook within what the Town of Montville refers to as Parcel 47-51, which is accessed from the east side of Fitch Hill Road. The proposed access road associated with the facility extends past a historical farmstead to the east through agricultural land, then northeast into a forested area where the proposed solar facility will be constructed. The proposed solar facility project area is surrounded on all sides by deciduous forest. The region in general is a sparsely developed residential area. Heritage completed this investigation on behalf of All-Points in May of 2021. All work associated with this project was performed in accordance with the *Environmental Review Primer for Connecticut's Archaeological Resources* (Poirier 1987) promulgated by the Connecticut State Historic Preservation Office (CT-SHPO).

# **Project Description and Methods Overview**

As mentioned above, the proposed solar project will be located to the east of Fitch Hill Road and to the north of Falls Brook within Parcel 47-51 in Uncasville, Montville, Connecticut. The project area is currently characterized by a mixture of deciduous forest and agricultural fields to the southwest through which the proposed access road will extend. Elevations throughout the project area range from approximately 73.2 to 88.4 m (240 to 290 ft) NGVD. The proposed solar facility will contain approximately 5,300 solar panel modules in rows spaced 4.6 m (15 ft) apart throughout the project area, all of which will be surrounded by a chain link fence. Metering equipment will be installed off the western boundary of the solar array and to the south of the proposed access road. This access road will extend eastward toward Fitch Hill Road and it will be a gravel thoroughfare. An overhead electrical line with utility poles will connect the metering equipment to the existing electrical grid along Fitch Hill Road. Finally, trees will be cleared for the proposed access road, overhead interconnect, and solar array.

This Phase IA cultural resources assessment survey consisted of the completion of the following tasks: 1) a contextual overview of the region's prehistory, history, and natural setting (e.g., soils, ecology, hydrology, etc.); 2) a literature search to identify and discuss previously completed cultural resources surveys and previously recorded cultural resources in the region encompassing the project area; 3) a review of readily available historical maps and aerial imagery depicting the project area in order to identify potential historical resources and/or areas of past disturbance; and 4) pedestrian survey and photo-documentation of the project area in order to determine their archaeological sensitivity.

#### Project Results and Management Recommendations Overview

The review of historical maps and aerial images of the project area and files maintained by the CT-SHPO resulted in the identification of five previously identified archaeological sites located within 1.6 km (1 mi) mile of the project area. No National or State Register of Historic Places properties were identified. The previously identified archaeological sites are discussed in detail in Chapter V. In addition to the cultural resources discussed above, Heritage combined data from the historical map and aerial image

analysis, as well as pedestrian survey, to stratify the project area into zones of no/low and moderate/high archaeological sensitivity.

Based on the data recovered during the background review and subsequent pedestrian survey effort, it is the professional opinion of Heritage that all 9.87 acres of the project area retain moderate/high sensitivity for yielding archaeological deposits. The low slopes of the project area and the fact that Falls Brook runs past its southern border suggest it would have been a desirable area for Native American use. Historical resources related to the project area's agricultural use may exist at this location as well.

#### **Project Personnel**

Key personnel for this project included Mr. David R. George, M.A., R.P.A, (Principal Investigator), Ms. Kelsey Tuller, M.A., (Field Director), Ms. Barbara Sternal, M.A., (Historian), and Mr. Jeffrey Brown, M.A., (GIS Specialist). Ms. Elizabeth Correia, M.A., compiled this report under the supervision of Mr. George.

# CHAPTER II NATURAL SETTING

#### Introduction

This chapter provides a brief overview of the natural setting of the region containing the project area in Uncasville, Connecticut. Previous archaeological research has documented that specific environmental factors can be associated with both prehistoric and historical period site selection. These include general ecological conditions, as well as types of fresh water sources present, degree of slopes, and soils situated within a given project area. The remainder of this chapter provides a brief overview of the ecology, hydrological resources, and soils present within the project area and the larger region in general.

#### **Ecoregions of Connecticut**

Throughout the Pleistocene and Holocene Periods, Connecticut has undergone numerous environmental changes. Variations in climate, geology, and physiography have led to the "regionalization" of Connecticut's modern environment. It is clear, for example, that the northwestern portion of the state has different natural characteristics than the coastline. Recognizing this fact, Dowhan and Craig (1976), as part of their study of the distribution of rare and endangered species in Connecticut, subdivided the state into various ecoregions. Dowhan and Craig (1976:27) defined an ecoregion as:

"an area characterized by a distinctive pattern of landscapes and regional climate as expressed by the vegetation composition and pattern, and the presence or absence of certain indicator species and species groups. Each ecoregion has a similar interrelationship between landforms, local climate, soil profiles, and plant and animal communities. Furthermore, the pattern of development of plant communities (chronosequences and toposequences) and of soil profile is similar in similar physiographic sites. Ecoregions are thus natural divisions of land, climate, and biota."

Dowhan and Craig defined nine major ecoregions for the State of Connecticut. They are based on regional diversity in plant and animal indicator species (Dowhan and Craig 1976). Only one of the ecoregions is germane to the current investigation: Southeast Hills ecoregion. A summary of this ecoregion is presented below. It is followed by a discussion of the hydrology and soils found in and adjacent to the project area.

#### Southeast Hills Ecoregion

The Southeast Hills ecoregion consists of "coastal uplands, lying within 25 miles of Long Island Sound, characterized by low, rolling to locally rugged hills of moderate elevation, broad areas of upland, and local areas of steep and rugged topography" (Dowhan and Craig 1976). Elevations in the Southeast Hills ecoregion generally range from 75.7 to 227.2 m (250 to 750 ft) above sea level (Dowhan and Craig 1976). The bedrock of the region is composed of schists and gneisses deposited during the Paleozoic. Soils in the region have developed on top of glacial till in upland locales, and on top of stratified deposits of sand, gravel, and silt in the local valleys and upland areas (Dowhan and Craig 1976). Freshwater sources located in the region containing the project area include Williams Pond, Trent Pond, Salmon River, Nipsic Brook, and Wildcat Brook, as well as other unnamed streams, ponds and wetland areas.

#### Hydrology in the Vicinity of the Project Area

The project area is situated within a region that contains several sources of freshwater, including Falls Brook just to the south of the project area boundary, Stony Brook, Wheeler Pond, Oxoboxo Lake, Rockland

Pond, Oxoboxo Brook, Picker Pond, and the Thames River, as well as unnamed streams, ponds, and wetlands. These freshwater sources may have served as resource extraction areas for Native American and historical populations. Previously completed archaeological investigations in Connecticut have demonstrated that streams, rivers, and wetlands were focal points for prehistoric occupations because they provided access to transportation routes, sources of freshwater, and abundant faunal and floral resources.

## Soils Comprising the Project Area

Soil formation is the direct result of the interaction of many variables, including climate, vegetation, parent material, time, and organisms present (Gerrard 1981). Once archaeological deposits are buried within the soil, they are subject to various diagenic and taphonomic processes. Different classes of artifacts may be preferentially protected, or unaffected by these processes, whereas others may deteriorate rapidly. Cyclical wetting and drying, freezing, and thawing, and compression can accelerate chemically and mechanically the decay processes for animal bones, shells, lithics, ceramics, and plant remains. Lithic and ceramic artifacts are largely unaffected by soil pH, whereas animal bones and shells decay more quickly in acidic soils. In contrast, acidic soils enhance the preservation of charred plant remains.

A review of the soils within the project area is presented below. The study area is characterized by the presence of two major soil types: the Haven and Enfield series (32) and the Narragansett series (68) (Figure 3). Generally speaking, the soils identified within the project area are very deep, well drained loams and are the types of soils that are typically correlated with prehistoric and historical use and occupation. Descriptive profiles for each soil type are presented below; they were gathered from the National Resources Conservation Service.

# Haven and Enfield Series (Soil Code 32)

The Haven series consists of very deep, well drained soils formed in loamy over sandy and gravelly outwash. They are nearly level through moderately sloping soils on outwash plains, valley trains, terraces, and water-sorted moraine deposits. Saturated hydraulic conductivity is moderately high or high in the mineral solum and very high in the substratum. Slope ranges from 0 through 15 percent. A typical profile associated with Haven soils is as follows: Oi--0 to 2 inches (0 to 5 centimeters); slightly decomposed plant material derived from loose pine needles, leaves and twigs; Oa--2 to 3 inches (5 to 8 centimeters); black (5YR 2/1) highly decomposed plant material; A--3 to 6 inches (8 to 15 centimeters); dark grayish brown (10YR 4/2) loam; weak fine and medium granular structure; friable; many fine and coarse roots; very strongly acid; abrupt smooth boundary; **Bw1**--6 to 13 inches (15 to 33 centimeters); brown (7.5YR 4/4) loam; weak fine and medium subangular blocky structure; friable; common fine roots; many fine pores; very strongly acid; clear wavy boundary; Bw2--13 to 22 inches (33 to 56 centimeters); strong brown (7.5YR 5/6) loam; weak fine and medium subangular blocky structure; friable; common fine roots; many fine pores; 5 percent fine gravel; very strongly acid; gradual wavy boundary; BC--22 to 31 inches (56 to 79 centimeters); yellowish brown (10YR 5/6) gravelly loam; weak medium and fine subangular blocky structure; friable; few fine roots; common fine pores; 20 percent fine gravel; very strongly acid; clear wavy boundary; and 2C--31 to 65 inches (79 to 165 centimeters); yellowish brown (10YR 5/4) to brownish yellow (10YR 6/6) stratified gravelly sand; single grained; loose; 30 percent fine gravel; very strongly acid.

The Enfield series consists of very deep, well drained loamy soils formed in a silty mantle overlying glacial outwash. They are nearly level to sloping soils on outwash plains and terraces. Slope ranges from 0 to 15 percent. A typical profile associated with Enfield soils is as follows: **Ap**--0 to 7 inches; dark grayish

brown (10YR 4/2) silt loam; moderate fine granular structure; friable; many very fine and fine roots; 5 percent fine gravel; strongly acid; abrupt smooth boundary; **Bw1**--7 to 16 inches; strong brown (7.5YR 5/6) silt loam; weak medium subangular blocky structure; friable; common very fine and many fine roots; 5 percent fine gravel; strongly acid; clear wavy boundary; **Bw2**--16 to 25 inches; light olive brown (2.5Y 5/4) silt loam; weak medium subangular blocky structure; friable, few very fine and common fine roots; 5 percent fine gravel; strongly acid; abrupt wavy boundary; and **2C**--25 to 60 inches; brown (10YR 5/3) very gravelly sand; single grain; loose; stratified; 45 percent gravel and 5 percent cobbles; strongly acid.

## Narragansett Series (Soil Code 68)

The Narragansett series consists of very deep, well drained loamy soils formed in a mantle of mediumtextured deposits overlying till. They are nearly level to moderately steep soils on till plains, low ridges and hills. Slope ranges from 0 to 25 percent. A typical profile associated with Narragansett soils is as follows: **Ap**--0 to 6 inches; dark brown (10YR 3/3) silt loam; weak medium granular structure; very friable; common medium roots; very strongly acid; clear wavy boundary; **Bw1**--6 to 15 inches; dark yellowish brown (10YR 4/6) silt loam; weak medium subangular blocky structure; very friable; common medium roots; very strongly acid; gradual wavy boundary; **Bw2**--15 to 24 inches; yellowish brown (10YR 5/6) silt loam; weak medium subangular blocky structure; very friable; common medium roots; strongly acid; clear wavy boundary; **Bw3**--24 to 28 inches; yellowish brown (10YR 5/6) gravelly silt loam; weak medium subangular blocky structure; very friable; few fine roots; 15 percent gravel; strongly acid; clear wavy boundary; and **2C**--28 to 60 inches; light olive brown (2.5Y 5/4) very gravelly loamy coarse sand; single grain; loose; 45 percent gravel and cobbles; strongly acid.

## Summary

The natural setting of the area containing the proposed solar facility is common throughout the Southeast Hills ecoregion. The major river within this ecoregion is the Thames River, which has numerous smaller tributaries. Moderate slopes dominate the region, and the soils are loams. In general, the project region was well suited to Native American occupation throughout the prehistoric era. This portion of Uncasville was also used after Colonial settlement for agricultural land, as evidenced by the presence of agricultural fields throughout the region; thus, archaeological deposits dating from the prehistoric and historical era may be expected near or within the proposed project area.

# CHAPTER III PREHISTORIC SETTING

#### Introduction

Prior to the late 1970s and early 1980s, very few systematic archaeological surveys of large portions of the state of Connecticut had been undertaken. Rather, the prehistory of the region was studied at the site level. Sites chosen for excavation were highly visible and they were in such areas as the coastal zone, e.g., shell middens, and Connecticut River Valley. As a result, a skewed interpretation of the prehistory of Connecticut was developed. It was suggested that the upland portions of the state, i.e., the northeastern and northwestern hills ecoregions, were little used and rarely occupied by prehistoric Native Americans, while the coastal zone, i.e., the eastern and western coastal and the southeastern and southwestern hills ecoregions, were the focus of settlements and exploitation in the prehistoric era. This interpretation remained unchallenged until the 1970s and 1980s when several town-wide and regional archaeological studies were completed. These investigations led to the creation of several archaeological phases that subsequently were applied to understand the prehistory of Connecticut. The remainder of this chapter provides an overview of the prehistoric setting of the region encompassing the project area.

#### Paleo-Indian Period (12,000 to 10,000 Before Present [B.P.])

The earliest inhabitants of the area encompassing the State of Connecticut, who have been referred to as Paleo-Indians, arrived in the area by ca., 12,000 B.P. (Gramly and Funk 1990; Snow 1980). Due to the presence of large Pleistocene mammals at that time and the ubiquity of large fluted projectile points in archaeological deposits of this age, Paleo-Indians often have been described as big-game hunters (Ritchie and Funk 1973; Snow 1980); however, as discussed below, it is more likely that they hunted a broad spectrum of animals. While there have been numerous surface finds of Paleo-Indian projectile points throughout the State of Connecticut, only two sites, the Templeton Site (6-LF-21) in Washington, Connecticut, and the Hidden Creek Site (72-163) in Ledyard, Connecticut, have been studied in detail and dated using the radiocarbon method (Jones 1997; Moeller 1980). The Templeton Site (6-LF-21) is in Washington, Connecticut and was occupied between 10,490 and 9,890 years ago (Moeller 1980). In addition to a single large and two small fluted points, the Templeton Site produced a stone tool assemblage consisting of gravers, drills, core fragments, scrapers, and channel flakes, which indicates that the full range of stone tool production and maintenance took place at the site (Moeller 1980). Moreover, the use of both local and non-local raw materials was documented in the recovered tool assemblage, suggesting that not only did the site's occupants spend some time in the area, but they also had access to distant stone sources, the use of which likely occurred during movement from region to region.

The only other Paleo-Indian site studied in detail in Connecticut is the Hidden Creek Site (72-163) (Jones 1997). The Hidden Creek Site is situated on the southeastern margin of the Great Cedar Swamp on the Mashantucket Pequot Reservation in Ledyard, Connecticut. While excavation of the Hidden Creek Site produced evidence of Terminal Archaic and Woodland Period components (see below) in the upper soil horizons, the lower levels of the site yielded artifacts dating from the Paleo-Indian era. Recovered Paleo-Indian artifacts included broken bifaces, side-scrapers, a fluted preform, gravers, and end-scrapers. Based on the types and number of tools present, Jones (1997:77) has hypothesized that the Hidden Creek Site represented a short-term occupation, and that separate stone tool reduction and rejuvenation areas were present.

While archaeological evidence for Paleo-Indian occupation is scarce in Connecticut, it, combined with data from the West Athens Road and King's Road Site in the Hudson drainage and the Davis and Potts Sites in northern New York, supports the hypothesis that there was human occupation of the area not long after ca. 12,000 B.P. (Snow 1980). Further, site types currently known suggest that the Paleo-Indian settlement pattern was characterized by a high degree of mobility, with groups moving from region to region in search of seasonally abundant food resources, as well as for the procurement of high-quality raw materials from which to fashion stone tools.

# Archaic Period (10,000 to 2,700 B.P.)

The Archaic Period, which succeeded the Paleo-Indian Period, began by ca., 10,000 B.P. (Ritchie and Funk 1973; Snow 1980), and it has been divided into three subperiods: Early Archaic (10,000 to 8,000 B.P.), Middle Archaic (8,000 to 6,000 B.P.), and Late Archaic (6,000 to 3,400 B.P.). These periods were devised to describe all non-farming, non-ceramic producing populations in the area. Regional archeologists recently have recognized a final "transitional" Archaic Period, the Terminal Archaic Period (3,400-2,700 B.P.), which was meant to describe those groups that existed just prior to the onset of the Woodland Period and the widespread adoption of ceramics into the toolkit (Snow 1980; McBride 1984; Pfeiffer 1984, 1990; Witthoft 1949, 1953).

# Early Archaic Period (10,000 to 8,000 B.P.)

To date, very few Early Archaic sites have been identified in southern New England. As a result, researchers such as Fitting (1968) and Ritchie (1969), have suggested a lack of these sites likely is tied to cultural discontinuity between the Early Archaic and preceding Paleo-Indian Period, as well as a population decrease from earlier times. However, with continued identification of Early Archaic sites in the region, and the recognition of the problems of preservation, it is difficult to maintain the discontinuity hypothesis (Curran and Dincauze 1977; Snow 1980).

Like their Paleo-Indian predecessors, Early Archaic sites tend to be very small and produce few artifacts, most of which are not temporally diagnostic. While Early Archaic sites in other portions of the United States are represented by projectile points of the Kirk series (Ritchie and Funk 1973) and by Kanawha types (Coe 1964), sites of this age in southern New England are identified on the basis of a series of ill-defined bifurcate-based projectile points. These projectile points are identified by the presence of their characteristic bifurcated base, and they generally are made from high quality raw materials. Moreover, finds of these projectile points have rarely been in stratified contexts. Rather, they occur commonly either as surface expressions or intermixed with artifacts representative of later periods. Early Archaic occupations, such as the Dill Farm Site and Sites 6LF64 and 6LF70 in Litchfield County, are represented by camps that were relocated periodically to take advantage of seasonally available resources (McBride 1984; Pfeiffer 1986). In this sense, a foraging type of settlement pattern was employed during the Early Archaic Period.

# Middle Archaic Period (8,000 to 6,000 B.P.)

By the onset of the Middle Archaic Period, essentially modern deciduous forests had developed in the region (Davis 1969). It is at this time that increased numbers and types of sites are noted in Connecticut (McBride 1984). The most well-known Middle Archaic site in New England is the Neville Site, which is in Manchester, New Hampshire and studied by Dincauze (1976). Careful analysis of the Neville Site indicated that the Middle Archaic occupation dated from between ca., 7,700 and 6,000 years ago. In fact, Dincauze (1976) obtained several radiocarbon dates from the Middle Archaic component of the Neville Site. The dates, associated with the then-newly named Neville type projectile point, ranged from 7,740<u>+</u>280 and 7,015<u>+</u>160 B.P. (Dincauze 1976).

In addition to Neville points, Dincauze (1976) described two other projectile points styles that are attributed to the Middle Archaic Period: Stark and Merrimac projectile points. While no absolute dates were recovered from deposits that yielded Stark points, the Merrimac type dated from 5,910<u>+</u>180 B.P. Dincauze argued that both the Neville and later Merrimac and Stark occupations were established to take advantage of the excellent fishing that the falls situated adjacent to the site area would have afforded Native American groups. Thus, based on the available archaeological evidence, the Middle Archaic Period is characterized by continued increases in diversification of tool types and resources exploited, as well as by sophisticated changes in the settlement pattern to include different site types, including both base camps and task-specific sites (McBride 1984:96)

## Late Archaic Period (6,000 to 3,700 B.P.)

The Late Archaic Period in southern New England is divided into two major cultural traditions that appear to have coexisted. They include the Laurentian and Narrow-Stemmed Traditions (Funk 1976; McBride 1984; Ritchie 1969a and b). Artifacts assigned to the Laurentian Tradition include ground stone axes, adzes, gouges, ulus (semi-lunar knives), pestles, atlatl weights, and scrapers. The diagnostic projectile point forms of this time period in southern New England include the Brewerton Eared-Notched, Brewerton Eared and Brewerton Side-Notched varieties (McBride 1984; Ritchie 1969a; Thompson 1969). In general, the stone tool assemblage of the Laurentian Tradition is characterized by flint, felsite, rhyolite, and quartzite, while quartz was largely avoided for stone tool production.

In terms of settlement and subsistence patterns, archaeological evidence in southern New England suggests that Laurentian Tradition populations consisted of groups of mobile hunter-gatherers. While a few large Laurentian Tradition occupations have been studied, sites of this age generally encompass less than 500 m<sup>2</sup> (5,383 ft<sup>2</sup>). These base camps reflect frequent movements by small groups of people in search of seasonally abundant resources. The overall settlement pattern of the Laurentian Tradition was dispersed in nature, with base camps located in a wide range of microenvironments, including riverine as well as upland zones (McBride 1978, 1984:252). Finally, subsistence strategies of Laurentian Tradition focused on hunting and gathering of wild plants and animals from multiple ecozones.

The second Late Archaic tradition, known as the Narrow-Stemmed Tradition, is unlike the Laurentian Tradition, and it likely represents a different cultural adaptation. The Narrow-Stemmed tradition is recognized by the presence of quartz and quartzite narrow stemmed projectile points, triangular quartz Squibnocket projectile points, and a bipolar lithic reduction strategy (McBride 1984). Other tools found in Narrow-Stemmed Tradition artifact assemblages include choppers, adzes, pestles, antler and bone projectile points, harpoons, awls, and notched atlatl weights. Many of these tools, notably the projectile points and pestles, indicate a subsistence pattern dominated by hunting and fishing, as well the collection of a wide range of plant foods (McBride 1984; Snow 1980:228).

# Terminal Archaic Period (3,700 to 2,700 B.P.)

The Terminal Archaic Period, which lasted from ca., 3,700 to 2,700 BP, is perhaps the most interesting, yet confusing of the Archaic Periods in southern New England prehistory. Originally termed the "Transitional Archaic" by Witthoft (1953) and recognized by the introduction of technological innovations, e.g., broadspear projectile points and soapstone bowls, the Terminal Archaic has long posed problems for regional archeologists. While the Narrow-Stemmed Tradition persisted through the Terminal Archaic and into the Early Woodland Period, the Terminal Archaic is coeval with what appears to be a different technological adaptation, the Susquehanna Tradition (McBride 1984; Ritchie 1969b). The Susquehanna Tradition is recognized in southern New England by the presence of a new stone tool industry that was based on the use of high-quality raw materials for stone tool production and a

settlement pattern different from the "coeval" Narrow-Stemmed Tradition.

The Susquehanna Tradition is based on the classification of several Broadspear projectile point types and associated artifacts. There are several local sequences within the tradition, and they are based on projectile point type chronology. Temporally diagnostic projectile points of these sequences include the Snook Kill, Susquehanna Broadspear, Mansion Inn, and Orient Fishtail types (Lavin 1984; McBride 1984; Pfeiffer 1984). The initial portion of the Terminal Archaic Period (ca., 3,700-3,200 BP) is characterized by the presence of Snook Kill and Susquehanna Broadspear projectile points, while the latter Terminal Archaic (3,200-2,700 BP) is distinguished by the use of Orient Fishtail projectile points (McBride 1984:119; Ritchie 1971).

In addition, it was during the late Terminal Archaic Period that interior cord marked, grit tempered, thick walled ceramics with conoidal (pointed) bases made their initial appearance in the Native American toolkit. These are the first ceramics in the region, and they are named Vinette I (Ritchie 1969a; Snow 1980:242); this type of ceramic vessel appears with much more frequency during the ensuing Early Woodland Period. In addition, the adoption and widespread use of soapstone bowls, as well as the implementation of subterranean storage, suggests that Terminal Archaic groups were characterized by reduced mobility and longer-term use of established occupation sites (Snow 1980:250).

Finally, while settlement patterns appeared to have changed, Terminal Archaic subsistence patterns were analogous to earlier patterns. The subsistence pattern still was diffuse in nature, and it was scheduled carefully. Typical food remains recovered from sites of this period consist of fragments of white-tailed deer, beaver, turtle, fish, and various small mammals. Botanical remains recovered from the site area consisted of *Chenopodium* sp., hickory, butternut, and walnut (Pagoulatos 1988:81). Such diversity in food remains suggests at least minimal use of a wide range of microenvironments for subsistence purposes.

# Woodland Period (2,700 to 350 B.P.)

Traditionally, the advent of the Woodland Period in southern New England has been associated with the introduction of pottery; however, as mentioned above, early dates associated with pottery now suggest the presence of Vinette I ceramics appeared toward the end of the preceding Terminal Archaic Period (Ritchie 1969a; McBride 1984). Like the Archaic Period, the Woodland Period has been divided into three subperiods: Early, Middle, and Late Woodland. The various subperiods are discussed below.

# Early Woodland Period (ca., 2,700 to 2,000 B.P.)

The Early Woodland Period of the northeastern United States dates from ca., 2,700 to 2,000 B.P., and it has been thought to have been characterized by the advent of farming, the initial use of ceramic vessels, and increasingly complex burial ceremonialism (Griffin 1967; Ritchie 1969a and 1969b; Snow 1980). In the Northeast, the earliest ceramics of the Early Woodland Period are thick walled, cord marked on both the interior and exterior, and possess grit temper.

Careful archaeological investigations of Early Woodland sites in southern New England have resulted in the recovery of narrow stemmed projectile points in association with ceramic sherds and subsistence remains, including specimens of white-tailed deer, soft and hard-shell clams, and oyster shells (Lavin and Salwen: 1983; McBride 1984:296-297; Pope 1952). McBride (1984) has argued that the combination of the subsistence remains and the recognition of multiple superimposed cultural features at various sites indicates that Early Woodland Period settlement patterns were characterized by multiple re-use of the same sites on a seasonal basis by small co-residential groups.

## Middle Woodland Period (2,000 to 1,200 B.P.)

The Middle Woodland Period is marked by an increase in the number of ceramic types and forms utilized (Lizee 1994a), as well as an increase in the amount of exotic lithic raw material used in stone tool manufacture (McBride 1984). The latter suggests that regional exchange networks were established, and that they were used to supply local populations with necessary raw materials (McBride 1984; Snow 1980). The Middle Woodland Period is represented archaeologically by narrow stemmed and Jack's Reef projectile points; increased amounts of exotic raw materials in recovered lithic assemblages, including chert, argillite, jasper, and hornfels; and conoidal ceramic vessels decorated with dentate stamping. Ceramic types, indicative of the Middle Woodland Period, include Linear Dentate, Rocker Dentate, Windsor Cord Marked, Windsor Brushed, Windsor Plain, and Hollister Stamped (Lizee 1994a:200).

In terms of settlement patterns, the Middle Woodland Period is characterized by the occupation of village sites by large co-residential groups that utilized native plant and animal species for food and raw materials in tool making (George 1997). These sites were the principal place of occupation, and they were positioned close to major river valleys, tidal marshes, estuaries, and the coastline, all of which would have supplied an abundance of plant and animal resources (McBride 1984:309). In addition to villages, numerous temporary and task-specific sites were utilized in the surrounding upland areas, as well as in closer ecozones such as wetlands, estuaries, and floodplains. The use of temporary and task-specific sites to support large village populations indicates that the Middle Woodland Period was characterized by a resource acquisition strategy that can best be termed as logistical collection (McBride 1984:310).

# Late Woodland Period (ca., 1,200 to 350 B.P.)

The Late Woodland Period in southern New England dates from ca., 1,200 to 350 B.P., and it is characterized by the earliest evidence for the use of corn in the lower Connecticut River Valley (Bendremer 1993; Bendremer and Dewar 1993; Bendremer et al. 1991; George 1997; McBride 1984); an increase in the frequency of exchange of non-local lithics (Feder 1984; George and Tryon 1996; McBride 1984; Lavin 1984); increased variability in ceramic form, function, surface treatment, and decoration (Lavin 1980, 1986, 1987; Lizee 1994a, 1994b); and a continuation of a trend towards larger, more permanent settlements in riverine, estuarine, and coastal ecozones (Dincauze 1974; McBride 1984; Snow 1980).

Stone tool assemblages associated with Late Woodland occupations, especially village-sized sites, are functionally variable and they reflect plant and animal resource processing and consumption on a large scale. Finished stone tools recovered from Late Woodland sites include Levanna and Madison projectile points; drills; side-, end-, and thumbnail scrapers; mortars and pestles; nutting stones; netsinkers; and celts, adzes, axes, and digging tools. These tools were used in activities ranging from hide preparation to plant processing to the manufacture of canoes, bowls, and utensils, as well as other settlement and subsistence-related items (McBride 1984; Snow 1980). Finally, ceramic assemblages recovered from Late Woodland sites are as variable as the lithic assemblages. Ceramic types identified include Windsor Fabric Impressed, Windsor Brushed, Windsor Cord Marked, Windsor Plain, Clearview Stamped, Sebonac Stamped, Selden Island, Hollister Plain, Hollister Stamped, and Shantok Cove Incised (Lavin 1980, 1988a, 1988b; Lizee 1994a; Pope 1953; Rouse 1947; Salwen and Ottesen 1972; Smith 1947). These types are more diverse stylistically than their predecessors, with incision, shell stamping, punctation, single point, linear dentate, rocker dentate stamping, and stamp and drag impressions common (Lizee 1994a:216).

#### **Summary of Connecticut Prehistory**

In sum, the prehistory of Connecticut spans from ca., 12,000 to 350 B.P., and it is characterized by numerous changes in tool types, subsistence patterns, and land use strategies. For much of the prehistoric era, local Native American groups practiced a subsistence pattern based on a mixed economy of hunting and gathering wild plant and animal resources. It is not until the Late Woodland Period that incontrovertible evidence for the use of domesticated species is available. Further, settlement patterns throughout the prehistoric era shifted from seasonal occupations of small co-residential groups to large aggregations of people in riverine, estuarine, and coastal ecozones. In terms of the region containing the proposed project area, a variety of prehistoric site types may be expected. These range from seasonal camps utilized by Archaic populations to temporary and task-specific sites of the Woodland era.

# CHAPTER IV HISTORICAL OVERVIEW

#### Introduction

The proposed project area is located in the village of Uncasville in the town of Montville in New London County, Connecticut. Originally part of New London, the area now called Montville was settled in 1646 as "Pequot" and was named for the Native American tribe. Following increased European settlement, the region became known in 1658 as the North Parish of New London and included a portion of today's town of Salem. Montville was officially incorporated as a town in 1786. The project area is located in eastern Montville, and to the west of modern-day Interstate 395 and the Thames River. The remainder of this chapter provides an overview history of Montville and historical data specific to the project area.

## **Native American History**

Prior to European contact, the Pequot and Mohegan tribes resided in eastern Connecticut (Oberg 2006:16). While similar in their shared variation of the Algonquian language, the Pequots and Mohegans possessed distinct cultural practices and territories prior to European contact. The Pequots occupied much of the area east of the Thames River, including the coast of Long Island Sound, extending into a portion of present-day Griswold. Sassacus was sachem of the Pequots during the mid-seventeenth century and their territory included the region of Montville, located on the western side of the Thames River between present day New London and Norwich. Though Uncas, then a prominent member of the Pequot tribe, had married into Sassacus' familial line, the two differed greatly on ruling matters. Uncas left with his followers and formed the Mohegan Tribe. When Uncas attempted to overthrow Sassacus, he was exiled only to be pardoned soon after (De Forest 1853). In 1637, when the Pequot tribe and the English colonists eventually went to war, Uncas sided with the colonists in the removal of the Pequot tribe. This strategy was not new as he had worked alongside John Mason and the Narragansett Tribe during the attempted extermination of the Pequot in 1637 (Baker 1896). Following the Pequot War, Uncas settled in the former Pequot territory of Montville. Uncas' authority extended north along the Quinebaug and Yantic Rivers, and groups in those areas paid tribute to the Mohegans. The eastern area of Montville was dedicated as a Reservation until 1790 when the Connecticut legislature divided the land among colonial families (Baker 1896).

# History of the Town of Montville

The colonization of New London, the parent town of Montville, began in the 1640s. Several large tracts of land in the conquered Pequot territory were granted to prominent colonial individuals, with an initial focus on the Thames River harbor. In 1658, the Connecticut legislature changed the growing town's name from Pequot to New London. Uncas similarly made grants of land from the territory he held in the future Montville in the 1640s, but the first known colonists to be granted land there were Richard Haughton and James Rogers in 1658 (Caulkins 1895). Disputes over ownership of the land hindered colonization of Montville, so that it only had enough colonial residents to form the North Parish of the Congregational Church of New London as of 1720. The territorial dispute was settled in 1721, and the separate town of Montville was created in 1786, part of a wave of post-Revolutionary War era town incorporations across the state (Crofut 1937). New London's large area and thriving port had a substantial population of over 5,000 resident as of 1782, while Montville remained much smaller. In 1800, Montville had a population of 2,233 residents, which declined slightly to 2,187 residents in 1810, and then dramatically to 1,951 as of the 1820 census, largely due to the separation of the town of Salem in 1819 (Montville 2010).

Montville witnessed various nineteenth century economic trends: stagnation and decline between 1830 and 1850, modest growth from 1850 to 1880, and another net decline from 1880 to 1900. The population fluctuated accordingly, starting at 2,233 residents, dropping to 1,848, and rising again to 2,664 (Keegan 2012). The 1850 federal census of industry reported 14 firms in town that made at least \$500.00 worth of products per year in Montville, half of which were textile mills of various types. In total, these firms employed only 139 men and 94 women in an average month, demonstrating the modest employment opportunities in the manufacturing sector of Montville (United States Census 1860). This lack of work kept the population low and in 1870 the town had 2,495 residents (Howard and Crocker 1879).

By the end of the nineteenth century, manufacturing and industrial sectors in Montville saw an increase in activity. A tributary of the Thames River known as Saw-mill Brook (now called Oxoboxo Brook) hosted a dye works, numerous paper mills, and several textile mills. The smaller streams in the area continued to support grist mills and sawmills (Baker 1896). In 1932, the town's industries were listed as "agriculture, and the manufacture of paper, paper boxes, cotton goods, etc." (Connecticut 1932:288). Montville's population rose significantly after 1900, almost doubling by 1950 to 4,766 residents (Keegan 2012). Various factors contributed to this population growth. Continued industrial activity attracted new residents and many European immigrants arrived to work in the factories or establish farms. Improved transportation, such as the establishment of streetcars in the villages of Uncasville and Chesterfield, and the prevalence of automobiles also facilitated an influx of people. In addition, a number of residents of large cities built summer homes in town (Montville 2010).

Montville's population continued to increase during the 1960s, approaching 16,000 residents by 1970 and perpetuating a more gradual upward trend through the rest of the century (Keegan 2012). Latetwentieth century growth was the result of suburbanization, as people moved out of Norwich and New London, aided by the 1958 opening of Interstate 395 (Oglesby 2013). After 1970, the population growth leveled off, except for an increase of approximately 2,000 people between 1990 and 2010, reaching 18,680 residents by the end of that period (Keegan 2012). In 1994, a new settlement of the Mohegan tribe's land claims allowed the tribe to open a casino and related enterprises. The same year, a state prison opened in Montville, which added 1,800 imprisoned men to the town's population (Montville 2010). As of 2014, the town's largest employers were the town itself, the State of Connecticut Corrections Department (correlated to the prison), a manufacturer of gauges and meters (one of eight manufacturing firms in town), and two retail firms (out of nearly 65). Overall, the town's employment was dominated by the government sector, followed by the accommodation and foods services sector (CERC 2016). Despite its population growth Montville retains areas of rural landscape along with its suburban sections.

# **History of the Project Area**

According to an 1854 map of central Montville, the project area was located in a rural area along a branch of the Stony Brook and to the east of a roadway (Figure 4). There were several properties nearby, including a homestead north of the parcel that was owned by G. Dolbeare and another to the southeast owned by W. Baker. The closest homestead was west of the project area and belonged to A. F. Rogers, a descendent of one of the earliest settlers in Montville, James Rogers (Rogers 1902). In 1850, Asahel F. Rogers was listed as a 57-year-old farmer with a sizable estate worth of \$10,000.00 (United States Census 1850). By 1860, Rogers was going by Azel and was still a farmer, but his land holdings had decreased slightly and were valued at \$9,000.00. Rogers' 27-year-old son, John R., was a member of his household at that time and was working as a farmhand, presumably on the family farm (United States Census 1860).

A subsequent 1868 map of the area indicated that the A.F. Rogers estate was now owned by R. Rogers (Figure 5). This was likely Azel's son John R. who went by J. Randolph Rogers. Azel F. Rogers did not pass away until 1869, suggesting that perhaps he relinquished control and possibly ownership of the farm due to an illness (Find A Grave 2021a). John R. Rogers was listed in the 1870 census ad a 37-year-old farmer whose real estate was valued at \$5,500.00, indicating an almost 50 percent decrease from his father's original land holdings in 1850 (United States Census 1870). By 1880, Rogers was 47 and working as a mate on a merchant brig. There were no real estate holdings listed on the census (United States Census 1880). John R. Rogers passed away in 1887 and it is unclear when the property moved out of his ownership and why he had to take on work as a sailor (Find A Grave 2021b). Other nearby properties changed hands as well. In 1868, the homestead that had belonged to G. Dolbeare was simply labeled R.E. and the property under W. Baker's name was owned by J. Chappell.

In the early twentieth century, the region was still primarily rural agricultural land. A 1934 aerial photograph showed the project area situated in agricultural fields to the southeast of Fitch Hill Road (Figure 6). The project parcel consisted of cleared and forested land with several standing structures to the west of the proposed access road. Extending to the south of the project area, was the waterway now called Falls Brook. By 1951, very little had changed (Figure 6). The region still consisted of rural agricultural land as of the middle of the twentieth century. The parcel was almost completely forested by that time and the proposed access road crossed a cleared field and extended into a forested area. An access road running northeast to southwest connecting fields intersected the proposed access road. Some residences and outbuildings to the west of the proposed access road had been removed and others were added. A 2019 aerial photograph showed some development to the southwest of the project area as well as the addition of several structures west of the proposed access road (Figure 8). There was a narrow clearing running north to south located east of the project parcel and the access road that intersected the project area and was no longer in use. The parcel was completely forested and the proposed access road was partly on cleared land and partly on forested land.

#### Conclusions

Based on the location of the project area and its consistent use as agricultural fields, there is the possibility of encountering remains of outbuildings, stonewalls, or other evidence of historical farming practices. While the project area is located in close proximity to the location of the homestead of Azel F. Rogers and John Randolph Rogers, despite their relation to one of Montville's earliest settlers these persons, and other nearby landowners, were not of local, state, or national importance. Any archaeological deposits associated with the individuals who owned the land, and their occupations, are not likely to be considered historically significant.

# CHAPTER V PREVIOUS INVESTIGATIONS

#### Introduction

This chapter presents an overview of previous archaeological research completed within the vicinity of the project area in Uncasville, Connecticut. This discussion provides the comparative data necessary for assessing the results of the current Phase IA cultural resources assessment survey, and it ensures that the potential impacts to all previously recorded cultural resources located within and adjacent to the project area are taken into consideration. Specifically, this chapter reviews previously identified archaeological sites and National/State Register of Historic Places properties situated in the project region (Figures 9 and 10). The discussions presented below are based on information currently on file at the CT-SHPO in Hartford, Connecticut. In addition, the electronic site files maintained by Heritage were examined during this investigation. Both the quantity and quality of the information contained in the original cultural resources survey reports and State of Connecticut archaeological site forms are reflected below.

# Previously Recorded Archaeological Sites and National/State Register of Historic Places Properties/Districts in the Vicinity of the Project Area

A review of data currently on file at the CT-SHPO, as well as the electronic site files maintained by Heritage, resulted in the identification of five previously identified archaeological sites within 1.6 km (1 mi) of the project area and they are described below (Figure 9). No National or State Register of Historic Places properties were identified within the search area (Figure 10).

# <u>Site 86-13</u>

Site 86-13, also known as the Find Spot 1 E-1 Loop Site, is located approximately 965 m (0.60 mi) to the south of Fitch Hill Road within a Spectra Energy Corporation gas pipeline right of way in Montville, Connecticut (Figure 9). The Public Archaeology Laboratory, Inc., (PAL) identified the site in 2013 and recovered an isolated argillite Small Stemmed projectile point from the subsoil at this location. This projectile point type was manufactured during the Late Archaic Period. Site 86-13 has not been assessed applying the qualities of significance as defined by the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It will not be impacted by the proposed North Silverbrook Solar project because of distance from the project area.

# <u>Site 86-14</u>

Site 86-14, also referred to as the Find Spot 2 E-1 Loop Site, is situated approximately 1,075 m (0.67 mi) to the north of Raymond Hill Road in Montville, Connecticut. It too is located within a Spectra Energy Corporation gas pipeline right of way (Figure 9). PAL recorded this site in 2013 and recovered a single quartz Small Stemmed projectile point from the topsoil in this area. This projectile point type was manufactured during the Late Archaic Period. Jennifer Ort and Jenifer Elam of PAL recorded the site on October 24, 2013 and determined that it was not potentially eligible for listing on the National Register of Historic Places. It will not be impacted by the proposed North Silverbrook Solar project because of distance from the project area.

# Site 86-15

Site 86-15 is the Raymond Hill Wetland Site; it is located approximately 220 m (721.8 ft) to the north of Raymond Hill Road in Montville, Connecticut (Figure 9). PAL recorded the site in 2013 and recovered 10

chert flakes from one test pit and four array test pits. Jennifer Ort and Jenifer Elam recorded the site on October 24, 2013 as a camp site. While the site could not be dated to a specific prehistoric time period, it was determined to be potentially eligible for listing on the National Register of Historic Places. Site 86-15 will not be impacted by the proposed North Silverbrook Solar project because of distance from the project area.

# <u>Site 86-53</u>

Site 86-53 is the Cochegan Rock Site, recorded by Gregory F. Walwer of Archaeological Consulting Services in 1996. Walwer recorded that this was the site of reported early habitation, sheep herding, council meetings, and ceremonies for the Mohegans. The rock within the site area is believed to be the largest free standing glacial erratic in the region, and it now holds a commemorative inscription created by the Boy Scouts of America. Site 86-53 is located north of Raymond Hill Road and south of Falls Brook in Montville, Connecticut (Figure 9). It has not been assessed applying the qualities of significance as defined by the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). In addition, it will not be impacted by the proposed North Silverbrook Solar project because of distance from the project area.

# Find Spot 3 E-1 Loop

The site form for the Find Spot 3 E-1 Loop Site was recorded by Jennifer Ort and Jenifer Elam of the PAL on October 24, 2013. The site is located approximately 955 m (0.60 mi) to the north of Raymond Hill Road within a Spectra Energy Corporation gas pipeline right of way (Figure 9). PAL archaeologists recovered a single piece of quartz chipping debris from the subsoil within the site area. The site could not be dated to a specific prehistoric time period and it was determined to be ineligible for listing on the National Register of Historic Places. The find spot site will not be impacted by the proposed North Silverbrook Solar project because of distance from the project area.

# Conclusion

A total of five prehistoric archaeological resources has been previously identified within 1.6 km (1 mi) of the project area. This indicates that additional prehistoric resources could exist in the project area, which is further supported by the natural setting of the region discussed in Chapter II as suited to Native American occupation. Though no historical resources have been previously recorded within 1.6 km (1 mi) of the project area, Uncasville is known to have been used for farmsteads from settlement to the present era. The project area itself was agricultural land for its entire history, and cultural deposits relating to this activity may exist here.

#### Introduction

This chapter describes the research design and field methodology used to complete the Phase IA cultural resources assessment survey of the project area in Uncasville, Connecticut. The following tasks were completed during this investigation: 1) study of the region's prehistory, history, and natural setting, as presented in Chapters II through IV; 2) a literature search to identify and discuss previously recorded cultural resources in project region; 3) a review of historical maps, topographic quadrangles, and aerial imagery depicting the project area in order to identify potential historical resources and/or areas of past disturbance; and 4) pedestrian survey and photo-documentation of the project area in order to determine its archaeological sensitivity. These methods are in keeping with those required by the Connecticut State Historic Preservation Office in the document entitled: *Environmental Review Primer for Connecticut's Archaeological Resources* (Poirier 1987).

#### **Research Framework**

The current Phase IA cultural resources assessment survey was designed to assess the archaeological sensitivity of the project area, as well as to visually examine the development area for any previously unidentified cultural resources during pedestrian survey. The undertaking was comprehensive in nature, and project planning considered the distribution of previously recorded cultural resources located within the project region, as well as a visual assessment of the project area. The methods used to complete this investigation were designed to provide coverage of all portions of the project area. The fieldwork portion of this undertaking entailed pedestrian survey, photo-documentation, and mapping (see below).

#### Archival Research & Literature Review

Background research for this project included a review of a variety of historical maps depicting the proposed project area; an examination of USGS 7.5' series topographic quadrangles; a review of aerial images dating from 1934 through 2019; and a review of all archaeological sites and National/State Register of Historic Places on file with the CT-SHPO, as well as electronic cultural resources data maintained by Heritage. The intent of this review was to identify all previously recorded cultural resources situated within and immediately adjacent to the project area, and to provide a natural and cultural context for the project region. This information then was used to develop the archaeological context of the project area, and to assess its sensitivity with respect to the potential for producing intact cultural resources.

Background research materials, including historical maps, aerial imagery, and information related to previous archaeological investigations, were gathered from the CT-SHPO. Finally, electronic databases and Geographic Information System files maintained by Heritage were employed during the course of this project, and they provided valuable data related to the project region, as well as data concerning previously identified archaeological sites and National and State Register of Historic Places properties within the general vicinity of the project area.

#### Field Methodology and Data Synthesis

Heritage also performed fieldwork for the Phase IA cultural resources assessment survey of the project area associated with the proposed solar project in Uncasville, Connecticut. This included pedestrian

survey, photo-documentation, and mapping of the area containing the proposed facility. During the completion of the pedestrian survey, representatives from Heritage photo-documented all potential areas of impact using digital media.

# CHAPTER VII RESULTS OF THE INVESTIGATION & MANAGEMENT OVERVIEW

#### Introduction

This chapter presents the results of the Phase IA cultural resources assessment survey of the project area in Uncasville, Connecticut. As stated in the introductory section of this report, the goals of the investigation included completion of the following tasks: 1) a contextual overview of the region's prehistory, history, and natural setting (e.g., soils, ecology, hydrology, etc.); 2) a literature search to identify and discuss previously completed cultural resources surveys and previously recorded cultural resources in the project region; 3) a review of readily available historical maps and aerial imagery depicting the project area in order to identify potential historical resources and/or areas of past disturbance; and 4) pedestrian survey and photo-documentation of the project items in order to determine their archaeological sensitivity.

## **Results of Phase IA Survey**

At the time of survey, the project area was characterized by deciduous forest, with agricultural land to the southwest through which a proposed access road will extend (Figure 11 and Photos 1 through 15). The proposed access road connects to a driveway that runs east from Fitch Hill Road (Photo 1). It then runs past a historical residence and associated outbuildings into farm fields (Photos 2 through 4). The project area becomes forested along the northeastern segment of the proposed access road (Photo 5). The area that will contain the proposed solar array is characterized by deciduous forest (Photos 6 through 15). Stone walls and disused farm equipment related to the historical use of the property for agricultural cultivation were noted within the project area (Photo 9 and 15).

# **Overall Sensitivity of the Proposed Project Area**

The field data associated with soils, slopes, aspect, distance to water, and previous disturbance collected during the pedestrian survey and presented above was used in conjunction with the analysis of historical maps, aerial images, and data regarding previously identified archaeological sites and National/State Register of Historic Places properties to stratify the project area into zones of no/low and/or moderate/high archaeological sensitivity. In general, historical period archaeological sites are relatively easy to identify on the current landscape because the features associated with them tend to be relatively permanent constructions that extend above the ground surface (i.e., stone foundations, pens, wells, privies, etc.). Archaeological sites dating from the prehistoric era, on the other hand, are less often identified during pedestrian survey because they are buried, and predicting their locations relies more on the analysis and interpretation of environmental factors that would have informed Native American site choices.

With respect to the potential for identifying prehistoric archaeological sites, the project area was divided into areas of no/low and/or moderate/high archaeological potential by analyzing the landform types, slope, aspect, soils contained within them, and their distance to water. In general, areas located less than 300 m (1,000 ft) from a freshwater source and that contain slopes of less than 8 percent and well-drained soils possess a high potential for producing prehistoric archaeological deposits. Those areas located between 300 and 600 m (1,000 and 2,000 ft) from a freshwater source and well drained soils are considered moderate probability areas. This is in keeping with broadly based interpretations of prehistoric settlement and subsistence models that are supported by decades of previous archaeological

research throughout the region. It is also expected that there may be variability of prehistoric site types found in the moderate/high sensitivity zones. For example, large Woodland period village sites and Archaic period seasonal camps may be expected along large river floodplains and near stream/river confluences, while smaller temporary or task specific sites may be expected on level areas with well-drained soils that are situated more than 300 m (1,000 ft) but less than 600 m (2,000 ft) from a water source. Finally, steeply sloping areas, poorly drained soils, or areas of previous disturbance are generally deemed to retain a no/low archaeological sensitivity with respect to their potential to contain prehistoric archaeological sites.

In addition, the potential for a given area to yield evidence of historical period archaeological deposits is based not only on the above-defined landscape features but also on the presence or absence of previously identified historical period archaeological resources as identified during previous archaeological surveys, recorded on historical period maps, or captured in aerial images of the region under study. In this case, portions of the project area that are situated within 100 m (328 ft) of a previously identified historical period archaeological site or a National or State Register of Historic Places district/individually listed property also may be deemed to retain a moderate/high archaeological sensitivity. In contrast, those areas situated over 100 m (328 ft) from any of the above-referenced properties would be considered to retain a no/low historical period archaeological sensitivity.

## **Project Summary**

The combined review of historical maps, aerial images, land deeds, and pedestrian survey indicates that the entirety of the project area contains low slopes and well drained soils within open fields and forest situated in close proximity to a freshwater source. Portions characterized by open field showed signs of past plowing; however, intact B-Horizon deposits may still be in place. The low slopes of the project area and the fact that Falls Brook extends past its southern border, suggests it would have been a desirable area for Native American use. Historical resources related to the project area's agricultural use may exist here as well, supported by the existence of a historical farmstead, stone walls, and farm equipment. Based on the data collected during this investigation, it is the professional opinion of Heritage that the 9.87 acre project area retains a moderate/high sensitivity for yielding archaeological deposits.

# **BIBLIOGRAPHY**

#### Asch, D.L., and N. B. Asch

1985 Prehistoric Plant Cultivation in West-Central Illinois. In *Prehistoric Food Production in North America*, edited by R.I. Ford, pp. 149-203. Museum of Anthropology Anthropological Papers No. 75. University of Michigan, Ann Arbor.

#### Baker, Henry A.

1896 *History of Montville, Connecticut, Formerly the North Parish of New London from 1640 to 1896.* Case, Lockwood & Brainard Company, Hartford, CT.

#### Banks, R.C., R.W. McDiarmid, A.L. Gardner

1987 *Checklist of vertebrates of the Unites States: The U.S. Territories and Canada*. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

## Barber, John Warner

1836 Connecticut Historical Collections, Containing a General Collection of Interesting Facts, Traditions, Biographical Sketches, Anecdotes, &c. History and Antiquities of Every Town in Connecticut, with Geographical Descriptions. New Haven, CT: B.I. Hamlen.

#### Bell, Michael

1985 *The Face of Connecticut: People, Geology, and the Land.* State Geological Natural History Survey of Connecticut Department of Environmental Protection.

## Bendremer, J.

1993 *Late Woodland Settlement and Subsistence in Eastern Connecticut*. Ph.D. Dissertation, Department of Anthropology, University of Connecticut, Storrs, Connecticut.

#### Bendremer, J. and R. Dewar

1993 The Advent of Maize Horticulture in New England. In *Corn and Culture in the Prehistoric New World.* Ed. by S. Johannessen and C. Hastorf. Westview Press, Boulder.

#### Bendremer, J., E. Kellogg and T. Largy

1991 A Grass-Lined Storage Pit and Early Maize Horticulture in Central Connecticut. North American Archaeologist 12(4):325-349.

#### Braun, E.L.

1950 Deciduous Forests of Eastern North America. The Free Press.

#### Brown, Clair A.

1965 *Louisiana Trees and Shrubs.* Louisiana Forestry Commission Bulletin No. 1. Claitor's Publishing Division, Baton Rouge, Louisiana.

#### Caulkins, Frances Manwaring

1895 *History of New London, Connecticut, From the First Survey of the Coast in 1612 to 1860.* H. D. Utley, New London, CT.

CERC

2016 "Montville, Connecticut, CERC Town Profile 2016." http://profiles.ctdata.org/profiles/download, accessed July 29, 2016.

#### Chapman, J., and A.B. Shea

1981 The Archaeobotanical Record: Early Archaic Period to Contact in the Lower Little Tennessee River Valley. *Tennessee Anthropologist* 6(1):61-84.

## Coe, Joffre Lanning

1964 The Formative Cultures of the Carolina Piedmont. *Transactions of the American Philosophical Society*, Vol. 54, Part 5. Philadelphia, Pennsylvania.

#### Connecticut Environmental Conditions Online (CT ECO)

2019 Connecticut 2019 Orthophotography. Storrs, Connecticut: University of Connecticut, Connecticut Environmental Conditions Online. http://www.cteco.uconn.edu/data/flight2019/index.htm.

#### Connecticut, State of

1932 *State Register and Manual*. State of Connecticut, Hartford, CT.

### Crofut, Florence

1937 *Guide to the History and Historic Sites of Connecticut*, vol.1. New Haven, CT: Yale University Press.

## Curran, M.L., and D.F. Dincauze

1977 Paleo-Indians and Paleo-Lakes: New Data from the Connecticut Drainage. In *Amerinds and their Paleoenvironments in Northeastern North America.* Annals of the New York Academy of Sciences 288:333-348.

#### Davis, M.

1969 Climatic changes in southern Connecticut recorded by Pollen deposition at Rogers Lake. *Ecology* 50: 409-422.

#### De Forest, John W.

1852 *History of the Indians of Connecticut from the Earliest Known Period to 1850.* Wm. Jas. Hamersley, Hartford, Connecticut.

#### Dincauze, Dena F.

- 1974 An Introduction to Archaeology in the Greater Boston Area. *Archaeology of Eastern North America* 2(1):39-67.
- 1976 *The Neville Site: 8000 Years at Amoskeag.* Peabody Museum Monograph No. 4. Cambridge, Massachusetts.

#### Dowhan, J.J. and R.J. Craig

1976 Rare and endangered species of Connecticut and Their Habitats. State Geological Natural History Survey of Connecticut Department of Environmental Protection, Report of Investigations No. 6.

#### Fairchild Aerial Surveys

1934 Connecticut Statewide Aerial Photograph Series. Hartford, Connecticut: Connecticut State Archives.

#### Feder, Kenneth

1984 *Pots, Plants, and People: The Late Woodland Period of Connecticut.* Bulletin of the Archaeological Society of Connecticut 47:99-112.

#### Fitting, J.E.

1968 *The Spring Creek Site*. In *Contributions to Michigan Archaeology*, pp. 1-78. Anthropological Papers No. 32. Museum of Anthropology, University of Michigan, Ann Arbor.

#### Find A Grave

- 2021a Azel Fitch Rogers II. https://www.findagrave.com/memorial/12167190/azel-fitch-rogers, accessed May 12, 2021.
- 2021b John Randolph Rogers. https://www.findagrave.com/memorial/42890948/john-randolphrogers, accessed May 12, 2021.

## Ford, R.I.

1985 Patterns of Prehistoric Food Production in North America. In *Prehistoric Food Production in North America*, edited by R.I. Ford, pp. 341-364. Museum of Anthropology Anthropological Papers No. 75. University of Michigan, Ann Arbor.

#### Fritz, Gayle J.

1990 Multiple Pathways to Farming in Pre-Contact Eastern North America. *Journal of World Prehistory* 4(4):387-435.

#### Funk, R.E.

1976 *Recent Contributions to Hudson Valley Prehistory.* New York State Museum Memoir 22. Albany.

#### George, D.

1997 A Long Row to Hoe: The Cultivation of Archaeobotany in Southern New England. *Archaeology* of Eastern North America 25:175 - 190.

#### George, D. and C. Tryon

1996 Lithic and Raw Material Procurement and Use at the Late Woodland Period Cooper Site, Lyme, Connecticut. Paper presented at the joint meeting of the Archaeological Society of Connecticut and the Massachusetts Archaeological Society, Storrs Connecticut

#### George, D.R., and R. Dewar

1999 Prehistoric Chenopodium in Connecticut: Wild, Weedy, Cultivated, or Domesticated? *Current Northeast Paleoethnobotany*, edited by J. Hart, New York State Museum, Albany, New York.

#### Gerrard, A.J.

1981 *Soils and Landforms, An Integration of Geomorphology and Pedology*. George Allen & Unwin: London.

#### Gramly, R. Michael, and Robert E. Funk

1990 What is Known and Not Known About the Human Occupation of the Northeastern United States Until 10,000 B. P. *Archaeology of Eastern North America* 18: 5-32.

#### Griffin, J.B.

1967 Eastern North America Archaeology: A Summary. *Science* 156(3772):175-191.

#### Howard, R. H., and Henry E. Crocker

1879 A History of New England: Containing Historical and Descriptive Sketches of the Counties, Cities and Principal Towns of the Six New England States, Including, in Its List of Contributors, More Than Sixty Literary Men and Women, Representing Every County in New England. Crocker & Company, Boston.

#### Johannessen, Sissel

1984 Paleoethnobotany. In American Bottom Archaeology: A Summary of the FAI-270 Project Contribution to the Culture History of the Mississippi River Valley, edited by Charles J. Bareis and James W. Porter, pp. 197-214. University of Illinois Press, Urbana.

#### Jones, B.

1997 The Late Paleo-Indian Hidden Creek Site in Southeastern Connecticut. Archaeology of Eastern North America 25:45-80.

#### Keegan, Kristen Noble, comp.

2012 Historical Population Data of Connecticut. Unpublished Excel spreadsheet.

#### Lavin, L.

- 1980 Analysis of Ceramic Vessels from the Ben Hollister Site, Glastonbury, Connecticut. *Bulletin of the Archaeological Society of Connecticut* 43:3-46.
- 1984 Connecticut Prehistory: A Synthesis of Current Archaeological Investigations. *Archaeological Society of Connecticut Bulletin* 47:5-40.
- 1986 *Pottery Classification and Cultural Models in Southern New England Prehistory*. North American Archaeologist 7(1):1-12.
- 1987 The Windsor Ceramic Tradition in Southern New England. *North American Archaeologist* 8(1):23-40.
- 1988a Coastal Adaptations in Southern New England and Southern New York. Archaeology of Eastern North America, Vol.16:101-120.
- 1988b The Morgan Site, Rocky Hill, Connecticut: A Late Woodland Farming Community in the Connecticut River Valley. *Bulletin of the Archaeological Society of Connecticut* 51:7-20.

#### Lizee, J.

1994a Prehistoric Ceramic Sequences and Patterning in southern New England: The Windsor Tradition. Unpublished Ph.D. dissertation, Department of Anthropology, University of Connecticut, Storrs. 1994b Cross-Mending Northeastern Ceramic Typologies. Paper presented at the 1994 Annual Meeting of the Northeastern Anthropological Association, Geneseo, New York.

#### McBride, K.

- 1978 Archaic Subsistence in the Lower Connecticut River Valley: Evidence from Woodchuck Knoll. Man in the Northeast 15 & 16:124-131.
- 1983 *Prehistory of the Lower Connecticut River Valley.* Ph.D. Dissertation, Department of Anthropology, University of Connecticut, Storrs, Connecticut.

#### Moeller, R.

1980 *6-LF-21: A Paleo-Indian Site in Western Connecticut.* American Indian Archaeological Institute, Occasional Papers No. 2.

#### Montville, Town of

- 2010 Plan of Conservation and Development. Electronic document. http://www.townofmontville.org/Customer-Content/WWW/CMS/files/
- 2010 \_PlanofConservationandDevelopment1.pdf, accessed July 29, 2016.

#### Niering, W.A., and N.C. Olmstead

1995 National Audubon Society Field Guide to North American Wildflowers: Eastern Region. Chanticleer Press, New York.

#### Oberg, Michael Leroy

2006 Uncas: First of the Mohegans. Cornell University Press, Ithaca, NY.

#### Oglesby, Scott

2013 "I-395." *Connecticut Roads*. http://www.kurumi.com/roads/ct/i395.html, accessed December 12, 2018.

#### Pagoulatos, P.

1988 Terminal Archaic Settlement and Subsistence in the Connecticut River Valley. *Man in the Northeast* 35:71-93.

#### Pease, John C. and John M. Niles

1819 *A Gazetteer of the States of Connecticut and Rhode-Island*. Hartford, CT: William S. Marsh.

#### Peterson, T. R., and M. McKenny

1968 *Wildflowers of Northeastern and North-Central America.* Houghton Mifflin Company, Boston, Massachusetts.

#### Pfeiffer, J.

- 1984 The Late and Terminal Archaic Periods in Connecticut Prehistory. *Bulletin of the Bulletin of the Archaeological Society of Connecticut* 47:73-88.
- 1986 Dill Farm Locus I: Early and Middle Archaic Components in Southern Connecticut. *Bulletin of the Archaeological Society of Connecticut* 49:19-36.

1990 The Late and Terminal Archaic Periods in Connecticut Prehistory: A Model of Continuity. In *Experiments and Observations on the Archaic of the Middle Atlantic Region.* R. Moeller, ed.

#### Poirier, D.

1987 *Environmental Review Primer for Connecticut's Archaeological Resources.* Connecticut Historical Commission, State Historic Preservation Office, Hartford, Connecticut.

#### Pope, G.

- 1952 Excavation at the Charles Tyler Site. *Bulletin of the Archaeological Society of Connecticut* 26:3-29.
- 1953 The Pottery Types of Connecticut. *Bulletin of the Archaeological Society of New Haven* 27:3-10.

#### Ritchie, W.A.

- 1969a The Archaeology of New York State. Garden City: Natural History Press.
- 1969b The Archaeology of Martha's Vineyard: A Framework for the Prehistory of Southern New England; A study in Coastal Ecology and Adaptation. Garden City: Natural History Press
- 1971 *A Typology and Nomenclature for New York State Projectile Points*. New York State Museum Bulletin Number 384, State Education Department. University of the State of New York, Albany, New York.

#### Ritchie, W.A., and R.E. Funk

1973 *Aboriginal Settlement Patterns in the Northeast.* New York State Museum Memoir 20. The State Education Department, Albany.

#### Robinson, P., and Hall, L. M.

1980 Tectonic synthesis of southern New England. In *International Geological Correlation Project, Proceedings, Project 27: The Caledonides in the U.S.A.*: Blacksburg, Virginia, Virginia Polytechnic Institute and State University Department of Geological Sciences Memoir 2, edited by Wones, D.R.

#### Rogers, James Swift

1902 James Rogers of New London, CT., and His Descendants. James Swift Rogers, Boston.

#### Rouse, I.

1947 Ceramic Traditions and sequences in Connecticut. *Bulletin of the Archaeological Society of Connecticut* 21:10-25.

#### Salwen, B., and A. Ottesen

1972 Radiocarbon Dates for a Windsor Occupation at the Shantok Cove Site. *Man in the Northeast* 3:8-19.

#### Shelford, V.E.

1963 *The Ecology of North America*. University of Illinois Press.

#### Smith, B.D.

1992 *Rivers of Change: Essays on Early Agriculture in Eastern North America.* Smithsonian Institution Press, Washington and London.

#### Smith, C.

1947 An Outline of the Archaeology of Coastal New York. *Bulletin of the Archaeological Society of Connecticut* 21:2-9.

**United States Census** 

- 1850 Seventh Census of the United States. Schedule 1. HeritageQuest Online. Provo, UT: ProQuest LLC.
- 1860 Eighth Census of the United States. Schedule 1. HeritageQuest Online. Provo, UT: ProQuest LLC.
- 1870 Ninth Census of the United States. Schedule 1. HeritageQuest Online. Provo, UT: ProQuest LLC.
- 1880 Tenth Census of the United States. Schedule 2. HeritageQuest Online. Provo, UT: ProQuest LLC.

United States Department of Agriculture (USDA)

1951 Agricultural Stabilization and Conservation Service Aerial Photography for Connecticut. Washington, DC: Collections of the National Archives and Records Administration.


Figure 1. Excerpt from a USGS 7.5' series topographic quadrangle image showing the location of the project area in Uncasville, Connecticut.



Figure 2. Copy of the project plans for the proposed solar center in Uncasville, Connecticut.

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Excerpt from a 2019 aerial photograph showing the location of the project area in Uncasville, Connecticut.



Figure 9. Digital map showing the location of previously identified archaeological sites in the vicinity of the project area in Uncasville, Connecticut.



Figure 10. Digital map depicting the locations of previously identified National/State Register of Historic Places properties in the vicinity of the project area in Uncasville, Connecticut.



Figure 11. Aerial image showing the locations and directions of photos taken by Heritage personnel during Phase IA survey of the project area in Uncasville, Connecticut.



Photo 1. Overview of the project area facing east from the western end of the proposed access road.



Photo 2. Overview of the project area facing east along the proposed access road.



Photo 3. Overview of the project area facing west from the center of the proposed access road.



Photo 4. Overview of the project area facing northeast from the center of the proposed access road.



Photo 5. Overview of the project area facing northeast from the eastern section of the proposed access road.



Photo 6. Overview of the project area facing east from the western boundary, where it connects to the proposed access road.



Photo 7. Overview of the project area facing north from the center of the western boundary.



Photo 8. Overview of the project area facing south from the northern boundary.



Photo 9. Overview of the project area facing west from the eastern boundary.



Photo 10. Overview of the project area facing northeast from the southern boundary.



Photo 11. Overview of the project area facing northwest from the southern boundary.



Photo 12. Overview of the project area facing north from the center.



Photo 13. Overview of the project area facing east from the center.



Photo 14. Overview of the project area facing south from the center.



Photo 15. Overview of the project area facing west from the center.

# PHASE IB CULTURAL RESOURCES RECONNAISSANCE SURVEY OF THE PROPOSED NORTH SILVERBROOK SOLAR PROJECT AT 486 FITCH HILL ROAD IN UNCASVILLE, CONNECTICUT

PREPARED FOR:



PREPARED BY:



55 EAST CEDAR STREET NEWINGTON, CONNECTICUT 06111

# ABSTRACT

This report presents the results of a Phase IB cultural resources reconnaissance survey for the proposed North Silverbrook Solar Project, which will be constructed at 486 Fitch Hill Road in Uncasville, Connecticut. The project area encompasses approximately 9.8 acres located to the east of Fitch Hill Road and to the north of Falls Brook. The undertaking will include installation of a solar array surrounded by a chain link fence. A proposed gravel access road will extend through agricultural land to the east, then northeast into a forested area where the proposed solar facility will be constructed. A Phase IA cultural resources assessment survey for this project was completed in May of 2021. The pedestrian survey indicated that the project area is characterized by gently sloping topography and well drained soils, and Falls Brook runs past its southern border.

A Phase IB survey was completed in July 2021. A total of 208 of 209 (99 percent) planned shovel tests and 10 of 10 (100 percent) delineation shovel tests were excavated throughout the project area, resulting in the identification of two archaeological loci. Locus 1 yielded two quartzite flakes from the plow zone and a quartz Archaic Period Brewerton Eared Triangle point from the subsoil. Locus 2 produced a single argillite tertiary flake in the plow zone. No cultural features or soil anomalies were associated with the two loci. Both loci were assessed as not significant applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). In addition, five shovel tests also yielded a scatter of both modern and historical artifacts within the disturbed Ap-Horizon (plow zone) and a layer of fill. None of these items were found in association with buried cultural features or above ground architectural remains. Thus, this low density assemblage was identified as unassociated field scatter. No impacts to significant archaeological resources are expected by the construction of the solar facility, and no additional archaeological examination of the project area is recommended prior to construction.

Finally, a single stone cluster and three dry laid stone walls were identified within the project area. The stone cluster is located in the southern portion of the project area. One stone wall was identified in the northern portion of the project area running southwest to northeast. A second stone wall was identified to the south of the proposed access road beginning at the western boundary of the project area and running east. A third stone wall extends perpendicular to it in the southeastern portion of the project area and runs from north to south. The stone cluster and stone walls cannot be attributed to a specific type, function, or time period; no additional recordation of them is recommended.

# TABLE OF CONTENTS

CHAPTER I: INTRODUCTION	1
Project Description and Methods	1
Project Results	1
Project Personnel	2
Chapter II: Natural Setting	3
Introduction	3
Ecoregions of Connecticut	3
Southeast Hills Ecoregion	3
Hydrology in the Vicinity of the Facility	3
Soils Comprising the Facility Area	4
Haven and Enfield Series (Soil Code 32)	4
Narragansett Series (Soil Code 68)	5
Summary	5
Chapter III: Prehistoric Setting	6
Introduction	6
Paleo-Indian Period (12,000 to 10,000 Before Present [B.P.])	6
Archaic Period (10,000 to 2,700 B.P.)	7
Early Archaic Period (10,000 to 8,000 B.P.)	7
Middle Archaic Period (8,000 to 6,000 B.P.)	7
Late Archaic Period (6,000 to 3,700 B.P.)	8
Terminal Archaic Period (3,700 to 2,700 B.P.)	8
Woodland Period (2,700 to 350 B.P.)	9
Early Woodland Period (ca., 2,700 to 2,000 B.P.)	9
Middle Woodland Period (2,000 to 1,200 B.P.)	10
Late Woodland Period (ca., 1,200 to 350 B.P.)	10
Summary of Connecticut Prehistory	11
CHAPTER IV: HISTORICAL OVERVIEW	12
Introduction	12
Native American History	12
History of the Town of Montville	12
CHAPTER V: PREVIOUS INVESTIGATIONS	15
Introduction	
Previously Recorded Archaeological Sites and National/State Register of Historic Places	
Properties/Districts in the Vicinity of the Project Area	15
Site 86-13	15
Site 86-14	15
Site 86-15	15
Site 86-53	16
Find Spot 3 E-1 Loop	16
Conclusion	16

CHAPTER VI: METHODS	
Introduction	
Research Design	
Field Methods	
Curation	17
CHADTER VIII. RESULTS & MANAGEMENT RECOMMENDATIONS	19
Introduction	19
Results of the Phase IB Cultural Resources Reconnaissance Survey of the Facility	
Locus 1	20
Locus 2	20
Management Recommendations	21
-	
BIBLIOGRAPHY	22
APPENDIX 1: SITE FORM	62

# LIST OF FIGURES

- Figure 1. Excerpt from a USGS 7.5' series topographic quadrangle image showing the location of the project area in Uncasville, Connecticut.
- Figure 2. Copy of the project plans for the proposed solar center in Uncasville, Connecticut.
- Figure 3. Excerpt from an 1854 historical map showing the location of the project area in Uncasville, Connecticut.
- Figure 4. Excerpt from an 1868 historical map showing the location of the project area in Uncasville, Connecticut.
- Figure 5. Excerpt from a 1934 aerial photograph showing the location of the project area in Uncasville, Connecticut.
- Figure 6. Excerpt from a 1951 aerial photograph showing the location of the project area in Uncasville, Connecticut.
- Figure 7. Excerpt from a 2019 aerial photograph showing the location of the project area in Uncasville, Connecticut.
- Figure 8. Digital map showing the location of previously identified archaeological sites in the vicinity of the project area in Uncasville, Connecticut.
- Figure 9. Digital map depicting the locations of previously identified National/State Register of Historic Places properties in the vicinity of the project area in Uncasville, Connecticut.
- Figure 10. Plan view map depicting the location of Shovel Tests, Delineation Shovel tests and Loci 1 and 2 in Uncasville, Connecticut.

# LIST OF PHOTOS

- Photo 1. Overview photo south of the proposed access road. Photo taken facing north.
- Photo 2. Overview photo from western end of proposed gravel access road. Photo taken facing west.
- Photo 3. Overview photo of Locus 1 area. Photo taken facing south.
- Photo 4. Overview photo of Locus 1 area. Photo taken facing north.
- Photo 5. Overview photo of Locus 1 area. Photo taken facing east.
- Photo 6. Overview photo of Locus 1 area. Photo taken facing west.
- Photo 7. Obverse photograph of Quartz Brewerton Eared Point from Locus 1.
- Photo 8. Overview photo of Locus 2 area from the western end of the proposed access road. Photo taken facing east.
- Photo 9. Overview photo of Locus 2 area along the proposed access road. Photo taken facing east.
- Photo 10. Overview photo of the stone cluster in the southern portion of project area. Photo taken facing east.
- Photo 11. Overview photo of the stonewall in the northern portion of project area. Photo taken facing northeast.
- Photo 12. Overview photo of the stonewall in the central portion of project area. Photo taken facing north.
- Photo 13. Overview photo of the stone wall in the eastern portion of project area. Photo taken facing southwest.

# CHAPTER I INTRODUCTION

This report presents the results of a Phase IB cultural resources reconnaissance survey of a proposed solar facility (the Facility) in Uncasville, Connecticut (Figure 1). All-Points Technology Corporation (All-Points) requested that Heritage Consultants, LLC (Heritage) complete the reconnaissance survey as part of the planning process for the Facility, which will encompass approximately 9.8 acres of land situated to the east of Fitch Hill Road and to the north of Falls Brook. The project area is situated within what the Town of Montville refers to as Parcel 47-51, which is accessed from the east side of Fitch Hill Road. The proposed access road associated with the Facility will pass a farmstead to the east through agricultural land, then northeast into a forested area where the proposed solar facility will be constructed. The proposed facility is surrounded on all sides by deciduous forest. The region in general is a sparsely developed residential area. Heritage completed the fieldwork for this investigation in July of 2021. All work associated with this project was performed in accordance with the *Environmental Review Primer for Connecticut's Archaeological Resources* (Poirier 1987) promulgated by the Connecticut State Historic Preservation Office (CT-SHPO).

# **Project Description and Methods**

As mentioned above, the proposed solar project will be located to the east of Fitch Hill Road and to the north of Falls Brook within Parcel 47-51 in Uncasville, Montville, Connecticut. The project area is currently characterized by a mixture of deciduous forest and agricultural fields to the southwest through which the proposed access road will extend. Elevations throughout the project area range from approximately 73.2 to 88.4 meters (240 to 290 feet) NGVD. The proposed Facility will contain approximately 5,300 solar panel modules in rows spaced 4.6 meters (15 feet) apart throughout the project area, all of which will be surrounded by a chain link fence. Metering equipment will be installed off the western boundary of the solar array and to the south of the proposed access road. This access road will extend eastward toward Fitch Hill Road and it will be a gravel thoroughfare. An overhead electrical line with utility poles will connect the metering equipment to the existing electrical grid along Fitch Hill Road. Finally, trees will be cleared for the proposed access road, overhead interconnect, and solar array.

The Phase IB cultural resources reconnaissance survey was completed utilizing pedestrian survey, systematic shovel testing, GPS recordation, and photo-documentation. During the survey, Heritage conducted the systematic excavation of shovel tests along 15 survey transects across the proposed project area and access road. The shovel tests along the proposed access road and Transect 1 extended from west to east. The shovel tests were situated at 15 m (49.2 ft) intervals along the access road. Shovel tests along the remaining 14 parallel survey transects were spaced 15 m (49.2 ft) apart running north to south. Each shovel test measured 50 x 50 cm (19.7 x 19.7 in) in size, and each was excavated to the glacially derived C-Horizon or until immovable objects (e.g., tree roots, boulders, etc.) were encountered. Each shovel test was excavated in 10 cm (3.9 in) arbitrary levels within natural strata, and the fill from each level was screened separately. All shovel test fill was screened through 0.635 cm (0.25 in) hardware cloth and examined visually for cultural material. Soil characteristics were recorded using Munsell Soil Color Charts and standard soils nomenclature. Each shovel test was backfilled after being recorded.

#### **Project Results**

The review of historical maps and aerial images of the project area, files maintained by the Connecticut State Historic Preservation Office (CT-SHPO), and the previously completed Phase IA pedestrian survey,

revealed that five previously identified archaeological sites have been located within 1.6 kilometer (1 mile) of the project area, suggesting that the landform on which the Facility will be located retained a moderate to high archaeological sensitivity. No National or State Register of Historic Places properties were identified in the area

A Phase IB survey of the Facility was completed in July 2021. A total of 208 of 209 (99 percent) planned shovel tests and 10 of 10 (100 percent) delineation shovel tests were excavated throughout the project area, and two cultural resources loci were identified. Locus 1 yielded two quartzite flakes from the plow zone and a quartz Archaic Period Brewerton Eared Triangle point in the subsoil. Locus 2 yielded a single argillite tertiary flake in the plow zone. No cultural features or soil anomalies were associated with the two loci. Loci 1 and 2, which lacked substantial numbers of artifacts and research potential, were assessed as not significant applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). No additional archaeological examination of Loci 1 and 2 is recommended prior to construction of the Facility.

In addition, of the 208 excavated shovel tests, five yielded a scatter of both modern and historical artifacts within the disturbed Ap-Horizon (plow zone) and a localized layer of fill. None of these items were found in association with buried cultural features or above ground architectural remains, and no historical resources were identified in the Facility area. The low density historical/modern period assemblage was identified as unassociated field scatter. No impacts to significant archaeological resources are expected by the construction of the solar facility, and no additional archaeological examination of the project area is recommended prior to construction.

Finally, a single stone cluster and three dry laid stone wall segments were identified in the Facility area. The stone cluster is located in the southern portion of the project area. One stone wall was identified in the northern portion of the Facility area; it extended from southwest to northeast. A second stone wall was identified to the south of the proposed access road and beginning at the western boundary of the project area and extending to the east. The third stone wall was identified in the southeastern portion of the project area; it extended from north to south. The identified stone cluster and walls cannot be attributed to a specific type, function, or time period; no additional recordation of this surficial features is recommended.

# Project Personnel

Heritage personnel who contributed to the project include David R. George, M.A., R.P.A., (Principal Investigator); Renée Petruzelli, M.A., R.P.A. (Project Archaeologist); Samuel Spitzchuch, B.A., (Field Director); Stephen Anderson, B.A., (Geographic Information Specialist), and Barbara Sternal, M.A., (Historian).

# CHAPTER II NATURAL SETTING

#### Introduction

This chapter provides a brief overview of the natural setting of the region containing of the region containing the Facility in Uncasville, Connecticut. Previous archaeological research has documented that specific environmental factors can be associated with both prehistoric and historical period site selection. These include general ecological conditions, as well as types of fresh water sources present, degree of slopes, and soils situated within a given project area. The remainder of this chapter provides a brief overview of the ecology, hydrological resources, and soils present within the project area and the larger region in general.

#### **Ecoregions of Connecticut**

Throughout the Pleistocene and Holocene Periods, Connecticut has undergone numerous environmental changes. Variations in climate, geology, and physiography have led to the "regionalization" of Connecticut's modern environment. It is clear, for example, that the northwestern portion of the state has different natural characteristics than the coastline. Recognizing this fact, Dowhan and Craig (1976), as part of their study of the distribution of rare and endangered species in Connecticut, subdivided the state into various ecoregions. Dowhan and Craig (1976:27) defined an ecoregion as:

"an area characterized by a distinctive pattern of landscapes and regional climate as expressed by the vegetation composition and pattern, and the presence or absence of certain indicator species and species groups. Each ecoregion has a similar interrelationship between landforms, local climate, soil profiles, and plant and animal communities. Furthermore, the pattern of development of plant communities (chronosequences and toposequences) and of soil profile is similar in similar physiographic sites. Ecoregions are thus natural divisions of land, climate, and biota."

Dowhan and Craig defined nine major ecoregions for the State of Connecticut. They are based on regional diversity in plant and animal indicator species (Dowhan and Craig 1976). Only one of the ecoregions is germane to the current investigation: Southeast Hills ecoregion. A summary of this ecoregion is presented below. It is followed by a discussion of the hydrology and soils found in and adjacent to the project area.

#### Southeast Hills Ecoregion

The Southeast Hills ecoregion consists of "coastal uplands, lying within 25 miles of Long Island Sound, characterized by low, rolling to locally rugged hills of moderate elevation, broad areas of upland, and local areas of steep and rugged topography" (Dowhan and Craig 1976). Elevations in the Southeast Hills ecoregion generally range from 75.7 to 227.2 m (250 to 750 ft) above sea level (Dowhan and Craig 1976). The bedrock of the region is composed of schists and gneisses deposited during the Paleozoic. Soils in the region have developed on top of glacial till in upland locales, and on top of stratified deposits of sand, gravel, and silt in the local valleys and upland areas (Dowhan and Craig 1976). Freshwater sources located in the region containing the project area include Williams Pond, Trent Pond, Salmon River, Nipsic Brook, and Wildcat Brook, as well as other unnamed streams, ponds and wetland areas.

#### Hydrology in the Vicinity of the Facility

The Facility is situated within a region that contains several sources of freshwater, including Falls Brook just to the south of the project area boundary, Stony Brook, Wheeler Pond, Oxoboxo Lake, Rockland Pond, Oxoboxo Brook, Picker Pond, and the Thames River, as well as unnamed streams, ponds, and wetlands. These freshwater sources may have served as resource extraction areas for Native American and historical populations. Previously completed archaeological investigations in Connecticut have demonstrated that streams, rivers, and wetlands were focal points for prehistoric occupations because they provided access to transportation routes, sources of freshwater, and abundant faunal and floral resources.

#### Soils Comprising the Facility Area

Soil formation is the direct result of the interaction of many variables, including climate, vegetation, parent material, time, and organisms present (Gerrard 1981). Once archaeological deposits are buried within the soil, they are subject to various diagenic and taphonomic processes. Different classes of artifacts may be preferentially protected, or unaffected by these processes, whereas others may deteriorate rapidly. Cyclical wetting and drying, freezing, and thawing, and compression can accelerate chemically and mechanically the decay processes for animal bones, shells, lithics, ceramics, and plant remains. Lithic and ceramic artifacts are largely unaffected by soil pH, whereas animal bones and shells decay more quickly in acidic soils. In contrast, acidic soils enhance the preservation of charred plant remains.

A review of the soils within the Facility area is presented below. The study area is characterized by the presence of two major soil types: the Haven and Enfield series (32) and the Narragansett series (68) (Figure 3). Generally speaking, the soils identified within the project area are very deep, well drained loams and are the types of soils that are typically correlated with prehistoric and historical use and occupation. Descriptive profiles for each soil type are presented below; they were gathered from the National Resources Conservation Service.

#### Haven and Enfield Series (Soil Code 32)

The Haven series consists of very deep, well drained soils formed in loamy over sandy and gravelly outwash. They are nearly level through moderately sloping soils on outwash plains, valley trains, terraces, and water-sorted moraine deposits. Saturated hydraulic conductivity is moderately high or high in the mineral solum and very high in the substratum. Slope ranges from 0 through 15 percent. A typical profile associated with Haven soils is as follows: Oi--0 to 2 inches (0 to 5 centimeters); slightly decomposed plant material derived from loose pine needles, leaves and twigs; **Oa**--2 to 3 inches (5 to 8 centimeters); black (5YR 2/1) highly decomposed plant material; A--3 to 6 inches (8 to 15 centimeters); dark grayish brown (10YR 4/2) loam; weak fine and medium granular structure; friable; many fine and coarse roots; very strongly acid; abrupt smooth boundary; Bw1--6 to 13 inches (15 to 33 centimeters); brown (7.5YR 4/4) loam; weak fine and medium subangular blocky structure; friable; common fine roots; many fine pores; very strongly acid; clear wavy boundary; Bw2--13 to 22 inches (33 to 56 centimeters); strong brown (7.5YR 5/6) loam; weak fine and medium subangular blocky structure; friable; common fine roots; many fine pores; 5 percent fine gravel; very strongly acid; gradual wavy boundary; BC--22 to 31 inches (56 to 79 centimeters); yellowish brown (10YR 5/6) gravelly loam; weak medium and fine subangular blocky structure; friable; few fine roots; common fine pores; 20 percent fine gravel; very strongly acid; clear wavy boundary; and 2C--31 to 65 inches (79 to 165 centimeters); yellowish brown (10YR 5/4) to brownish yellow (10YR 6/6) stratified gravelly sand; single grained; loose; 30 percent fine gravel; very strongly acid.

The Enfield series consists of very deep, well drained loamy soils formed in a silty mantle overlying glacial outwash. They are nearly level to sloping soils on outwash plains and terraces. Slope ranges from 0 to 15 percent. A typical profile associated with Enfield soils is as follows: **Ap**--0 to 7 inches; dark grayish brown (10YR 4/2) silt loam; moderate fine granular structure; friable; many very fine and fine roots; 5 percent fine gravel; strongly acid; abrupt smooth boundary; **Bw1**--7 to 16 inches; strong brown (7.5YR 5/6) silt loam; weak medium subangular blocky structure; friable; common very fine and many fine roots; 5 percent fine gravel; strongly acid; clear wavy boundary; **Bw2**--16 to 25 inches; light olive brown (2.5Y 5/4)

silt loam; weak medium subangular blocky structure; friable, few very fine and common fine roots; 5 percent fine gravel; strongly acid; abrupt wavy boundary; and **2C**--25 to 60 inches; brown (10YR 5/3) very gravelly sand; single grain; loose; stratified; 45 percent gravel and 5 percent cobbles; strongly acid.

#### Narragansett Series (Soil Code 68)

The Narragansett series consists of very deep, well drained loamy soils formed in a mantle of mediumtextured deposits overlying till. They are nearly level to moderately steep soils on till plains, low ridges and hills. Slope ranges from 0 to 25 percent. A typical profile associated with Narragansett soils is as follows: **Ap**--0 to 6 inches; dark brown (10YR 3/3) silt loam; weak medium granular structure; very friable; common medium roots; very strongly acid; clear wavy boundary; **Bw1**--6 to 15 inches; dark yellowish brown (10YR 4/6) silt loam; weak medium subangular blocky structure; very friable; common medium roots; very strongly acid; gradual wavy boundary; **Bw2**--15 to 24 inches; yellowish brown (10YR 5/6) silt loam; weak medium subangular blocky structure; very friable; common medium roots; strongly acid; gradual wavy boundary; **Bw2**--15 to 24 inches; yellowish brown (10YR 5/6) silt loam; weak medium subangular blocky structure; very friable; common medium roots; strongly acid; clear wavy boundary; **Bw3**--24 to 28 inches; yellowish brown (10YR 5/6) gravelly silt loam; weak medium subangular blocky structure; very friable; few fine roots; 15 percent gravel; strongly acid; clear wavy boundary; and **2C**--28 to 60 inches; light olive brown (2.5Y 5/4) very gravelly loamy coarse sand; single grain; loose; 45 percent gravel and cobbles; strongly acid.

#### Summary

The natural setting of the area containing the proposed Facility is common throughout the Southeast Hills ecoregion. The major river within this ecoregion is the Thames River, which has numerous smaller tributaries. Moderate slopes dominate the region, and the soils are loams. In general, the project region was well suited to Native American occupation throughout the prehistoric era. This portion of Uncasville was also used after Colonial settlement for agricultural land, as evidenced by the presence of agricultural fields throughout the region; thus, archaeological deposits dating from the prehistoric and historical era may be expected near or within the proposed Facility.

# CHAPTER III PREHISTORIC SETTING

#### Introduction

Prior to the late 1970s and early 1980s, very few systematic archaeological surveys of large portions of the state of Connecticut had been undertaken. Rather, the prehistory of the region was studied at the site level. Sites chosen for excavation were highly visible and they were in such areas as the coastal zone, e.g., shell middens, and Connecticut River Valley. As a result, a skewed interpretation of the prehistory of Connecticut was developed. It was suggested that the upland portions of the state, i.e., the northeastern and northwestern hills ecoregions, were little used and rarely occupied by prehistoric Native Americans, while the coastal zone, i.e., the eastern and western coastal and the southeastern and southwestern hills ecoregions, were the focus of settlements and exploitation in the prehistoric era. This interpretation remained unchallenged until the 1970s and 1980s when several town-wide and regional archaeological studies were completed. These investigations led to the creation of several archaeological phases that subsequently were applied to understand the prehistory of Connecticut. The remainder of this chapter provides an overview of the prehistoric setting of the region encompassing the project area.

#### Paleo-Indian Period (12,000 to 10,000 Before Present [B.P.])

The earliest inhabitants of the area encompassing the State of Connecticut, who have been referred to as Paleo-Indians, arrived in the area by ca., 12,000 B.P. (Gramly and Funk 1990; Snow 1980). Due to the presence of large Pleistocene mammals at that time and the ubiquity of large fluted projectile points in archaeological deposits of this age, Paleo-Indians often have been described as big-game hunters (Ritchie and Funk 1973; Snow 1980); however, as discussed below, it is more likely that they hunted a broad spectrum of animals.

While there have been numerous surface finds of Paleo-Indian projectile points throughout the State of Connecticut, only two sites, the Templeton Site (6-LF-21) in Washington, Connecticut and the Hidden Creek Site (72-163) in Ledyard, Connecticut, have been studied in detail and dated using the radiocarbon method (Jones 1997; Moeller 1980). The Templeton Site (6-LF-21) is in Washington, Connecticut and was occupied between 10,490 and 9,890 years ago (Moeller 1980). In addition to a single large and two small fluted points, the Templeton Site produced a stone tool assemblage consisting of gravers, drills, core fragments, scrapers, and channel flakes, which indicates that the full range of stone tool production and maintenance took place at the site (Moeller 1980). Moreover, the use of both local and non-local raw materials was documented in the recovered tool assemblage, suggesting that not only did the site's occupants spend some time in the area, but they also had access to distant stone sources, the use of which likely occurred during movement from region to region.

The only other Paleo-Indian site studied in detail in Connecticut is the Hidden Creek Site (72-163) (Jones 1997). The Hidden Creek Site is situated on the southeastern margin of the Great Cedar Swamp on the Mashantucket Pequot Reservation in Ledyard, Connecticut. While excavation of the Hidden Creek Site produced evidence of Terminal Archaic and Woodland Period components (see below) in the upper soil horizons, the lower levels of the site yielded artifacts dating from the Paleo-Indian era. Recovered Paleo-Indian artifacts included broken bifaces, side-scrapers, a fluted preform, gravers, and end-scrapers. Based on the types and number of tools present, Jones (1997:77) has hypothesized that the Hidden Creek Site represented a short-term occupation, and that separate stone tool reduction and rejuvenation areas were present.

While archaeological evidence for Paleo-Indian occupation is scarce in Connecticut, it, combined with data from the West Athens Road and King's Road Site in the Hudson drainage and the Davis and Potts Sites in northern New York, supports the hypothesis that there was human occupation of the area not long after ca. 12,000 B.P. (Snow 1980). Further, site types currently known suggest that the Paleo-Indian settlement pattern was characterized by a high degree of mobility, with groups moving from region to region in search of seasonally abundant food resources, as well as for the procurement of high-quality raw materials from which to fashion stone tools.

### Archaic Period (10,000 to 2,700 B.P.)

The Archaic Period, which succeeded the Paleo-Indian Period, began by ca., 10,000 B.P. (Ritchie and Funk 1973; Snow 1980), and it has been divided into three subperiods: Early Archaic (10,000 to 8,000 B.P.), Middle Archaic (8,000 to 6,000 B.P.), and Late Archaic (6,000 to 3,400 B.P.). These periods were devised to describe all non-farming, non-ceramic producing populations in the area. Regional archeologists recently have recognized a final "transitional" Archaic Period, the Terminal Archaic Period (3,400-2,700 B.P.), which was meant to describe those groups that existed just prior to the onset of the Woodland Period and the widespread adoption of ceramics into the toolkit (Snow 1980; McBride 1984; Pfeiffer 1984, 1990; Witthoft 1949, 1953).

### Early Archaic Period (10,000 to 8,000 B.P.)

To date, very few Early Archaic sites have been identified in southern New England. As a result, researchers such as Fitting (1968) and Ritchie (1969), have suggested a lack of these sites likely is tied to cultural discontinuity between the Early Archaic and preceding Paleo-Indian Period, as well as a population decrease from earlier times. However, with continued identification of Early Archaic sites in the region, and the recognition of the problems of preservation, it is difficult to maintain the discontinuity hypothesis (Curran and Dincauze 1977; Snow 1980).

Like their Paleo-Indian predecessors, Early Archaic sites tend to be very small and produce few artifacts, most of which are not temporally diagnostic. While Early Archaic sites in other portions of the United States are represented by projectile points of the Kirk series (Ritchie and Funk 1973) and by Kanawha types (Coe 1964), sites of this age in southern New England are identified on the basis of a series of ill-defined bifurcate-based projectile points. These projectile points are identified by the presence of their characteristic bifurcated base, and they generally are made from high quality raw materials. Moreover, finds of these projectile points have rarely been in stratified contexts. Rather, they occur commonly either as surface expressions or intermixed with artifacts representative of later periods. Early Archaic occupations, such as the Dill Farm Site and Sites 6LF64 and 6LF70 in Litchfield County, are represented by camps that were relocated periodically to take advantage of seasonally available resources (McBride 1984; Pfeiffer 1986). In this sense, a foraging type of settlement pattern was employed during the Early Archaic Period.

# Middle Archaic Period (8,000 to 6,000 B.P.)

By the onset of the Middle Archaic Period, essentially modern deciduous forests had developed in the region (Davis 1969). It is at this time that increased numbers and types of sites are noted in Connecticut (McBride 1984). The most well-known Middle Archaic site in New England is the Neville Site, which is in Manchester, New Hampshire and studied by Dincauze (1976). Careful analysis of the Neville Site indicated that the Middle Archaic occupation dated from between ca., 7,700 and 6,000 years ago. In fact, Dincauze (1976) obtained several radiocarbon dates from the Middle Archaic component of the Neville Site. The

dates, associated with the then-newly named Neville type projectile point, ranged from 7,740+280 and 7,015+160 B.P. (Dincauze 1976).

In addition to Neville points, Dincauze (1976) described two other projectile points styles that are attributed to the Middle Archaic Period: Stark and Merrimac projectile points. While no absolute dates were recovered from deposits that yielded Stark points, the Merrimac type dated from 5,910+180 B.P. Dincauze argued that both the Neville and later Merrimac and Stark occupations were established to take advantage of the excellent fishing that the falls situated adjacent to the site area would have afforded Native American groups. Thus, based on the available archaeological evidence, the Middle Archaic Period is characterized by continued increases in diversification of tool types and resources exploited, as well as by sophisticated changes in the settlement pattern to include different site types, including both base camps and task-specific sites (McBride 1984:96)

### Late Archaic Period (6,000 to 3,700 B.P.)

The Late Archaic Period in southern New England is divided into two major cultural traditions that appear to have coexisted. They include the Laurentian and Narrow-Stemmed Traditions (Funk 1976; McBride 1984; Ritchie 1969a and b). Artifacts assigned to the Laurentian Tradition include ground stone axes, adzes, gouges, ulus (semi-lunar knives), pestles, atlatl weights, and scrapers. The diagnostic projectile point forms of this time period in southern New England include the Brewerton Eared-Notched, Brewerton Eared and Brewerton Side-Notched varieties (McBride 1984; Ritchie 1969a; Thompson 1969). In general, the stone tool assemblage of the Laurentian Tradition is characterized by flint, felsite, rhyolite, and quartzite, while quartz was largely avoided for stone tool production.

In terms of settlement and subsistence patterns, archaeological evidence in southern New England suggests that Laurentian Tradition populations consisted of groups of mobile hunter-gatherers. While a few large Laurentian Tradition occupations have been studied, sites of this age generally encompass less than 500 m2 (5,383 ft2). These base camps reflect frequent movements by small groups of people in search of seasonally abundant resources. The overall settlement pattern of the Laurentian Tradition was dispersed in nature, with base camps located in a wide range of microenvironments, including riverine as well as upland zones (McBride 1978, 1984:252). Finally, subsistence strategies of Laurentian Tradition focused on hunting and gathering of wild plants and animals from multiple ecozones.

The second Late Archaic tradition, known as the Narrow-Stemmed Tradition, is unlike the Laurentian Tradition, and it likely represents a different cultural adaptation. The Narrow-Stemmed tradition is recognized by the presence of quartz and quartzite narrow stemmed projectile points, triangular quartz Squibnocket projectile points, and a bipolar lithic reduction strategy (McBride 1984). Other tools found in Narrow-Stemmed Tradition artifact assemblages include choppers, adzes, pestles, antler and bone projectile points, harpoons, awls, and notched atlatl weights. Many of these tools, notably the projectile points and pestles, indicate a subsistence pattern dominated by hunting and fishing, as well the collection of a wide range of plant foods (McBride 1984; Snow 1980:228).

# Terminal Archaic Period (3,700 to 2,700 B.P.)

The Terminal Archaic Period, which lasted from ca., 3,700 to 2,700 BP, is perhaps the most interesting, yet confusing of the Archaic Periods in southern New England prehistory. Originally termed the "Transitional Archaic" by Witthoft (1953) and recognized by the introduction of technological innovations, e.g., broadspear projectile points and soapstone bowls, the Terminal Archaic has long posed problems for regional archeologists. While the Narrow-Stemmed Tradition persisted through the Terminal Archaic and into the Early Woodland Period, the Terminal Archaic is coeval with what appears to be a different

technological adaptation, the Susquehanna Tradition (McBride 1984; Ritchie 1969b). The Susquehanna Tradition is recognized in southern New England by the presence of a new stone tool industry that was based on the use of high-quality raw materials for stone tool production and a settlement pattern different from the "coeval" Narrow-Stemmed Tradition.

The Susquehanna Tradition is based on the classification of several Broadspear projectile point types and associated artifacts. There are several local sequences within the tradition, and they are based on projectile point type chronology. Temporally diagnostic projectile points of these sequences include the Snook Kill, Susquehanna Broadspear, Mansion Inn, and Orient Fishtail types (Lavin 1984; McBride 1984; Pfeiffer 1984). The initial portion of the Terminal Archaic Period (ca., 3,700-3,200 BP) is characterized by the presence of Snook Kill and Susquehanna Broadspear projectile points, while the latter Terminal Archaic (3,200-2,700 BP) is distinguished by the use of Orient Fishtail projectile points (McBride 1984:119; Ritchie 1971).

In addition, it was during the late Terminal Archaic Period that interior cord marked, grit tempered, thick walled ceramics with conoidal (pointed) bases made their initial appearance in the Native American toolkit. These are the first ceramics in the region, and they are named Vinette I (Ritchie 1969a; Snow 1980:242); this type of ceramic vessel appears with much more frequency during the ensuing Early Woodland Period. In addition, the adoption and widespread use of soapstone bowls, as well as the implementation of subterranean storage, suggests that Terminal Archaic groups were characterized by reduced mobility and longer-term use of established occupation sites (Snow 1980:250).

Finally, while settlement patterns appeared to have changed, Terminal Archaic subsistence patterns were analogous to earlier patterns. The subsistence pattern still was diffuse in nature, and it was scheduled carefully. Typical food remains recovered from sites of this period consist of fragments of white-tailed deer, beaver, turtle, fish, and various small mammals. Botanical remains recovered from the site area consisted of Chenopodium sp., hickory, butternut, and walnut (Pagoulatos 1988:81). Such diversity in food remains suggests at least minimal use of a wide range of microenvironments for subsistence purposes.

# Woodland Period (2,700 to 350 B.P.)

Traditionally, the advent of the Woodland Period in southern New England has been associated with the introduction of pottery; however, as mentioned above, early dates associated with pottery now suggest the presence of Vinette I ceramics appeared toward the end of the preceding Terminal Archaic Period (Ritchie 1969a; McBride 1984). Like the Archaic Period, the Woodland Period has been divided into three subperiods: Early, Middle, and Late Woodland. The various subperiods are discussed below.

# Early Woodland Period (ca., 2,700 to 2,000 B.P.)

The Early Woodland Period of the northeastern United States dates from ca., 2,700 to 2,000 B.P., and it has been thought to have been characterized by the advent of farming, the initial use of ceramic vessels, and increasingly complex burial ceremonialism (Griffin 1967; Ritchie 1969a and 1969b; Snow 1980). In the Northeast, the earliest ceramics of the Early Woodland Period are thick walled, cord marked on both the interior and exterior, and possess grit temper.

Careful archaeological investigations of Early Woodland sites in southern New England have resulted in the recovery of narrow stemmed projectile points in association with ceramic sherds and subsistence remains, including specimens of white-tailed deer, soft and hard-shell clams, and oyster shells (Lavin and Salwen: 1983; McBride 1984:296-297; Pope 1952). McBride (1984) has argued that the combination of the subsistence remains and the recognition of multiple superimposed cultural features at various sites

indicates that Early Woodland Period settlement patterns were characterized by multiple re-use of the same sites on a seasonal basis by small co-residential groups.

### Middle Woodland Period (2,000 to 1,200 B.P.)

The Middle Woodland Period is marked by an increase in the number of ceramic types and forms utilized (Lizee 1994a), as well as an increase in the amount of exotic lithic raw material used in stone tool manufacture (McBride 1984). The latter suggests that regional exchange networks were established, and that they were used to supply local populations with necessary raw materials (McBride 1984; Snow 1980). The Middle Woodland Period is represented archaeologically by narrow stemmed and Jack's Reef projectile points; increased amounts of exotic raw materials in recovered lithic assemblages, including chert, argillite, jasper, and hornfels; and conoidal ceramic vessels decorated with dentate stamping. Ceramic types, indicative of the Middle Woodland Period, include Linear Dentate, Rocker Dentate, Windsor Cord Marked, Windsor Brushed, Windsor Plain, and Hollister Stamped (Lizee 1994a:200).

In terms of settlement patterns, the Middle Woodland Period is characterized by the occupation of village sites by large co-residential groups that utilized native plant and animal species for food and raw materials in tool making (George 1997). These sites were the principal place of occupation, and they were positioned close to major river valleys, tidal marshes, estuaries, and the coastline, all of which would have supplied an abundance of plant and animal resources (McBride 1984:309). In addition to villages, numerous temporary and task-specific sites were utilized in the surrounding upland areas, as well as in closer ecozones such as wetlands, estuaries, and floodplains. The use of temporary and task-specific sites to support large village populations indicates that the Middle Woodland Period was characterized by a resource acquisition strategy that can best be termed as logistical collection (McBride 1984:310).

### Late Woodland Period (ca., 1,200 to 350 B.P.)

The Late Woodland Period in southern New England dates from ca., 1,200 to 350 B.P., and it is characterized by the earliest evidence for the use of corn in the lower Connecticut River Valley (Bendremer 1993; Bendremer and Dewar 1993; Bendremer et al. 1991; George 1997; McBride 1984); an increase in the frequency of exchange of non-local lithics (Feder 1984; George and Tryon 1996; McBride 1984; Lavin 1984); increased variability in ceramic form, function, surface treatment, and decoration (Lavin 1980, 1986, 1987; Lizee 1994a, 1994b); and a continuation of a trend towards larger, more permanent settlements in riverine, estuarine, and coastal ecozones (Dincauze 1974; McBride 1984; Snow 1980).

Stone tool assemblages associated with Late Woodland occupations, especially village-sized sites, are functionally variable and they reflect plant and animal resource processing and consumption on a large scale. Finished stone tools recovered from Late Woodland sites include Levanna and Madison projectile points; drills; side-, end-, and thumbnail scrapers; mortars and pestles; nutting stones; netsinkers; and celts, adzes, axes, and digging tools. These tools were used in activities ranging from hide preparation to plant processing to the manufacture of canoes, bowls, and utensils, as well as other settlement and subsistence-related items (McBride 1984; Snow 1980). Finally, ceramic assemblages recovered from Late Woodland sites are as variable as the lithic assemblages. Ceramic types identified include Windsor Fabric Impressed, Windsor Brushed, Windsor Cord Marked, Windsor Plain, Clearview Stamped, Sebonac Stamped, Selden Island, Hollister Plain, Hollister Stamped, and Shantok Cove Incised (Lavin 1980, 1988a, 1988b; Lizee 1994a; Pope 1953; Rouse 1947; Salwen and Ottesen 1972; Smith 1947). These types are more diverse stylistically than their predecessors, with incision, shell stamping, punctation, single point, linear dentate, rocker dentate stamping, and stamp and drag impressions common (Lizee 1994a:216).

#### **Summary of Connecticut Prehistory**

In sum, the prehistory of Connecticut spans from ca., 12,000 to 350 B.P., and it is characterized by numerous changes in tool types, subsistence patterns, and land use strategies. For much of the prehistoric era, local Native American groups practiced a subsistence pattern based on a mixed economy of hunting and gathering wild plant and animal resources. It is not until the Late Woodland Period that incontrovertible evidence for the use of domesticated species is available. Further, settlement patterns throughout the prehistoric era shifted from seasonal occupations of small co-residential groups to large aggregations of people in riverine, estuarine, and coastal ecozones. In terms of the region containing the proposed project area, a variety of prehistoric site types may be expected. These range from seasonal camps utilized by Archaic populations to temporary and task-specific sites of the Woodland era.
# CHAPTER IV HISTORICAL OVERVIEW

# Introduction

The proposed Facility is located in the village of Uncasville in the town of Montville in New London County, Connecticut. Originally part of New London, the area now called Montville was settled in 1646 as Pequot and was named for the Native American tribe. Following increased European settlement, the region became known in 1658 as the North Parish of New London and included a portion of today's town of Salem. Montville was officially incorporated as a town in 1786. The project area is located in eastern Montville, west of modern-day Interstate 395 and the Thames River. The remainder of this chapter provides on overview history of Montville and historical data specific to the Facility area.

# **Native American History**

Prior to European contact, eastern Connecticut was inhabited by the Mohegan and Pequot tribes. The Mohegans were concentrated between Norwich and New London on the western side of the Thames River. Various Mohegan settlements were in that territory, including Pomechaug and Fort Hill. Other settlements called Massapeag and Shantok were both located on the western bank of the Thames River, with Shantok being the largest. The Pequots were primarily located in the Mystic River Valley, with their territory spanning along the coast from the Thames River in the west to the Pawcatuck River in the east and as far north as present-day Griswold. While similar in their shared variation of the Algonquian language, the Pequots and Mohegans possessed distinct cultural practices prior to European contact. When the Europeans arrived, the Pequots began to dominate trade with them and expanded their territory, coming into conflict with the various other native groups that lived in the area at the time. The Mohegan sachem Uncas had married a member of the Pequot tribe in order to form an alliance. However, he, and other Native Americans subject to the Pequots' rule, sought a way to change the power balance. Uncas made numerous attempts to overthrow the Pequot sachem Sassacus, who was also his wife's brother. Sassacus could not afford to lose the support of the Mohegans; therefore, he exiled Uncas instead of executing him (Oberg 2006). In 1638, when the Pequot tribe and the English colonists eventually went to war, Uncas sided with the colonists in the removal of the Pequot tribe. This strategy was not new as he had worked alongside John Mason and the Narragansett tribes during the attempted extermination of the Pequot in 1637 (Baker 1896). Following the Pequot War, Uncas settled in the area that is now Montville, which was no longer under Pequot control. Uncas' authority extended north along the Quinebaug and Yantic Rivers, and groups in those areas paid tribute to the Mohegans. The eastern area of Montville was dedicated as a Reservation until 1790 when the Connecticut legislature divided the land among colonial families (Baker 1896).

# History of the Town of Montville

The colonization of New London, the parent town of Montville, began in the 1640s. Several large tracts of land in the former Pequot territory were granted to prominent colonial individuals, with an initial focus on the Thames River harbor. Originally named Pequot, in 1658, the Connecticut legislature changed the growing town's name to New London. Uncas similarly made grants of land from the territory he held in the future Montville in the 1640s, but the first known colonists to be granted land there were Richard Haughton and James Rogers in 1658 (Caulkins 1895). Disputes over ownership of the land slowed colonization of Montville, so that it only had enough colonial residents to form the North Parish of the Congregational Church of New London as of 1720. The territorial dispute was then settled in 1721, and the separate town of Montville was created in 1786, as part of a wave of post-Revolutionary War era town

incorporations across the state (Crofut 1937). New London's large area and thriving port had a substantial population of over 5,000 through 1782, while Montville remained much smaller. In 1800, Montville had a population of 2,233 residents, which declined slightly to 2,187 residents in 1810, and then dramatically to 1,951 as of the 1820 census, largely due to the separation of the town of Salem in 1819 (Secretary of the State Denise W. Merrill 2021a).

Montville witnessed various nineteenth century economic trends: stagnation and decline between 1830 and 1850, modest growth from 1850 to 1880, and another net decline from 1880 to 1900. The population fluctuated accordingly, starting at 2,233 residents, dropping to 1,848 in 1850, and rising again to 2,664 in 1880 (Secretary of the State Denise W. Merrill 2021b). The 1850 federal census of industry reported 14 firms that made at least \$500 of product per year in Montville, half of which were textile mills of various types. In total, these firms employed only 139 men and 94 women in an average month, demonstrating the modest employment opportunities in the manufacturing sector of Montville (United States Census Bureau 1850). By the end of the nineteenth century, manufacturing and industrial sectors in Montville saw an increase in activity. A tributary of the Thames River known as Saw-mill Brook (now called Oxoboxo Brook) hosted a dye works, numerous paper mills, and several textile mills. The smaller streams in the area continued to support grist mills and sawmills (Baker 1896).

As of the early twentieth century, Montville's economy was still based on a combination of farming and manufacturing. In 1932, the town's industries were listed as "agriculture, and the manufacture of paper, paper boxes, cotton goods, etc." (Connecticut 1932:288). Montville's population rose significantly after 1900, almost doubling by 1950 to 4,766 residents (Secretary of the State Denise W. Merrill 2021c). Various factors contributed to this population growth. Continued industrial activity attracted new residents and many European immigrants arrived to work in the factories or establish farms. Improved transportation, such as the establishment of streetcars in the villages of Uncasville and Chesterfield, and the prevalence of automobiles also facilitated an influx of people. In addition, a number of residents of large cities built summer homes in town (Montville 2010). Montville's population continued to increase during the 1960s, approaching 16,000 residents by 1970 and perpetuating a more gradual upward trend through the rest of the century (Secretary of the State Denise W. Merrill 2021d). Late-twentieth century growth was the result of suburbanization, as people moved out of Norwich and New London, aided by the 1958 opening of Interstate 395 (Oglesby 2013). In 1994, a state prison opened in Montville, which added 1,800 imprisoned men to the town's population (Montville 2010). In 1995, the Mohegan tribe gained land in Montville, after receiving federal recognition the previous year. The tribe opened a casino on its land in 1996 and it remains one of only two casinos in the state (the other being Foxwoods owned by the Mashantucket Pequot tribe) (Bixby 05 October 1996:A1; Lightman 30 September 1995:A1). As of 2018, the town's largest employers were the town itself, the State of Connecticut Corrections Department (correlated to the prison), a manufacturer of gauges and meters (one of eight manufacturing firms in town), and two retail firms (out of 61). Overall, the town's employment was dominated by the government sector, followed by the accommodation and foods services sector. The population by 2020 was 19,546 residents (AdvanceCT and CTData Collaborative 2020). Despite its population growth, Montville retains areas of rural landscape along with its suburban sections.

# History of the Facility Area

The Facility is located in the village of Uncasville (named after the Mohegan sachem Uncas) in the southeastern corner of Montville. Uncasville was the site of various mills in the nineteenth century mostly located on the Oxoboxo River, which extends through the village. In the mid-twentieth century, land in Uncasville was sold to the United Nuclear Corporation, which had a manufacturing facility on the site that produced nuclear fuel components until the 1990s. This same land, which consisted of 244 acres, was

ceded to the Mohegan tribe to settle their land claims and comprises most of their reservation (Montville 2010).

According to an 1854 map of central Montville, the Facility is located in what was a rural area along a branch of the Stony Brook and to the east of a roadway (Figure 3). There were several properties located nearby, including a homestead to the north of the parcel owned by G. Dolbeare and another to the to the southeast owned by W. Baker. The closest homestead was to the west of the Facility; it belonged to A. F. Rogers, otherwise known as Asahel F. Rogers, a descendent of one of the earliest settlers in Montville, James Rogers (Rogers 1902). In 1850, Asahel F. Rogers was a 57-year-old farmer with a sizable estate worth \$10,000 (U.S. Census Bureau 1850). By 1860, Rogers was going by Azel and was still a farmer, but his land holdings had decreased slightly and were valued at \$9,000. Rogers' 27-year-old son John R. was a member of his household at the time and was working as a farmhand, presumably on the family farm (U.S. Census Bureau 1860).

An 1868 map of the area indicated that the A. F. Rogers estate was now owned by R. Rogers (Figure 4). This was likely Azel's son John R. who went by J. Randolph Rogers. Azel F. Rogers did not pass away until 1869, suggesting that perhaps he relinquished control and possibly ownership of the farm due to an illness (Find A Grave 2021a). As of the 1870 census, John R. Rogers was a 37-year-old farmer whose real estate was valued at \$5,500, indicating an almost 50 percent decrease from his father's original land holdings in 1850 (U.S. Census Bureau 1870). By 1880, Rogers was 47 and working as a mate on a merchant brig. There were no real estate holdings listed on the census (U.S. Census Bureau 1880). Rogers passed away in 1887 and it is unclear when the property moved out of his ownership and why he had to take on work as a sailor (Find A Grave 2021b). Other nearby properties changed hands as well. In 1868, the homestead that had belonged to G. Dolbeare was simply labeled R.E. and the property under W. Baker's name was owned by J. Chappell.

In the early twentieth century, the region was still primarily rural agricultural land. A 1934 aerial photograph showed the Facility location as situated in agricultural fields southeast of Fitch Hill Road (Figure 5). At that time, the project parcel consisted of cleared and forested land with several standing structures west of the where the proposed access road will be built. The area also contained Falls Brook, which extended to the Facility. By 1951, very little had changed in the project region (Figure 6). The area still consisted of rural agricultural land. The project parcel was almost completely forested at that time and the proposed access road crosses what was a cleared field and traveled into a forested area. Another former road that extended from northeast to southwest connected fields that interested where the proposed access road will be built. The 1951 aerial also shows that some structures to the west of the proposed access road had been removed and others were added during the middle of the twentieth century. A 2019 aerial photograph showed some development to the southwest of the Facility, as well as the addition of several structures west of the proposed access road (Figure 7). As of 2019, the parcel was completely forested and the proposed access road was partly on cleared land and partly on forested land.

# Conclusions

Based on the location of the Facility and its consistent use as agricultural fields, there is the possibility of encountering remains of outbuildings, stonewalls, or other evidence of historical farming. The project area is in close proximity to the location of the homestead of Azel F. Rogers and John Randolph Rogers; however, despite their relation to one of Montville's earliest settlers these persons, as well as other nearby landowners, these individuals were not of local, state, or national importance. Any archaeological deposits associated with them are not likely to be considered historically significant.

# CHAPTER V PREVIOUS INVESTIGATIONS

# Introduction

This chapter presents an overview of previous archaeological research completed within the vicinity of the Facility in Uncasville, Connecticut. This discussion provides the comparative data necessary for assessing the results of the current Phase IB cultural resources reconnaissance survey, and it ensures that the potential impacts to all previously recorded cultural resources located within and adjacent to the project area are taken into consideration. Specifically, this chapter reviews previously identified archaeological sites and National/State Register of Historic Places properties situated in the project region (Figures 8 and 9). The discussions presented below are based on information currently on file at the Connecticut State Historic Preservation Office (CT-SHPO) in Hartford, Connecticut. In addition, the electronic site files maintained by Heritage were examined during this investigation. Both the quantity and quality of the information contained in the original cultural resources survey reports and State of Connecticut archaeological site forms are reflected below.

# Previously Recorded Archaeological Sites and National/State Register of Historic Places Properties/Districts in the Vicinity of the Project Area

A review of data currently on file at the CT-SHPO, as well as the electronic site files maintained by Heritage, resulted in the identification of five previously identified archaeological sites within 1.6 km (1 mi) of the project area and they are described below (Figure 8). No National or State Register of Historic Places properties were identified within the search area (Figure 9).

# <u>Site 86-13</u>

Site 86-13, also known as the Find Spot 1 E-1 Loop Site, is located approximately 965 m (0.60 mi) to the south of Fitch Hill Road within a Spectra Energy Corporation gas pipeline right of way in Montville, Connecticut (Figure 8). The Public Archaeology Laboratory, Inc., (PAL) identified the site in 2013 and recovered an isolated argillite Small Stemmed projectile point from the subsoil at this location. This projectile point type was manufactured during the Late Archaic Period. Site 86-13 has not been assessed applying the qualities of significance as defined by the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It will not be impacted by the proposed Facility because of distance from the project area.

# <u>Site 86-14</u>

Site 86-14, also referred to as the Find Spot 2 E-1 Loop Site, is situated approximately 1,075 m (0.67 mi) to the north of Raymond Hill Road in Montville, Connecticut. It too is located within a Spectra Energy Corporation gas pipeline right of way (Figure 8). PAL recorded this site in 2013 and recovered a single quartz Small Stemmed projectile point from the topsoil in this area. This projectile point type was manufactured during the Late Archaic Period. Jennifer Ort and Jenifer Elam of PAL recorded the site on October 24, 2013, and it was determined that it was not potentially eligible for listing on the National Register of Historic Places. It will not be impacted by the proposed Uncasville Solar project because of distance from the project area.

# Site 86-15

Site 86-15 is the Raymond Hill Wetland Site; it is located approximately 220 m (721.8 ft) to the north of Raymond Hill Road in Montville, Connecticut (Figure 8). PAL recorded the site in 2013 and recovered 10

chert flakes from one test pit and four array test pits. Jennifer Ort and Jenifer Elam recorded the site on October 24, 2013, as a camp site. While the site could not be dated to a specific prehistoric time period, it was determined to be potentially eligible for listing on the National Register of Historic Places. Site 86-15 will not be impacted by the proposed Uncasville Solar project because of distance from the project area.

# <u>Site 86-53</u>

Site 86-53, which is also known as the Cochegan Rock Site, was recorded in 1996 by Gregory F. Walwer of Archaeological Consulting Services. Walwer recorded that this was the site of reported early habitation, sheep herding, council meetings, and ceremonies for the Mohegan Tribe. The rock within the site area is believed to be the largest free standing glacial erratic in the region, and it now holds a commemorative inscription created by the Boy Scouts of America. Site 86-53 is located north of Raymond Hill Road and south of Falls Brook in Montville, Connecticut (Figure 8). It has not been assessed applying the qualities of significance as defined by the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It will not be impacted by the proposed North Silverbrook Solar project because of distance from the project area.

# Find Spot 3 E-1 Loop

The site form for the Find Spot 3 E-1 Loop Site was recorded by Jennifer Ort and Jenifer Elam of the PAL on October 24, 2013. The site is located approximately 955 m (0.60 mi) to the north of Raymond Hill Road within a Spectra Energy Corporation gas pipeline right of way (Figure 8). PAL archaeologists recovered a single piece of quartz chipping debris from the subsoil within the site area. The site could not be dated to a specific prehistoric time period and it was determined to be ineligible for listing on the National Register of Historic Places. The find spot site will not be impacted by the proposed North Silverbrook Solar project because of distance from the project area.

# Conclusion

A total of five prehistoric archaeological resources has been previously identified within 1.6 km (1 mi) of the Facility. This indicates that additional prehistoric resources could exist within the project area, which is further supported by the natural setting of the region discussed in Chapter II as suited to Native American occupation. Though no historical resources have been previously recorded within 1.6 km (1 mi) of the project area, Uncasville is known to have been used for farmsteads from settlement to the present era. The project area itself was agricultural land for its entire history, and cultural deposits relating to this activity may exist here.

# Introduction

This chapter describes the research design and field methods used to complete the current Phase IB cultural resources reconnaissance survey of the 9.8 acres deemed to retain moderate/high sensitivity for intact archaeological deposits associated with the proposed Solar Facility in Uncasville, Connecticut. In addition, the location and point-of-contact for the facility at which all cultural material, drawings, maps, photographs, and field notes generated during survey will be curated is provided below.

# **Research Design**

The current Phase IB cultural resources reconnaissance survey was designed to identify all prehistoric and historical cultural resources located within moderate/high sensitivity areas associated with the proposed facility. Fieldwork for the project was comprehensive in nature and project planning considered the distribution of previously recorded archaeological sites located near the project parcel, as well as an assessment of the natural qualities of the Facility area. The methods used to complete this investigation were designed to provide complete and thorough coverage of all portions of the moderate/high sensitivity areas. This undertaking entailed pedestrian survey, systematic subsurface testing, detailed mapping, and photo-documentation.

# **Field Methods**

Following the completion of all background research, the moderate/high sensitivity area previously identified during the Phase IA cultural resources assessment survey was subjected to a Phase IB cultural resources reconnaissance survey utilizing pedestrian survey, photo-documentation, GPS recordation, and systematic shovel testing. The field strategy was designed such that the entirety of the moderate/high sensitivity areas was examined visually and photographed. The archaeological field methodology also included subsurface testing in which shovel tests were situated at 15 m (49.2 ft) intervals along the access road. The shovel tests along the proposed access road extended from west to east. Shovel tests along the remaining 14 parallel survey transects were spaced 15 m (49.2 ft) from north to south throughout the solar array. Finally, when identified, positive shovel tests that yielded prehistoric period artifacts were delineated by excavating additional shovel tests spaced 7.5 m (25.6 ft) intervals around them.

During the survey, each shovel test measured 50 x 50 cm (19.7 x 19.7 in) in size, and each was excavated until the glacially derived C-Horizon was encountered or until large buried objects (e.g., boulders) prevented further excavation. Each shovel test was excavated in 10 cm (3.9 in) arbitrary levels within natural strata, and the fill from each level was screened separately. All shovel test fill was screened through 0.635 cm (0.25 in) hardware cloth and examined visually for cultural material. Soil characteristics were recorded in the field using Munsell Soil Color Charts and standard soils nomenclature. Shovel tests were backfilled after they were recorded.

# Curation

Following the completion and acceptance of the Final Report of Investigations, all cultural material, drawings, maps, photographs, and field notes will be curated with:

Dr. Sarah Sportman Office of Connecticut State Archaeology, Box U-1023 University of Connecticut Storrs, Connecticut 06269

# CHAPTER VII RESULTS & MANAGEMENT RECOMMENDATIONS

# Introduction

This chapter presents the results of the Phase IB cultural resources reconnaissance survey of the proposed solar Facility in Uncasville, Connecticut. It was completed by Heritage on behalf of All-Points in July of 2021. All fieldwork was performed in accordance with the *Environmental Review Primer for Connecticut's Archaeological Resources,* which is promulgated by the Connecticut State Historic Preservation Office (Poirier 1987). Field methods employed during the current investigation consisted of pedestrian survey, mapping, photo-documentation, and subsurface testing throughout the array area. Field methods and results are discussed below.

# Results of the Phase IB Cultural Resources Reconnaissance Survey of the Facility

As discussed in Chapter I, the proposed project area encompasses approximately 9.8 acres of land situated to the east of Fitch Hill Road and to the north of Falls Brook within what the Town of Montville refers to as Parcel 47-51; the project area is accessed from the east side of Fitch Hill Road. The proposed access road associated with the Facility extends past a farmstead to the east through agricultural land, then northeast into a forested area, where the solar array will be constructed (Figure 10 and Photos 1 and 2). The Facility is surrounded on all sides by deciduous forest, and the region is a sparsely developed residential area situated at elevations ranging from 73.2 to 88.4 m (240 to 290 ft) NGVD. A total of approximately 5,300 solar panel modules will be installed in rows spaced 4.6 m (15 ft) apart throughout the Facility area. A chain link fence will surround the solar panels. Metering equipment will be installed off the western boundary of the solar array and to the south of the proposed access road. This proposed gravel access road will extend eastward toward Fitch Hill Road. An overhead electrical line with utility poles will connect the metering equipment to the existing electrical grid along Fitch Hill Road. Finally, trees will be cleared for the proposed access road, overhead interconnect, and solar array.

The current Phase IB survey consisted of pedestrian survey, subsurface testing, and mapping of the project parcel. The subsurface testing regime associated with the Phase IB cultural resources reconnaissance survey resulted in the excavation of a total of 208 of 209 (99 percent) planned shovel tests and 10 of 10 (100 percent) delineation shovel tests (Figure 10) The single shovel test that was not excavated was because it fell in a wetland area. Of the 208 excavated shovel tests, five yielded a scatter of both modern and historical period artifacts within the Ap-Horizon (plow zone) between 0 to 20 centimeters (0 to 15.7 inches) below surface and in a disturbed layer of localized fill between 20 to 60 centimeters (8 to 23.6 inches) below surface. Historical/modern artifacts recovered from the plow zone (Ap-Horizon) included 1 blue transfer print pearlware rim sherd, 5 plain whiteware ceramic sherds, and 1 olive green glass shard. A layer of localized fill was identified in Shovel Test 4 along Transect 1, which was located approximately 5 meters south of an existing wetland area. It is likely that Shovel Test 4 fell within a filled wetland area. Artifacts from the layer of fill included 1 plain whiteware sherd, 3 clear glass bottle shards, 2 clear glass window shards, 1 brick fragment, 1 ferrous strap with a screw attached, 1 piece of unidentified ferrous metal, 5 pieces of slag, 1 coal fragment, and 1 piece of coal ash. None of these items were found in association with intact soil horizons, buried cultural features, or above ground architectural remains. Thus, this low density historic/modern assemblage was interpreted as unassociated field scatter. No additional archaeological examination of it is recommended.

The Phase IB survey also resulted in the identification of two archaeological loci in the Facility area. They were designated as Locus 1 and Locus 2 (Figure 9). A total of 10 delineation shovel tests were excavated around the positive shovel tests within the loci. Locus 1 and Locus 2 are described below.

# Locus 1

Locus 1 was identified in the south-central portion of the Facility area (Figure 10 and Photos 3 through 6). It encompasses a total of two shovel tests that included Shovel Test 9 along Transect 5 and Shovel Test 8 along Transect 6. A typical shovel test excavated within the Locus 1 area exhibited four soil horizons in profile and reached to a depth of 55 centimeters below surface (22 inches below surface). The uppermost soil horizon Ap-Horizon (plow zone) extended from 0 to 22 centimeters below surface (0 to 8.7 inches below surface) and was described as a deposit of dark brown (10YR 3/3) silty loam with fine sand. It was underlain by a layer of subsoil (B1-Horizon) that ranged in depth from 22 to 33 centimeters below surface (8.7 to 13 inches below surface) and was described as a layer of (10YR 3/4) yellowish brown (10YR 5/6) sandy silt. The underlying B2-Horizon was identified as a layer of (10YR 3/4) yellowish brown sandy silt that extended between 33 to 45 centimeters (13 to 17.7 inches) below surface. Finally, the glacially derived C-Horizon reached from 45 to 55 centimeters below surface (17.7 to 22 inches below surface) and was classified as a layer of light olive brown (2.5Y 5/4) coarse sand with silt.

Shovel testing of the Locus 1 area resulted in the recovery of three prehistoric period artifacts from two shovel tests. A total of 2 quartzite tertiary flakes were recovered from Shovel Test 9 along Transect 5 in the disturbed Ap-Horizon (plow zone) between 10 to 20 centimeters (4 to 8 inches) below surface. In addition, a single quartz Brewerton Eared Triangle point was identified in the subsoil of Shovel Test 8 along Transect 6 between 20 to 30 centimeters (8 to 12 inches) below surface (Photo 7). A total of eight delineation shovel tests were excavated around the two positive shovel tests. No additional artifacts or were identified. The Brewerton Eared Triangle was not found in association with any other artifacts and is interpreted as an isolated find; it dates from the Late Archaic period of Connecticut prehistory (ca., 6,000 to 3,900 B.P.). Despite these finds, it was determined that locus 1 lacked substantial numbers of artifacts and research potential. It was assessed as not significant applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). No additional archaeological examination of Locus 1 is recommended prior to construction. A site form for this locus is included in Appendix 1.

# Locus 2

Locus 2 was identified at the western end of the proposed access road and included Shovel Test 5 along Transect 1 (Figure 10 and Photos 8 and 9). A typical shovel test excavated within the Locus 2 area exhibited three soil horizons in profile and reached to a depth of 48 centimeters below surface (19 inches below surface). The Ap-Horizon (plow zone) extended from 0 to 24 centimeters below surface (0 to 9.4 inches below surface) and was described as a deposit of dark brown (10YR 3/3) silty loam. It was underlain by the subsoil (B-Horizon) that ranged in depth from 24 to 33 centimeters below surface (9.4 to 13 inches below surface) and was described as a dark yellowish brown (10YR 4/6) silt with medium sand. Finally, the glacially derived C-Horizon reached from 33 to 48 centimeters below surface (13 to 19 inches below surface) and was classified as a layer of light olive brown (10YR 5/2) gravel with sand.

Shovel testing of the Locus 2 area resulted in the recovery of a single argillite tertiary flake in Shovel Test 5 along Transect 1; it originated from the disturbed Ap-Horizon (plow zone) at depths between 10 to 20 centimeters (4 to 8 inches) below surface. Despite the survey and delineation effort, no additional prehistoric period artifacts were recovered from this locus. No cultural features or soil anomalies were associated with the argillite flake, and it could not be assigned to particular prehistoric time period or cultural affiliation. Locus 2 also was assessed as not significant applying the National Register of Historic

Places criteria for evaluation (36 CFR 60.4 [a-d]). No additional archaeological examination of Locus 1 is recommended prior to construction.

Finally, a single stone cluster and three dry laid stone walls were identified during the Phase IB survey. The stone cluster is located in the southern portion of the project area (Figure 10). One stone wall was identified in the northern portion of the project area and extended from southwest to northeast (Figure 10 and Photo 11) A second stone wall was identified to the south of the proposed access road beginning at the western boundary of the Facility area; it ran to the east (Figure 10 and Photo 12). The third stone wall was situated to the second wall in the southeastern portion of the project area; it extended from north to south (Figure 10 and Photo 13).

# **Management Recommendations**

A total of 208 of 209 (99 percent) planned shovel tests and 10 of 10 (100 percent) delineation shovel tests were excavated throughout the project area, resulting in the identification of two archaeological loci. Locus 1 yielded two quartzite flakes from the plow zone and a single quartz Brewerton Eared Triangle point from the subsoil. The eight delineation shovel tests that were excavated in the Locus 1 area did not yield additional cultural material. No features or soil anomalies were associated with Locus 1, and the Brewerton Eared Triangle point was determined to be an isolated find. Locus 1 was assessed as not significant applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). No additional archaeological examination of the locus area is recommended prior to construction

Locus 2 yielded a single argillite tertiary flake in the plow zone between 10 to 20 (4 to 8 inches) below surface. No additional prehistoric period artifacts were recovered from the two delineation shovel tests that were excavated around the positive shovel test. No cultural features or soil anomalies were associated with Locus 2, and the recovered cultural materials could not be assigned to a particular prehistoric time period or cultural affiliation. Locus 2 also was assessed as not significant applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). No additional archaeological examination of Locus 2 is recommended prior to construction.

Of the 208 excavated shovel tests, five also yielded a scatter of both modern and historical artifacts within the disturbed Ap-Horizon (plow zone) and a layer of localized fill. None of these items were found in association with buried cultural features or above ground architectural remains, and no historical resources were identified in the project area. Thus, this low density assemblage was identified as unassociated field scatter. No impacts to significant archaeological resources are expected by the construction of the Facility, and no additional archaeological examination of the project area is recommended prior to construction. Finally, a single stone cluster and three dry laid stone walls were identified in the project area. The stone cluster and stone walls cannot be attributed to a specific type, function, or time period; no additional recordation of these items is recommended.

# **BIBLIOGRAPHY**

#### AdvanceCT and CTData Collaborative

2020 Montville, Connecticut, CERC Town Profile 2019. Electronic document, https://s3-us-west 2.amazonaws.com/cerc-pdfs/2019/montville-2019.pdf, accessed June 28, 2021.

# Asch, D.L., and N. B. Asch

1985 Prehistoric Plant Cultivation in West-Central Illinois. In *Prehistoric Food Production in North America*, edited by R.I. Ford, pp. 149-203. Museum of Anthropology Anthropological Papers No. 75. University of Michigan, Ann Arbor.

#### Baker, Henry A.

1896 *History of Montville, Connecticut, Formerly the North Parish of New London from 1640 to 1896.* Case, Lockwood & Brainard Company, Hartford, CT.

#### Banks, R.C., R.W. McDiarmid, A.L. Gardner

1987 *Checklist of vertebrates of the Unites States: The U.S. Territories and Canada*. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

#### Barber, John Warner

1836 Connecticut Historical Collections, Containing a General Collection of Interesting Facts, Traditions, Biographical Sketches, Anecdotes, &c. History and Antiquities of Every Town in Connecticut, with Geographical Descriptions. New Haven, CT: B.I. Hamlen.

#### Bell, Michael

1985 *The Face of Connecticut: People, Geology, and the Land.* State Geological Natural History Survey of Connecticut Department of Environmental Protection.

#### Bendremer, J.

1993 Late Woodland Settlement and Subsistence in Eastern Connecticut. Ph.D. Dissertation, Department of Anthropology, University of Connecticut, Storrs, Connecticut.

#### Bendremer, J. and R. Dewar

1993 The Advent of Maize Horticulture in New England. In *Corn and Culture in the Prehistoric New World.* Ed. by S. Johannessen and C. Hastorf. Westview Press, Boulder.

#### Bendremer, J., E. Kellogg and T. Largy

1991 A Grass-Lined Storage Pit and Early Maize Horticulture in Central Connecticut. North American Archaeologist 12(4):325-349.

#### Bixby, Lyn

1996 A New Player At The Table The Sun Casino: Foxwoods Gets a Rival. *Hartford Courant* 5 October: A1. Hartford, Connecticut.

#### Caulkins, Frances Manwaring

1895 *History of New London, Connecticut, From the First Survey of the Coast in 1612 to 1860.* H. D. Utley, New London, CT.

CERC

2016 "Montville, Connecticut, CERC Town Profile 2016." http://profiles.ctdata.org/profiles/download, accessed July 29, 2016.

#### Chapman, J., and A.B. Shea

1981 The Archaeobotanical Record: Early Archaic Period to Contact in the Lower Little Tennessee River Valley. *Tennessee Anthropologist* 6(1):61-84.

# Coe, Joffre Lanning

1964 The Formative Cultures of the Carolina Piedmont. *Transactions of the American Philosophical Society*, Vol. 54, Part 5. Philadelphia, Pennsylvania.

#### Connecticut Environmental Conditions Online (CT ECO)

2019 Connecticut 2019 Orthophotography. Storrs, Connecticut: University of Connecticut, Connecticut Environmental Conditions Online. http://www.cteco.uconn.edu/data/flight2019/index.htm.

#### Connecticut, State of

1932 *State Register and Manual*. State of Connecticut, Hartford, CT.

# Crofut, Florence

1937 *Guide to the History and Historic Sites of Connecticut*, vol.1. New Haven, CT: Yale University Press.

#### Curran, M.L., and D.F. Dincauze

1977 Paleo-Indians and Paleo-Lakes: New Data from the Connecticut Drainage. In *Amerinds and their Paleoenvironments in Northeastern North America*. Annals of the New York Academy of Sciences 288:333-348.

# Davis, M.

1969 Climatic changes in southern Connecticut recorded by Pollen deposition at Rogers Lake. *Ecology* 50: 409-422.

#### De Forest, John W.

1852 *History of the Indians of Connecticut from the Earliest Known Period to 1850.* Wm. Jas. Hamersley, Hartford, Connecticut.

#### Dincauze, Dena F.

- 1974 An Introduction to Archaeology in the Greater Boston Area. *Archaeology of Eastern North America* 2(1):39-67.
- 1976 *The Neville Site: 8000 Years at Amoskeag.* Peabody Museum Monograph No. 4. Cambridge, Massachusetts.

#### Dowhan, J.J. and R.J. Craig

1976 *Rare and endangered species of Connecticut and Their Habitats*. State Geological Natural History Survey of Connecticut Department of Environmental Protection, Report of Investigations No. 6.

#### Fairchild Aerial Surveys

1934 Connecticut Statewide Aerial Photograph Series. Hartford, Connecticut: Connecticut State Archives.

#### Feder, Kenneth

1984 *Pots, Plants, and People: The Late Woodland Period of Connecticut.* Bulletin of the Archaeological Society of Connecticut 47:99-112.

#### Fitting, J.E.

1968 *The Spring Creek Site*. In *Contributions to Michigan Archaeology*, pp. 1-78. Anthropological Papers No. 32. Museum of Anthropology, University of Michigan, Ann Arbor.

#### Find A Grave

- 2021a Azel Fitch Rogers II. https://www.findagrave.com/memorial/12167190/azel-fitch-rogers, accessed May 12, 2021.
- 2021b John Randolph Rogers. https://www.findagrave.com/memorial/42890948/john-randolphrogers, accessed May 12, 2021.

# Ford, R.I.

1985 Patterns of Prehistoric Food Production in North America. In *Prehistoric Food Production in North America*, edited by R.I. Ford, pp. 341-364. Museum of Anthropology Anthropological Papers No. 75. University of Michigan, Ann Arbor.

#### Fritz, Gayle J.

1990 Multiple Pathways to Farming in Pre-Contact Eastern North America. *Journal of World Prehistory* 4(4):387-435.

#### Funk, R.E.

1976 *Recent Contributions to Hudson Valley Prehistory.* New York State Museum Memoir 22. Albany.

#### George, D.

1997 A Long Row to Hoe: The Cultivation of Archaeobotany in Southern New England. *Archaeology* of Eastern North America 25:175 - 190.

#### George, D. and C. Tryon

1996 Lithic and Raw Material Procurement and Use at the Late Woodland Period Cooper Site, Lyme, Connecticut. Paper presented at the joint meeting of the Archaeological Society of Connecticut and the Massachusetts Archaeological Society, Storrs Connecticut

#### George, D.R., and R. Dewar

1999 Prehistoric Chenopodium in Connecticut: Wild, Weedy, Cultivated, or Domesticated? *Current Northeast Paleoethnobotany*, edited by J. Hart, New York State Museum, Albany, New York. Gerrard, A.J.

- 1981 *Soils and Landforms, An Integration of Geomorphology and Pedology*. George Allen & Unwin: London.
- Gramly, R. Michael, and Robert E. Funk
  - 1990 What is Known and Not Known About the Human Occupation of the Northeastern United States Until 10,000 B. P. *Archaeology of Eastern North America* 18: 5-32.

#### Griffin, J.B.

1967 Eastern North America Archaeology: A Summary. *Science* 156(3772):175-191.

Howard, R. H., and Henry E. Crocker

1879 A History of New England: Containing Historical and Descriptive Sketches of the Counties, Cities and Principal Towns of the Six New England States, Including, in Its List of Contributors, More Than Sixty Literary Men and Women, Representing Every County in New England. Crocker & Company, Boston.

#### Johannessen, Sissel

1984 Paleoethnobotany. In *American Bottom Archaeology: A Summary of the FAI-270 Project Contribution to the Culture History of the Mississippi River Valley*, edited by Charles J. Bareis and James W. Porter, pp. 197-214. University of Illinois Press, Urbana.

#### Jones, B.

1997 The Late Paleo-Indian Hidden Creek Site in Southeastern Connecticut. *Archaeology of Eastern North America* 25:45-80.

# Keegan, Kristen Noble, comp.

2012 Historical Population Data of Connecticut. Unpublished Excel spreadsheet.

#### Lavin, L.

- 1980 Analysis of Ceramic Vessels from the Ben Hollister Site, Glastonbury, Connecticut. *Bulletin of the Archaeological Society of Connecticut* 43:3-46.
- 1984 Connecticut Prehistory: A Synthesis of Current Archaeological Investigations. *Archaeological Society of Connecticut Bulletin* 47:5-40.
- 1986 *Pottery Classification and Cultural Models in Southern New England Prehistory*. North American Archaeologist 7(1):1-12.
- 1987 The Windsor Ceramic Tradition in Southern New England. *North American Archaeologist* 8(1):23-40.
- 1988a Coastal Adaptations in Southern New England and Southern New York. Archaeology of Eastern North America, Vol.16:101-120.
- 1988b The Morgan Site, Rocky Hill, Connecticut: A Late Woodland Farming Community in the Connecticut River Valley. *Bulletin of the Archaeological Society of Connecticut* 51:7-20.

#### Lightman, David

1995 Mohegans Get Montville Reservation, Prepare to Build Casino. *Hartford Courant* 30 September: A1. Hartford, Connecticut.

#### Lizee, J.

- 1994a Prehistoric Ceramic Sequences and Patterning in southern New England: The Windsor Tradition. Unpublished Ph.D. dissertation, Department of Anthropology, University of Connecticut, Storrs.
- 1994b Cross-Mending Northeastern Ceramic Typologies. Paper presented at the 1994 Annual Meeting of the Northeastern Anthropological Association, Geneseo, New York.

#### McBride, K.

- 1978 Archaic Subsistence in the Lower Connecticut River Valley: Evidence from Woodchuck Knoll. Man in the Northeast 15 & 16:124-131.
- 1983 *Prehistory of the Lower Connecticut River Valley.* Ph.D. Dissertation, Department of Anthropology, University of Connecticut, Storrs, Connecticut.

#### Moeller, R.

1980 *6-LF-21: A Paleo-Indian Site in Western Connecticut.* American Indian Archaeological Institute, Occasional Papers No. 2.

#### Montville, Town of

2010 Plan of Conservation and Development. Electronic document. http://www.townofmontville.org/Customer-Content/WWW/CMS/files/

#### Niering, W.A., and N.C. Olmstead

1995 National Audubon Society Field Guide to North American Wildflowers: Eastern Region. Chanticleer Press, New York.

#### Oberg, Michael Leroy

2006 Uncas: First of the Mohegans. Cornell University Press, Ithaca, NY.

#### Oglesby, Scott

2013 "I-395." *Connecticut Roads*. http://www.kurumi.com/roads/ct/i395.html, accessed December 12, 2018.

#### Pagoulatos, P.

1988 Terminal Archaic Settlement and Subsistence in the Connecticut River Valley. *Man in the Northeast* 35:71-93.

# Pease, John C. and John M. Niles

1819 A Gazetteer of the States of Connecticut and Rhode-Island. Hartford, CT: William S. Marsh.

#### Peterson, T. R., and M. McKenny

1968 Wildflowers of Northeastern and North-Central America. Houghton Mifflin Company, Boston, Massachusetts. Pfeiffer, J.

- 1984 The Late and Terminal Archaic Periods in Connecticut Prehistory. *Bulletin of the Bulletin of the Archaeological Society of Connecticut* 47:73-88.
- 1986 Dill Farm Locus I: Early and Middle Archaic Components in Southern Connecticut. *Bulletin of the Archaeological Society of Connecticut* 49:19-36.
- 1990 The Late and Terminal Archaic Periods in Connecticut Prehistory: A Model of Continuity. In *Experiments and Observations on the Archaic of the Middle Atlantic Region.* R. Moeller, ed.

Poirier, D.

1987 *Environmental Review Primer for Connecticut's Archaeological Resources.* Connecticut Historical Commission, State Historic Preservation Office, Hartford, Connecticut.

### Pope, G.

- 1952 Excavation at the Charles Tyler Site. *Bulletin of the Archaeological Society of Connecticut* 26:3-29.
- 1953 The Pottery Types of Connecticut. *Bulletin of the Archaeological Society of New Haven* 27:3-10.

#### Ritchie, W.A.

- 1969a The Archaeology of New York State. Garden City: Natural History Press.
- 1969b The Archaeology of Martha's Vineyard: A Framework for the Prehistory of Southern New England; A study in Coastal Ecology and Adaptation. Garden City: Natural History Press
- 1971 *A Typology and Nomenclature for New York State Projectile Points*. New York State Museum Bulletin Number 384, State Education Department. University of the State of New York, Albany, New York.

#### Ritchie, W.A., and R.E. Funk

1973 *Aboriginal Settlement Patterns in the Northeast*. New York State Museum Memoir 20. The State Education Department, Albany.

#### Robinson, P., and Hall, L. M.

1980 Tectonic synthesis of southern New England. In *International Geological Correlation Project, Proceedings, Project 27: The Caledonides in the U.S.A.*: Blacksburg, Virginia, Virginia Polytechnic Institute and State University Department of Geological Sciences Memoir 2, edited by Wones, D.R.

#### Rogers, James Swift

1902 James Rogers of New London, CT., and His Descendants. James Swift Rogers, Boston.

Rouse, I.

1947 Ceramic Traditions and sequences in Connecticut. *Bulletin of the Archaeological Society of Connecticut* 21:10-25.

Salwen, B., and A. Ottesen

1972 Radiocarbon Dates for a Windsor Occupation at the Shantok Cove Site. *Man in the Northeast* 3:8-19.

Secretary of the State Denise W. Merrill, The Office of

- 2021a Population of Connecticut Towns 1756-1820. https://portal.ct.gov/SOTS/Register-Manual/Section-VII/Population-1756-1820, accessed June 28, 2021.
- 2021b Population of Connecticut Towns 1830-1890. https://portal.ct.gov/SOTS/Register-Manual/Section-VII/Population-1830---1890, accessed June 28, 2021.
- 2021c Population of Connecticut Towns 1900-1960. https://portal.ct.gov/SOTS/Register-Manual/Section-VII/Population-1900-1960, accessed June 28, 2021.
- 2021d Population of Connecticut Towns 1970-2010. https://portal.ct.gov/SOTS/Register-Manual/Section-VII/Population-1970-2010, accessed June 28, 2021.

#### Shelford, V.E.

1963 The Ecology of North America. University of Illinois Press.

# Smith, B.D.

1992 *Rivers of Change: Essays on Early Agriculture in Eastern North America.* Smithsonian Institution Press, Washington and London.

#### Smith, C.

1947 An Outline of the Archaeology of Coastal New York. *Bulletin of the Archaeological Society of Connecticut* 21:2-9.

#### **United States Census**

- 1850 Seventh Census of the United States. Schedule 1. HeritageQuest Online. Provo, UT: ProQuest LLC.
- 1860 Eighth Census of the United States. Schedule 1. HeritageQuest Online. Provo, UT: ProQuest LLC.
- 1870 Ninth Census of the United States. Schedule 1. HeritageQuest Online. Provo, UT: ProQuest LLC.
- 1880 Tenth Census of the United States. Schedule 2. HeritageQuest Online. Provo, UT: ProQuest LLC.

#### United States Department of Agriculture (USDA)

1951 Agricultural Stabilization and Conservation Service Aerial Photography for Connecticut. Washington, DC: Collections of the National Archives and Records Administration.



Figure 1. Excerpt from a USGS 7.5' series topographic quadrangle image showing the location of the project area in Uncasville, Connecticut.



Figure 2. Copy of the project plans for the proposed solar center in Uncasville, Connecticut.

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Excerpt from a 2019 aerial photograph showing the location of the project area in Uncasville, Connecticut.



Figure 8. Digital map showing the location of previously identified archaeological sites in the vicinity of the project area in Uncasville, Connecticut.



Figure 9. Digital map depicting the locations of previously identified National/State Register of Historic Places properties in the vicinity of the project area in Uncasville, Connecticut.





Plan view map depicting the location of Shovel Tests, Delineation Shovel tests and Loci 1 and 2 in Uncasville, Connecticut.



Photo 1. Overview of the southern portion of the proposed access road. Photo taken facing north.



Photo 2.

Overview photo from western end of proposed gravel access road. Photo taken facing west.



Photo 3. Overview photo of Locus 1 area. Photo taken facing south.



Photo 4. Overview photo of Locus 1 area. Photo taken facing north.



Photo 5. Overview photo of Locus 1 area. Photo taken facing east.



Photo 6.

Overview photo of Locus 1 area. Photo taken facing west.



Photo 7. Obverse photograph of Quartz Brewerton Eared Point from Locus 1.



Photo 8. Overview photo of Locus 2 area from the western end of the proposed access road. Photo taken facing east.



Photo 9. Overview photo of Locus 2 area along the proposed access road. Photo taken facing east.



Photo 10. Overview photo of the stone cluster in southern portion of project area. Photo taken facing east.



Photo 11. Overview photo of stonewall in northern portion of project area. Photo taken facing northeast.



Photo 12. Overview photo of stonewall in central portion of project area. Photo taken facing north.



Photo 13. Overview photo of stone wall in eastern portion of project area. Photo taken facing southwest.