APPENDIX E

Phase 1A and Phase 1B Archaeological Surveys

This page intentionally left blank

REPORT

Phase Ia Archaeological Reconnaissance Survey
Seaside Regional Center Development
Waterford, Connecticut

Submitted to

Baystate Environmental Consultants
120 Mountain Avenue
Bloomfield, CT 06002

by

Archaeological and Historical Services, Inc.
569 Middle Turnpike
P.O. Box 543
Storrs, CT 06268

November 6, 2007

Authors:
Daniel Forrest
Brian Jones
Bruce Clouette

This page intentionally left blank

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF PHOTOGRAPHS

I. INTRODUCTION AND SCOPE OF WORK

A. Introduction

The Seaside Regional Center is a 36-acre property owned by the State of Connecticut in Waterford (Figure 1). The property is bordered on the south by Long Island Sound, on the north by Shore Road, and on the east and west by residential properties. Along the shore is a granite seawall which separates the lawn grass and specimen tree-planted "campus" from a narrow beach. The campus includes buildings and service roads associated with its construction by the state in 1934 as the Seaside Sanatorium, the first institution in the United States especially designed for the heliotropic treatment of children infected with tuberculosis. Heliotherapy involved prolonged exposure to the sun, and was believed to have some effectiveness in alleviating the symptoms of a certain type of pediatric tuberculosis. The sanatorium buildings face south and incorporate extensive south-facing multistory open terraces. The existing seawall was built in 1938 to create a sand beach for the patients (Cunningham 1994: Section 8, p. 2). Because of its significance in early health treatment, and because a number of the Seaside Buildings were designed by the renowned architect Cass Gilbert, the property was listed in the National Register of Historic Places in 1995.

By the 1950s tuberculosis became curable by the use of antibiotics and the need for sanatoriums declined. The Seaside Sanatorium closed in 1958 and then reopened as a state geriatric facility; by 1961 it was used as a facility for mentally and physically challenged children (DPW 2007). Seaside was downsized in the 1980s and closed in 1997. Shortly thereafter the state decided to sell the property. In 1999, a preferred developer was chosen, Seaside in Waterford, LLC, but zone changes and other legal actions postponed the actual sale of the property until this year (DPW 2007). The terms of the Purchase and Sale Agreement (PSA) require redevelopment of the property in accordance with the Town of Waterford zoning regulations, provisions for public access to the waterfront portion of the property, and preparation of an Environmental Impact Evaluation (EIE) pursuant to Connecticut General Statutes, Section 22a Connecticut Environmental Protection Act (CEPA). Moreover, "reasonably necessary measures to mitigate any issues that may be identified at the conclusion of the EIE" must be undertaken (State of Connecticut 2007: 10).

Baystate Environmental Consultants (BEC), EIE consultants to the State, requested that Archaeological and Historical Services, Inc. (AHS) conduct the first step in the CEPA/EIE process regarding cultural resources: a Phase Ia Archaeological Reconnaissance Survey. This report presents the results of the Phase Ia survey, also known as an assessment-level survey.

B. Scope of Work

Although the Seaside Regional Center property comprises 36 acres, the state is selling 32 acres, known as the Seaside Parcel, to Seaside in Waterford, LLC. The state will retain ownership of approximately four acres, including the seawall and the narrow beach located south of the seawall (Figure 1). An easement will be granted to the State for an area from the seawall landward to Elevation 12 (approximately). The Town of Waterford will also retain an easement over the Seaside Parcel in order to access a town-owned pump station. The 32-acre parcel under sale to Seaside in Waterford, LLC is the project area for the purpose of the CEPA/EIE and Phase Ia Archaeological Reconnaissance Survey.

The specific extent of the redevelopment of the Seaside has not yet been determined. However, the terms of the PSA require that Seaside in Waterford, LLC 1) "install and maintain"

a landscaped area along the boundary of the state parcel abutting the driveway into the property from Shore Road; 2) provide public accessways to "the shorefront lawn areas and the Beach for passive recreation and construct amenities to further the public use and enjoyment" of the areas, including construction of a ca. 25-car parking lot and park; and 3) enter into an agreement with the state for "construction of various public access and recreation facilities on the Seaside Parcel and Beach." Moreover, the PSA requires that Seaside in Waterford, LLC's redevelopment plan provide for the preservation and use of four of the major Seaside buildings (Figure 2), considered historically and architecturally significant and a core component of the National Register-listed property: the Tudor Revival-style Main Building, Employee Building I, the Superintendent's House, and the Duplex House (collectively the "Historic Buildings") in accordance with the requirements of the Seaside Preservation Zoning District and subject to the approval of the State Historic Preservation Office (SHPO). The PSA also binds Seaside in Waterford, LLC to the oversight of the SHPO "for any and all improvements, repairs and for alterations" of the Seaside Parcel and "the buildings located thereon" (State of Connecticut 2007, pp. 5-6).

Although the state's intent in the Request For Proposals/Request For Qualifications for buyers of the Seaside Parcel was "preservation and restoration of [the] historic structures" (State of Connecticut 2007, p. 1), and the PSA requires Seaside in Waterford, LLC to make improvements to the exteriors of Historic Buildings as approved by the SHPO (State of Connecticut 2007, pp. 9-10), the PSA also contains a provision for not preserving the four historic buildings: "If any of the Historic Buildings are damaged to an extent that they are no longer susceptible to renovation, as determined by the Purchaser's engineers, based on generally accepted sound engineering principles, then the Purchaser shall have the option ... to apply to the town for a modification of the site plan for the property" (State of Connecticut 2007, p. 16). The opinion of the SHPO must also be obtained if any of the historic buildings are not to be retained in the redevelopment.

The development of the Seaside Regional Center certainly involved ground disturbance in the construction of its complex of buildings and service roads, buried utilities, and, of course, the seawall. Additionally, a town sewer system traversed the property in the 1980s. However, most of the construction took place in the 1930s and 1940s, and probably used techniques that involved far less extensive land modification than used in more modern development. Archaeological investigations at roughly contemporaneous state institutions such as the former Norwich State Hospital property in Preston have demonstrated that remarkably intact land areas, and associated archaeological deposits, have survived institutional development. In a 2005 archaeological survey of the Norwich State Hospital property, a very large multi-component prehistoric (i.e., pre-European contact Native American) site was found to extend across over 20 acres of the main campus (Harper et al. 2006). The location of the Norwich State Hospital campus along the Thames River was clearly a major attraction for prehistoric peoples over thousands of years, yet the early 20th-century institutional development's impact to the archaeological remains of the prehistoric occupation was limited largely to the building footprints.

At the Seaside Parcel, depending on the extent of grading and earthmoving conducted in the early construction of the complex, and that associated with the later, mid-century addition of institutional buildings, the potential for the presence of intact prehistoric archaeological sites may be as high as at Norwich State Hospital. The Connecticut seacoast has been well established as having extremely high prehistoric archaeological sensitivity. In addition, this coastal area was among the earliest settled by Euro-Americans in the 17th and early 18th

centuries. In a 1995 townwide archaeological assessment survey sponsored by Waterford, numerous prehistoric archaeological sites were identified in the vicinity of the Seaside Parcel based on information from local artifact collectors (Harper et al. 1998). Moreover, the Seaside Parcel is surrounded by very early 18th-century houses which the townwide archaeological assessment survey identified as having associated archaeological remains. Some of the 18th-century buildings are believed to be on the sites of even earlier houses. For example, an early and rare stone-ender house is located just west of the Seaside Parcel. It is very clear that the Seaside Parcel is in an area of probable intensive prehistoric Native American and early colonial-period occupation. The SHPO also recognized the high archaeological potential of Seaside in its September 25, 2007 project review letter, in which it noted that the property "possesses moderate to high sensitivity for prehistoric and historic archaeological resources" and recommended that a "professional archaeological reconnaissance survey be undertaken to identify and evaluate archaeological resources which may exist within proposed project limits, including equipment storage and associated work areas" (Senich 2007). An archaeological reconnaissance survey consists of two parts: Phase Ia, or assessment survey, in which the specific archaeological potential of the project area is determined, and Phase Ib survey, in which systematic subsurface testing is done to confirm the presence or absence of buried archaeological sites that may be impacted by the project area.

AHS conducted the first half of the archaeological reconnaissance survey, the Phase Ia survey. As defined in the *Environmental Review Primer for Connecticut's Archaeological Resources* (hereafter *Primer*), the guiding regulations for cultural resource management in Connecticut, the purpose of a Phase Ia, or assessment-level survey, is to 1) identify areas of relative potential for containing buried archaeological sites dating to the prehistoric (i.e., pre-European settlement) and historic (i.e., post-European settlement) periods; 2) identify above-ground historic-period resources which may be significant, including remains such as building ruins or historic rural landscapes (and note buildings already listed on the National Register of Historic Places); 3) identify areas of potential traditional cultural significance to Native Americans; 4) make recommendations for preservation and/or impact mitigation to clearly significant features; and 5) design a strategy of targeted Phase Ib subsurface testing to locate buried archaeological sites which may be impacted by the project. Significance, as defined by the *Primer*, refers to archaeological sites or cultural resources which meet the criteria for listing in the National Register of Historic Places.

All of the Phase Ia work was done in accordance with *Primer* guidelines and is reported in this document.

II. SURVEY TASKS AND METHODOLOGY

A Phase Ia Archaeological Reconnaissance Survey involves documentary and cartographic research, interviews with informed persons or organizations, research in environmental sources, walkover visual inspection, and sometimes a small amount of subsurface testing in order to collect the data necessary to make an informed identification and assessment of significant above-ground cultural features and the potential for subsurface archaeological sites. The results of the survey have been synthesized in a format suitable for incorporation into the EIE and also in a more comprehensive report according to *Primer* standards (this document). The specific tasks, as defined by the *Primer*, are described below.

A. Task 1. Background Document and Records Research

This task involved brief background research in the SHPO and Office of State Archaeology (OSA) state site files of reported archaeological sites and historical resources; in published and unpublished reports, articles and books on the history and archaeology of the study area; in historical maps; and in environmental sources. The research was performed to identify known or potential archaeological sites in the project areas, to predict archaeological site locations, and to help interpret any identified sites or resources in appropriate prehistoric and historic contexts.

Because the Seaside Parcel is listed in the National Register of Historic Places, the National Register documentation form (Cunningham 1994) provides a concise history of the property from the construction of the hospital in 1934 to 1994. However, information from published histories, books, cultural resource management reports, articles and maps informed the pre-Hospital construction history, and also identified the locations of structures no longer standing but which may have left archaeological remains within the project areas. The Connecticut State Library and Connecticut Historical Society, as well as other repositories, contain early maps and other relevant historical documents which elucidate the pre-Hospital-era historic use of the project area.

The Town of Waterford has been unusually thorough in documenting its history and historic resources, both standing and buried. Two surveys of historic standing structures have been performed (McCahon 1990; Wagner 1996), two local historians, R. Bachman and Robert Bucher, did much to reconstruct the town's early history (Bachman 2000; Bucher 1984), and a local newspaper reporter, Margaret Stacy, focused on Waterford's history in the early to mid-20th century. In 1997 the town, with grant assistance from the SHPO, sponsored an assessment survey of Waterford's archaeological sites (Harper et al. 1998). The assessment survey, which was conducted by the Public Archaeology Survey Team, Inc. (PAST), an affiliate of AHS, included archival research, interviews with local artifact collectors and other members of the public, and the Municipal Historian, as well as a visual inspection to identify archaeological sites and/or archaeologically sensitive areas not otherwise noted. The survey significantly increased the number of archaeological sites in the SHPO and OSA site files and has proved to be an important cultural resource management tool for the town.

The townwide archaeological assessment survey identified numerous 18th-century sites in the vicinity of the Seaside Parcel, indicating that Great Neck, particularly the area closest to the seashore, was an area of very early Euro-American settlement. An 18th-century cemetery is northwest of the project, and several early 18th-century houses are located immediately west and north of Seaside; several of these houses are believed to be on the sites of earlier, possibly 17th-

century houses. Clearly the Great Neck area was a focus of very early 17th- and 18th-century Euro-American settlement, thus the Seaside Parcel's early historic-period archaeological site potential is high, assuming disturbance has been limited.

An important part of the background research is gathering environmental data on soils, slope, and wetland locations. Clear patterns of archaeological site location and type vis-à-vis environmental features have been established for all periods of prehistory, back to the Paleoindian period of about 11,000 years ago. The environmental information helped predict the locations and types of prehistoric sites which may be in the project area. The townwide archaeological assessment survey identified numerous Native American sites in the vicinity, demonstrating strong prehistoric archaeological site potential in undisturbed areas of Seaside.

B. Task 2. Consultation

AHS consulted with individuals and organizations who have relevant information on the project's history or prehistory. Information gathered not only includes historic or prehistoric sites or known historical use or events, but information on disturbance and use of the property that may have affected subsurface archaeological site integrity. BEC project engineers also provided site-specific data which bears on archaeological sensitivity or lack thereof because of disturbance. Because there was land modification during the construction of Seaside, and additional disturbance as utilities were modified, information on specific areas and types of ground disturbance was helpful in assessing the potential for intact archaeological remains.

C. Task 3. Walkover Survey

In this task, AHS walked over the project area in order to identify areas of relative archaeological sensitivity. A team of prehistoric and historic-period specialists looked for visible cultural remains suggestive of archaeological sites, such as foundation ruins, which may have associated below-ground components. Such areas, if they are not extensively disturbed, are considered to have relatively high archaeological potential. Areas of certain environmental characteristics, such as undisturbed, well-drained, relatively level locations in proximity to water sources or wetlands, have moderate to high potential for prehistoric sites. Wetlands, areas of slope in excess of 15%, extremely stony soils, and excessively disturbed areas generally have low archaeological potential. AHS looked for remains of structures identified on historical maps, in documents and those described by informants. Areas of particular archaeological or cultural sensitivity as identified in the background research and informant consultation were inspected.

D. Task 4. Subsurface Testing

Subsurface testing was conducted using both a 1-inch-diameter soil probe and a small number of standard-sized shovel test pits (Figures 9 and 10). The soil probe can penetrate a maximum depth of 30 inches and provides a quick but relatively low-resolution view of existing soil conditions. Fill and cut areas may be easily identified with the soil probe because the sample column contrasts strongly with an intact soil profile. However, the small bore of the probe limits the potential to observe mottling or other small-scale expressions of disturbance. For this reason, the soil-probe sampling was combined with shovel test pits to provide an accurate assessment of the soil conditions within the project area.

A small number of shovel test pits were placed in areas of suspected disturbance (low archaeological potential) or high archaeological potential as indicated by the background

research, walkover survey, and soil probe sampling. The test pits were not intended to identify sites, but were for the purpose of clarifying archaeological sensitivity or lack thereof due to soil disturbance. In accordance with the SHPO standards, the test pits excavated during the archaeological survey measured 50 centimeters by 50 centimeters in plan. Each was excavated by cultural, pedological (soil characteristic) or sedimentary strata. Soil horizons or other strata beneath the plowzone or natural topsoils that exceeded 10 centimeters in total thickness were divided into 10-centimeter levels to allow more precise identification of the vertical provenience of buried artifacts. Excavation within each test pit proceeded until undisturbed glacial sediments were encountered or further progress was obstructed by large rocks, roots, cemented sediments ("hardpan"), or the water table. All excavated soils were passed through ¼-inch hardware cloth screens to recover small artifacts. Provenience information for recovered artifacts was recorded on field forms, including test pit number, soil context, and depth below surface. All test pit soil profiles were recorded to interpret the stratigraphic integrity of any archaeological finds. Each test pit was immediately backfilled upon completion. All recovered artifacts were transported to AHS's laboratory facilities in Storrs for cleaning, identification, inventory, and curation.

The testing permitted a fine delineation of sensitive areas which warrant Phase Ib subsurface testing, and areas too disturbed to be archaeologically sensitive.

E. Task 5. Data Synthesis and Report Preparation

This task involved the synthesis of collected data in this report, which presents the survey results in narrative form and outlines areas of low, moderate and high archaeological potential. Identified above-ground cultural resources and general ground conditions were mapped, photographed and are described below. Phase Ib subsurface testing is recommended in areas of moderate to high archaeological sensitivity. Such areas are generally defined, according to the *Primer* guidelines, as areas of relatively level, apparently undisturbed, well-drained soils within proximity to a water source or wetlands. Specific "spot areas" of historic-period occupation, especially where these have been defined by the presence of structures from historical maps, are also considered to be archaeologically sensitive and are recommended for Phase Ib subsurface investigation.

F. Task 6. Project Administration

This task involved coordination between AHS, BEC, and other parties as necessary, arranging for informant consultation, maintaining the project schedule, record-keeping, and billing.

III. THE PREHISTORIC - EARLY HISTORIC NATIVE AMERICAN CONTEXT: RESULTS OF BACKGROUND RESEARCH

A. Geological Background of the Project Area

Examination of existing geological conditions across the Seaside Regional Center project area provided important information regarding ground conditions. These conditions have influenced the development of local habitats as well as the usefulness of the area for agriculture and habitation. State-level GIS data provided to the general public by the Connecticut Department of Environmental Protection were used in this study. The project area is underlain by Rope Ferry Gneiss, as is much of Waterford. A small tongue of Westerly Granite just crosses into the southwestern corner of the project area. Westerly Granite was the focus of a number of local quarries active during the 19th and early 20th centuries in Waterford. Bedrock outcrops were observed intermittently along the shoreline within the project bounds, but none of them appear to have been quarried. The gneiss observed was complexly folded and heavily metamorphosed. A northwest-running ridge appeared to underlie the western portion of the Main Building (the buildings are identified in Figure 2).

Bedrock within the project area is draped in glacial sediments laid down during the last glacial episode, about 18,000 years ago. Most of the property is underlain by glacial till deposits (Figure 3). These consist of so-called "thin-till" deposited during the last glacial episode, as well as "thick-till," which predates the last glaciation. The thin-till deposits consist of relatively well-drained, generally coarse-grained deposits which can be quite stony. The area of thick-till is limited to the north-central portion of the property where it represents the southernmost extent of a drumlinoid feature. This older deposit consists of relatively impermeable sediments that tend to shed water rather than retain it. The position of the thick-till lobe explains the presence of the two small drainage systems that flow south across the project area.

The southeastern portion of the project area is underlain by finer-grained deposits associated with a high-stand of Glacial Lake Connecticut (Figure 3). Soils developed on these sediments consist primarily of Agawam fine, sandy loams. Areas of well-drained, fine sediments are generally considered most sensitive to the location of archaeological sites. The dry, friable sediments also provided easier opportunities for excavating storage pits, earth ovens, and semi-subterranean dwellings. Agawam sandy loams are also well-suited to agriculture.

The state-level maps indicate that most of the project area consists of additional "prime farmland soils" such as Ninigrit and Tisbury and Sutton soils. North of the Main Building, soils are described as upland wetland Walpole sandy loams. Overall, the geology and soils indicate an area favorable to prehistoric foragers, late prehistoric farmers, and Euro-American farmers. The position of the project along the shoreline also made it favorable to prehistoric and historic-era fishing activities.

The natural surface-water drainage within the project area is controlled by two small intermittent stream drainages. The streams once flowed southward to Long Island Sound along the east and west margins of the thick-till deposits. Both streams were modified during the construction and modification of the hospital grounds. The eastern stream is located just east of Employee Building I and the Shed (Figure 2), and flows through a combination of short open channel segments and buried conduit. Immediately east of Employee Building I, the stream crosses beneath a small covered bridge and flows into a 400-foot-long section of conduit that pipes the discharge directly beneath the seawall and into Long Island Sound. The section of the former stream drainage traversed by the long conduit was graded level during hospital

construction, and is now slightly higher in elevation than the open channel segments of the stream to the north. A small artificial impoundment formed by a low earthen embankment is located within the stream drainage just east of the Shed.

The western stream drainage flows through a narrow ditched channel for the majority of its length within the project area. The channel is located approximately 120 feet (37 meters) west of the hospital's sewage treatment facility and greenhouse and flows southward through the area between Employee Building II and the Duplex House (Figure 2). The channel is open until it approaches the seawall, where it flows through a short section of conduit connecting the stream directly to Long Island Sound. As with the eastern stream drainage, the existing topography surrounding the western stream suggests much of the original lowlands surrounding the natural channel were filled and graded during the construction of the hospital facilities. North of the Duplex House, the ditched channel flows through a 100-foot-wide but very shallow swale that likely approximates the natural margins of the original stream basin. South of the Duplex House, the natural swale was filled and graded to a level lawn area, with a very abrupt transition to the stream channel.

The two freshwater drainages would have been important resources to prehistoric Native Americans living in the area. Aside from locations used for very brief periods of time (i.e., less than a day's duration), prehistoric Native American sites appear to have been consistently located within 150 to 200 meters of potable water resources. Both site and artifact densities typically increase in close proximity to wetlands and streams where well-drained level lands were present. Although the two Seaside drainages have been altered, their presence on the landscape increases the potential for encountering prehistoric archaeological resources within the project area.

B. Ecological Context

The project area falls within the Eastern Coastal Ecoregion, as defined by Dowhan and Craig (1976). This broad seaboard region lies between five and seven miles of eastern Long Island Sound. It is characterized by coastlands, tidal marshes, estuaries and sandy beaches. Such areas represent extremely productive environments, high in biomass and useful food and utilitarian resources. The mean annual temperature of the coastal region is 51 degrees Fahrenheit, with average winter temperatures just above freezing (32.5 degrees), the warmest winter temperatures in the state. The 195-day frost-free season is also the longest in the state. Average annual precipitation is 46 inches, with 35 inches of typical snowfall.

Local forests are typified by coastal hardwoods, such as red, white and black oaks, mockernut hickory, cherry, and sassafras. Hemlock is also relatively common. Currently, a manicured lawn, interspersed with oaks, maples, tulip trees and some cedar, dominates the project area. Denser, forested vegetation persists along the eastern project boundary. A large, open field covers about 4 acres of the northwestern portion of the property. Elevation of the immediate area is quite low, falling primarily between 10 and 40 feet above sea level, rising to the north. Overall, the area is considered to have offered important natural resources to prehistoric and early historic human populations.

C. Overview of Regional Prehistory and Early Native History

Human occupation of southern New England began with the arrival of Paleoindian hunter-gatherers approximately 11,000 years ago. At that time, a mixed spruce-pine-oak forest covered Waterford and the coastal region. These forests likely supported woodland caribou, moose, elk,

and perhaps the now-extinct mastodon, giant flat-headed peccary, giant beaver and ground sloth. Such large mammals were accompanied by a variety of small game which likely included snowshoe hare, red squirrel, flying squirrel, beaver, muskrat, woodchuck, porcupine, red fox, American marten, least weasel, mink, and northern river otter, most of which still occupy the state. Major predators would have included the timber wolf and possibly the dire wolf, black bear, giant short-faced bear, and mountain lion, as well as the smaller lynx and bobcat. While caribou probably played an important seasonal role in Paleoindian subsistence, most of these terrestrial mammals were probably also hunted for their meat, furs, bone, sinew and fat. Additional food resources would have included sea mammals, birds, reptiles, berries, tubers, and perhaps shellfish. Population density was very low during the initial millennium of settlement, with perhaps as few as 100 people occupying the state at any given moment in time. People lived in small groups of 30 or so individuals which were highly mobile, and it is probable that many parts of the state were uninhabited for long periods. Archaeological sites from this period are very rare, probably reflecting the low level of occupation, and no confirmed Paleoindian sites have been found in Waterford. However, Paleoindian sites from the region, including one found at the nearby Mashantucket Pequot Reservation, indicate that Paleoindians had a preference for high-quality stone materials such as chert and jasper, materials acquired from as far away as the Hudson River Valley and Lake Champlain, suggesting a wide-reaching range of mobility.

Between 10,000 and 8,000 years ago, the climate warmed rapidly, and temperate forests of pine and oak dominated the region. This period is known archaeologically as the Early Archaic. Population levels remained very low, and archaeological sites from this time are rare. People probably adapted to the new resource base by shifting their economies toward small game animals, especially of the wetlands. Deer likely became an important game animal at this time, but plant foods such as hazelnut, hickory, and cattail root would have been very important food resources as well. Archaeological sites from the period show that diet was very diverse. While social groups must have remained small throughout much of the year, new evidence suggests that substantial winter lodges were built near ecologically rich habitats, such as large freshwater marshes. The lodges were occupied repeatedly over the course of several centuries, indicating settlement patterns had stabilized after about 9,000 years ago. The degree of group mobility appears to have lessened during this period and people became focused on local resources. About 8,500 years ago a new culture group appeared which had strong ties to the mid-Atlantic and southeastern regions. These people left only faint traces of their presence behind, including small numbers of distinctive bifurcate-based projectile points. The use of non-local raw stone materials suggests that these newcomers were again highly mobile and ranged over a broad territory.

The Middle Archaic period occurred between 8,000 and 6,000 years ago. Mast forests similar to those of today were established in the region at this time and typical woodland species such as white-tailed deer, bear and turkey became more common. Population levels appear to have increased markedly and stone tool use again became focused on relatively local materials. In eastern Connecticut these included primarily quartzites available from outcrops along the Quinebaug River, but stone types from southeastern Massachusetts and the Boston area were used as well. It appears that group foraging regions were confined within major river drainages at this time, suggesting that a degree of territorialism was established. New tool types such as the pecked and ground axe and adze came into common use. It is likely dugout canoes made by such tools were used within an economy in which fishing had become more important. Sites of the period are typically small, and suggest a pattern of short-term, mobile land use. Many areas,

such as key fishing locations and wetland terraces, were used on a repeated seasonal basis, however. Sites from this period are found more frequently by archaeologists than sites associated with the preceding Early Archaic and Paleoindian periods.

The Late and Terminal Archaic periods fall between 6,000 and 2,700 years ago. During this time hunter-gatherers of the region increased in numbers, which resulted in decreased foraging territories. The use of stone shifted to a focus on locally available quartz, suggestive of territorial restriction of movement. However, after about 3,700 years ago (during the Terminal Archaic), tool assemblages begin to include more diverse stone types, many of which were likely acquired through maturing trade networks. Materials from southeastern Connecticut are often dominated by stone types quarried from the Narragansett Bay area, suggesting strong economic ties with that region. Sites remain typically small, but more often include substantial stone-lined hearth remains indicative of specialized food-processing tasks. As territories became restricted, it is probable that the economy became more focused on smaller, harder-to-process foods such as nuts, seeds, and shellfish. Deer, however, had become an important part of the subsistence base. Site locations are more often revisited, probably as part of well-established seasonal economic cycles within more confined areas. New technologies include the use of soapstone cooking vessels and, towards the very end of the period, the use of crude pottery.

The Woodland period began 2,700 years ago and continued until the period of contact with European settlers about 400 years ago. The Early Woodland period (ca. 2,700-2,000 years ago) remains poorly understood, and sites are relatively uncommon. During this time, the use of pottery vessels became well-established and aboriginal-made trade items included cold-hammered copper implements and tubular pipes for smoking tobacco. During the Middle Woodland period (ca. 2,000-1,200 years ago) longer-term settlements began to appear, the first which might be called villages. Populations began to aggregate in coastal and riverine settings where resources were rich and predictable, using the uplands increasingly for short-term hunting trips. It is likely that settlements remained seasonal, and that families divided into smaller camps for some of the year. The specialized use of wild plant foods, such as lamb's-quarters, appears to have increased at this time, as did shellfish harvesting and offshore fishing. Broad-ranging trade networks are marked by the common presence of jasper, most likely acquired from substantial quarries in eastern Pennsylvania.

The Late Woodland period (ca. 1,200 to 400 years ago) marks a time of permanent village formation. Large communities became ever more focused on coastal and riverine areas. Village intensification may in part have been a result of the incorporation of domesticated maize, beans and squash into the diet at this time. The importance of agriculture appears to have been stronger in interior, riverine areas than along the coast. An increased use of chert, probably from the vast Hudson River Valley quarries, may reflect a shift in trade patterns, though many tools are made from locally available quartz. Greater sedentism, rising population density, and stored wealth are factors which led to increased conflict at this time. Many villages become fortified at the end of this period, and some burials contain individuals killed in a violent manner. While life was probably focused on the growing villages, upland areas were still used by families for hunting, the collection of plant foods, and for short-term occupations.

When European colonists arrived in what is now Connecticut in the early 1600s, the Waterford area was occupied by the Western Nehantic (or Niantic) Indians. Little is known about this tribe, which has been overshadowed in the past and present by its neighbors to the north and east, the Mohegans and Pequots, respectively. At European contact, the Western

Niantics were allies of the Pequots. There is no evidence that they were related to the tribe known as the Eastern Niantics on the Rhode Island coast which was allied to the Narragansetts.

The Niantics certainly suffered the stresses and strains borne by all Native groups as a consequence of European colonization: Natives were pushed off their lands, drawn into the fur trade system, forced to compete with settlers for game, and infected with European-borne diseases. Native groups were pitted against one another and forced into each other's territory as they were pushed westward by advancing English colonization. In southeastern Connecticut, the scene of some of the earliest intensive European-Indian contact, tensions quickly erupted into violent conflict between the settlers and the Pequots, the locally dominant Native group, culminating in the Pequot War of 1636/7. The war was a seminal event that drastically changed southern New England Native lifeways and Native-colonist relations. In this brief conflict, colonists enlisted the assistance of the Mohegans, Narragansetts and Eastern Niantics against the Pequots, upon whom the combined force made a swift and brutal surprise attack. Pequot survivors fled for their lives; those that were not killed or did not escape were sold as slaves to Bermuda or parceled out to the pro-colonial tribes as rewards, to be absorbed into these groups. The professed intent of the colonists was to exterminate the Pequot tribe, and their ruthlessness sent a clear message that the balance of power had shifted from the Indians to the white invaders and that the colonists would stop at nothing to achieve their goal of opening settlement of Connecticut to Euro-Americans.

The Pequot survivors were scattered throughout Southern New England and New York. Some were incorporated into the Mohegans, Narragansetts and Eastern Niantics. Two groups of Pequots, however, refused to leave the area or to remain at their assigned locations. One group refused to join the Narragansetts as ordered and eventually became the Eastern Pequots of North Stonington. The other, although technically under the dominion of the Mohegans, lived in several locations along the west bank of the Thames River and in a village in the Waterford area (then Nameag or New London). The Nameag Pequots, led by Robin Cassasinamon, became the Mashantucket or Western Pequots. In 1646 there were 350 to 400 Pequots in the Nameag band. In 1651 the Colony of Connecticut gave up hope of merging the Nameag Pequots into other Native groups and the band was given a 500-acre reservation at Noank, to which it removed (DeForest 1852: 226; McBride 1984). The possible site of the Nameag Pequot village/fort in Waterford has been identified (Site 152-60, see below).

The Western Niantics seem to have been lost in the postwar shuffle. They did not participate in the Pequot War battle, although they may have harbored Pequot refugees, thus they did not suffer the immediate and drastic postwar population and land loss that the Pequots did. It is possible that the Nameag band of Pequots was living with Western Niantics, their allies. A joint Pequot–Western Niantic petition to the colonists against Uncas in 1647 certainly demonstrates a continued postwar alliance between the two groups (DeForest 1852: 231). Although the records are scanty and have yet to be systematically researched, mention of the Western Niantics is rare. Most likely the tribe suffered the fate of all Native groups–the steady encroachment on their lands by ever-increasing numbers of colonists, who came in continual waves after the Pequot defeat subdued Native Southern New England. What is known is that by 1672 the Western Niantics had no land of their own and were granted a 300-acre reservation in what is now East Lyme by the Connecticut Colony (DeForest 1852: 382). By 1734 there were 30 families left on the reservation (DeForest 1852: 383).

In 1761 Ezra Stiles visited the Western Niantics and found 85 people in 11 houses and six wigwams (Sturtevant 1975: 441-442). Stiles' notes offer intriguing glimpses of Western Niantic

life: at least one wigwam had been "stripped" and left for the winter, implying seasonal residence changes, a holdover of a pre-contact settlement pattern. On a 1747 map referenced by Stacy (1945) but not seen as part of this research, the ridge running south from Route 1 to Millstone Point is labeled Nehantic Hill and the portion of land between Route 1/Keeney Cove and Rope Ferry Road is called Wequampsh. Wequampsh later became known as the Wigwams, mapped as such on 19th-century maps, and was long known locally as the place in which the Western Niantics wintered in the woods. Archaeological evidence of Native occupation in this area is rich, certainly supporting long and intensive use of the area. In 1849, when DeForest wrote, large numbers of artifacts and human graves were apparently found regularly, exposed by house construction and river bank erosion (DeForest 1852: 387).

Stiles' notes also suggest a Mohegan presence among the Western Niantics, with Ben Uncas one of the Natives who hosted his visit (Sturtevant 1975: 441). A Mohegan-Western Niantic connection may also be indicated by Caulkins' reference to Uncas fleeing to a fort at the head of the Niantic River (in traditional Western Niantic territory) in 1657 (Caulkins 1895: 126-128). By the 18th century, with local Native groups increasingly fractured, it is entirely possible that at least some Western Niantics had formed alliances or friendships with the Mohegans, who had risen to prominence after aligning themselves with the Colony.

By 1783 there were 16 families at the Niantic reservation, but many Natives were leaving Connecticut to join the Brotherton Indian community in New York. In 1849 the tribe's overseer, Calvin Manwaring, wrote to DeForest that only 10 Western Niantics were left, the rest having moved away (DeForest 1852: 386-387). The reservation, then 240 acres, was gradually absorbed into white ownership.

Although many Western Niantics removed to the reservation, it is very likely that a number of local tribal members, along with Pequots, remained in Waterford, scattered among the Euro-American families until they left the area, merged into other local Native groups, or died off. According to Stacy (1933), local tradition held that the Cohanzie District in the northern part of town was named in 1750 after an old Pequot Indian who made his home in a wigwam in a swamp there and survived by making and selling brooms and baskets. Without doubt there were others, now lost to history.

D. Previously Identified Archaeological Site Areas

Based on known site locations and archaeological research in Waterford and adjacent coastal areas, some patterns in the locations of prehistoric sites can be established. These patterns, however, must be considered tentative because the professionally gathered data base is very small. Most of the known site information was not systematically gathered and is biased toward highly visible kinds of sites and those most readily exposed such as on river banks and in areas prone to development. Most professional archaeological surveys are limited to areas that are about to be developed. As a result, very little is actually known about the less developed, more remote interior areas of Waterford compared to the coastal and riverine areas. What is known today is that, in general, prehistoric sites are correlated with dry, relatively level, usually well-drained landforms which offered ready access to food resources, firewood and fresh water as well as shelter from prevailing winds and a southern exposure in the winter months. Site locations are often associated with coastal and interior wetlands, river floodplains and upper terraces, and estuarine habitats. Special-activity locations such as hunting stands, kill sites, butchering locations, plant-gathering areas and stone quarries were generally occupied for short

periods of time by small groups and may be located in less comfortable settings such as exposed stony uplands and wet or rocky terrain.

Waterford abuts both the Thames River and Long Island Sound, and the town contains a complex network of wetlands, small streams and estuarine habitats. This heterogeneous environment would have been rich in game and other important resources throughout prehistory. Very few locations in town are greater than one kilometer from a fresh water source or the Sound. As such, the town as a whole must be considered highly sensitive regarding its potential to produce prehistoric site locations of significant research value.

In 1997 the town of Waterford obtained a grant to conduct an archaeological assessment of the entire town's prehistoric and historic period archaeological resources. The assessment survey, conducted by PAST (M. Harper et al. 1998), involved background research in site files, historical records, cultural resource management reports, newspaper articles, and local historical society materials; informant research, a soils evaluation relative to prehistoric site potential; a "windshield" survey of the town area; and examination of a number of artifact collections, including the Bull Collection housed at the OSA. At the onset of the townwide assessment survey there were 19 prehistoric sites reported to the OSA. Eight additional prehistoric sites were recorded as a result of the assessment survey, and new information was added to previously known sites.

Documentary records and informant information collected during the townwide assessment survey also resulted in the identification of three contact/early historic period Native fort locations in Waterford. The first, designated as 152-16, may be the famed fort to which the Mohegan leader Uncas fled to escape a Narragansett assault in 1757. Although the site's association should be considered tentative, it is based on physical remains and historical data. The site is at the head of Keeney Cove, often referred to as the head of Niantic Bay, in a location known historically (and mapped as such) as Fort Hill. Historical records record Uncas's fort as "at Fort Hill at Niantic" (in Caulkins 1895: 126-128; Wherry 1997a). This may be the same fort as that referenced by Roger Williams in a 1636 letter to Govern Winthrop as "a fort of Nayantaquit men, confederate with the Pequots," at the head of Niantic Bay (Massachusetts Historical Collections, 2nd series, vol. 1, p. 161). Waterford was part of Niantic territory in the 17th century, but by the mid-18th century the Mohegans had achieved dominance in the area by virtue of their alliance with the colonists against the Pequots and their allies. Uncas may have taken over the old Niantic fort. Margaret Stacy reported in the 1930s that "many arrowheads and clamshells were formerly found" at the site, that 100 years earlier one could see the remains of a fish weir immediately south, and there was a pond (now a wetland) immediately north of the fort; the area was know as Fort Neck (Stacy 1934). Stacy reported that sand bank removal had destroyed at least some of the site. More recent graveling has occurred here as well, presumably further impacting the site. In addition to the fish weir and fort site proper, included in the site is a burial found just south along Stony Brook which, according to Robert Horan, who owned the abutting farm, was given to either Connecticut College or the Yale-Peabody Museum. Mr. Horan also found points and "chips" in a peninsula into the swamp.

The second fort site, 152-60, is believed to be a 17th-century Pequot fort. The location of this site is less specific since no artifacts are reported, but it is at the head of Alewife Cove on Pepperbox Hill. The area, known historically as "Old Fort Hill" or "Nameag Fort Hill," was first indicated as such in a 1651 land grant to Isaac Willey by New London (of which Waterford was then a part). James Wherry, who has done extensive research on local Native history, believes this to be the place at which the Pequot followers of Robin Cassasinamon resided (after the

tribe's defeat and break-up in the 1637 Pequot War) until their removal to a reservation in Noank in 1651, the year of Willey's grant (Wherry 1997a, b, and c). Wherry also suggests that the c. 1729 New London Baptist church was built on the fort site; however, local historians believe the church was further from the cove head, at Site 152-95. More intensive archaeological and historical research could more firmly establish the location of the fort and the later church.

The third fort site, 152-61, is the least well-documented. Its only description is in an 1861 letter to the Mystic Pioneer by an anonymous writer who went by the name of "Pequot" (Pequot 1861a and b). "Pequot" wrote occasional letters about local Native history, and his or her true identity was never revealed. In 1861 "Pequot" wrote:

> Here is still shown the remains of a sort of swamp fort near the residence of Nat. Chapman, Esq. The swamp has long since been cleared of maple and knoll in its centre shows but a slight elevation above the surrounding meadow, but the path once leading across the swampy thicket to the fort, is still said to be tracable by its raised stone pavement. Arrow heads, stone axes, samp mortars and pestles have been often exhumed in this part of Waterford, some of which are still preserved by the inhabitants.

"Pequot's" description would place the fort site in present Lake Brandegee, inundated by the lake's creation. If the site is submerged, it may well be preserved.

Beginning in 1998, PAST and AHS conducted an archaeological assessment study of the planned extension of State Route 11 through several towns in southeastern Connecticut, including Waterford. Thirty prehistoric sites were identified between the towns of Salem and Waterford in this study, indicating relatively intensive prehistoric use of the near-coastal uplands (Jones et al. 2006).

Some of the documented local sites include multiple components or episodes of use. The sites include shell middens, probable villages, sites with human burials, and temporary camps. Most of the reported sites are located in a coastal or near-coastal setting, less than a kilometer from the Sound or Thames River. However, while coastal and riverine settings are known to have attracted aggregated populations, especially during the Late Woodland period, the abundance of known coastal and riverine sites is believed to be an over-representation; that is, there really may not have been more coastal and riverine sites, but they have been found more often, exposed by development, which has focused heavily in these areas, and by a high rate of soil erosion in these settings. In contrast, sites in interior/upland areas which are much less developed, and which have been less studied by archaeologists, appear to be extremely under-represented.

The chronological representation of the reported sites in Waterford is biased towards the most recent era. The earliest sites reported to the OSA are from of the Late Archaic Period (ca. 6,000-3,700 years ago). All of the sites of this period appear to correspond to the Narrow-Stemmed Tradition, dated between roughly 4,500 and 3,700 years ago. Early Woodland components (ca. 2,700-2,000 years ago), Middle Woodland components (ca. 2,000-1,200 years ago), and Late Woodland components (ca. 1,200-400 years ago) are reported. Some sites could be classified only as Woodland (ca. 2,700-400 years ago), usually based on the presence of untyped aboriginal ceramics. A single Contact Period (17th century) burial is also reported. Some sites could not be chronologically placed at all because of the lack of diagnostic artifacts and are simply recorded as "unknown period".

The observed chronological distribution of sites is not believed to be representative of the total range of prehistoric occupation of the town of Waterford. Rather, archaeological site visibility is likely the main factor which has promoted the existing pattern. Sites of the Narrow-Stemmed Late Archaic, for example, are highly visible because of the focused use of quartz (a stone easy to recognize on plowed field surfaces where most sites are first discovered), as well as the abundance of projectile points produced during this period, a factor which is likely related to the ready availability of quartz and its properties which make it unsuitable for extensive reworking. In short, Narrow-Stemmed points are both highly visible and had brief working lives (they were in effect disposable tools), which has led to their abundance in the archaeological record.

Woodland occupation is known to have become focused on coastal and riverine areas, especially during the late Middle and early Late Woodland periods (McBride 1984). Aggregated seasonal and fully sedentary village communities developed at this time (ca. 1,400-800 years ago), which resulted in a decrease in the number of scattered upland and interior seasonal sites and in the formation of numerous deeply stratified refuse areas adjacent to villages. These middens were usually thick with shell remains, ceramic fragments, animal bone, charcoal and plant-food remains. This community aggregation and concomitant development of extensive refuse areas has resulted in very large, artifact-rich sites that are often easy to detect without extensive archaeological subsurface survey. As such, Woodland village sites and their associated midden deposits are more visible and thus well reported throughout Connecticut's coastal and riverine habitats.

Other factors contribute to the over-representation of relatively late sites in Waterford. One is the lack of archaeological data from the interior of Waterford, where many pre-Woodland sites are likely, especially adjacent to large wetland habitats. A second is the transgression of Long Island Sound since the end of the last ice age. Ocean transgression has resulted in the submergence of all but the most recent coastal zones. At the time of southern New England's first occupation, ca. 11,000 years ago, sea level was about 130 feet (40 meters) lower than that of today and the coastline was shifted significantly seaward of its present location. By 6,000 years ago (the beginning of the Late Archaic period) sea level had risen to about 32 feet (10 meters) lower than its present level. It is likely that the coastal region was always a resource-rich area and that sites were focused there on at least a seasonal basis throughout prehistory. This suggests that many of Waterford's earliest sites currently lie offshore in waters as deep as 130 feet.

When these variables of archaeological site visibility are considered, it becomes apparent that the small sample of sites reported in Waterford is not representative of the true prehistoric population. Were more extensive subsurface archaeological testing programs implemented, there is little doubt that all prehistoric time periods would be represented, as far back as the initial Paleoindian period of human occupation 11,000 years ago. Currently no data exists in the state records for the Terminal Archaic Period (ca. 3,700-2,700 years ago) in town, but sites of this age are very common throughout the state, and it is likely that many exist in Waterford, despite the fact that they are currently unreported.

Figure 4 shows archaeological sites reported within the project vicinity. Seven previously identified archaeological sites lie within a one mile of the Seaside project area, two of which are prehistoric. Two additional prehistoric sites lie just beyond the one-mile radius. Most of the sites were identified in the townwide archaeological assessment survey originally conducted by PAST, Inc. (see Figure 4) (M. Harper et al. 1998). Site 152-55 represents a single stone ax found

in the shallow waters of Jordan Cove, about 1.5 miles northwest of the project area. The style of the artifact is comparable to others dated to the Middle Archaic period, ca. 8,000 to 6,000 years ago. Its location within the cove could indicate the presence of an inundated site just offshore. Sea level during the Middle Archaic period was as much as 10 meters below the modern level. Site 152-57 is represented by a collection of Late Archaic tools, primarily stone spear tips dating to the Late Archaic period (ca. 5,000 – 3,800 years ago). The artifacts were found by a local collector in the plowed fields north of Harkness Memorial State Park. Site 152-62 is an undated site comprised of jasper and quartz tool-making debris as well as shell and bone. The presence of jasper could indicate a Middle Woodland age (ca. 2000 – 1200 years ago), during which time jasper was widely traded in the region. Site 152-63 was noted during the Waterford townwide survey after interviews with local residents, who recalled quantities of charcoal, burnt rock and shell removed during the construction of a house cellar. The site is undated, but likely marks the location of intensive prehistoric food-processing activities along the shore.

Table 1: Reported Prehistoric Archaeological sites in the Vicinity of the Project Area

Site	Period	Description
152-55	Prehistoric	Taberman Collection Ax, full-grooved pecked stone ax, possibly Middle Archaic
152-57	Prehistoric	Verkade Collection, Laurentian and Narrow-Stem Late Archaic
152-62	Prehistoric	Beach Street Site, jasper, quartz, shell and bone noted in CHPC 125 (CAS, Inc., 1983)
152-63	Prehistoric	charcoal, burned rock and shell noted during house construction

IV. THE HISTORIC PERIOD CONTEXT: RESULTS OF HISTORICAL BACKGROUND RESEARCH

Waterford was incorporated in 1801, but in essence it is the colonial town of New London minus the incorporated city (1784) immediately adjacent to the inner harbor on the Thames River. The earliest areas to be settled by the English include the main waterfront on the Thames, the area near the Niantic River, and Jordan Village. Unlike other parts of the Connecticut, the New London vicinity saw substantial migration from Rhode Island towns as early as the 17th century, a factor which resulted in greater Quaker and Baptist religious adherence and perhaps in other cultural differences as well.

The project area was first settled by the English around 1660, when James Rogers (ca. 1615-1687) established his home farm on hundreds of acres between Alewife and Jordan coves, an area then variously known as General Neck, Great Neck, and Goshen. James Rogers had come to Newport, Rhode Island, from England in 1635. He participated in the Pequot War, and around 1645 moved to Milford, Connecticut. Sometime between 1656 and 1660 he relocated to New London, where he became a wealthy trader, large landowner, and holder of numerous political offices, including representative to the General Court. According to probate proceedings, his household included one Indian and three African American servants; at least three of the four were reaching the end of their terms of service, and so were indentured servants rather than slaves for life (Rogers 1902: 35-36).

Among James Rogers's children were John, James, and Jonathan Rogers. John and James were instrumental in founding the Rogerene sect, an offshoot of the Seventh Day Baptist church of Newport, with which the family was still affiliated. The Rogers brothers, along with their followers (who included their father, the elder James Rogers), engaged in a long and acrimonious dispute with their Congregationalist neighbors, and were frequently the subject of fines and imprisonment over issues such as working on Sunday and interrupting Congregationalist church services. Doctrinally, they shared much with the Society of Friends, including belief in an inner dwelling Spirit, and they were commonly referred to as Quakers or Rogerene Quakers. All three Rogers brothers, described as "tradesmen, mechanics, boatmen, seamen, and farmers" (Caulkins 1895: 202), had farms at Great Neck (the vicinity of the project area).

Unlike his brothers, Jonathan Rogers (1656-1697) remained united with the Seventh Day Baptist church at Newport, though tradition holds that this decision caused no rift in the family. Jonathan Rogers is said to have built a stone house (which may, in whole or in part, be the present stone-ended dwelling) near his father's house; that is, the dwelling of James Rogers, the original settler (Rogers 1902: 46). This Jonathan Rogers was a man of many skills, judging by his estate inventory, which included cooper, carpenter, and blacksmith tools (Rogers 1902: 47). Jonathan Rogers and other members of his family formed the core of the Seventh Day Baptists who met at Great Neck. Although formal worship began in 1674, the group remained an outpost of various Rhode Island Baptist churches until 1784, when they established their own church society. But even at that date, 11 of the 14 founding members were named Rogers (Caulkins 1895: 613-24).

In the middle of the 19th century, the vicinity of the project was still a small community of farmers, fishermen, and sailors, many of who were members of the Rogers family (see Figures 5 and 6). In addition to the dwellings of the residents, the neighborhood had two small cemeteries, a Seventh-Day Baptist meetinghouse (an 1860 replacement for the one built in

1816), a school, and a store, the latter probably connected to a small granite quarry that formerly was operated just west of the project area. Within the boundaries of the project was the homestead of Jonathan Rogers. There were two Jonathan Rogers represented on these mid-19th-century maps: the older Jonathan Rogers (1783-1861) listed his occupation as "seaman" in the 1860 census (U.S. Census Office 1860). His property holdings that year appear to have been modest: $600 in real estate, $100 in other assets. His household economy was undoubtedly aided by the rent paid by the family of Richard Graham, who lived with Rogers and his wife. Graham was an English-born stonecutter who presumably was employed in the nearby granite quarry. His son, Jonathan King Rogers (1808-1879), was also a "seaman," with $2,000 worth of real estate and $900 in other assets. Without further research in the land records, it cannot be said which Jonathan had his homestead within the project area, though the path of the census taker suggests it was Jonathan K. Rogers. On the 1868 map (Figure 6), only one "J. Rogers" is indicated, most likely the younger man. According to the family genealogy (Rogers 1902: 261, 361), both men were fishermen and were called "Captain Rogers." In addition to being the master of a fishing vessel, Jonathan K. Rogers was also a boatbuilder. The two Jonathan Rogers, father and son, appear to have been typical of this seaside farming-fishing-seafaring community. Some of the others whose names were shown on mid-19th-century maps and who could be identified in the 1860 census are described in Table 2.

Table 2: Other Individuals in the Vicinity of the Jonathan Rogers Homestead

Name	Age	Occupation	Real Estate	Other Assets
Ephraim Brooks	34	Fisherman	900	100
Ezekiel Brooks	34	Fisherman	500	200
William Lester	35	Fisherman	1,000	100
Ezekiel Rogers	42	Seaman	1,700	1,100
David P. Rogers	51	Farmer	5,000	1,000
Silas Rogers	72	Farmer	2,000	800
Erastus W. Smith	45	Engineer	5,000	4,000

Source: 1860 U.S. Census

By 1890, when the first U.S.G.S. topographical survey of the area was made (Figure 7), there were fewer buildings shown in the vicinity, and no buildings at all within the project area.

The current appearance of the project area reflects its use as the Seaside Sanatorium, an institution founded in the 1930s as a place for tuberculosis-infected children to recover from their disease (Cunningham 1994). The State Tuberculosis Commission purchased 24 acres in 1931 and then in 1936 added another 12 acres, creating the property as it exists today. At the time, the property was mostly open, with some brush growing up around the edges; it was described as "a beautiful tract of untouched greensward" (Connecticut State Tuberculosis Commission 1932: 8). The Commission hired noted New York architect Cass Gilbert to design several large Tudor Revival-style buildings, and construction began in 1934. In addition to a large therapeutic building for the patients, the complex included a superintendent's house and residences for both

male and female employees. After drug therapy reduced the need for tuberculosis facilities, the property was used for nearly 20 years as a residential facility by the Department of Mental Retardation. It is now vacant.

Five historic period archaeological sites have been reported within a mile of the project area (Figure 4). Site 152-71 marks the location of the Booth Brothers granite quarry, in operation between ca. 1892 and 1940. Site 152-74 is the Dimmock Road Cemetery, first established during the smallpox epidemic of 1777. Site 152-80 is the c.1750 Jonathan Rogers "stone-ender" house reportedly built on or near the location of an earlier house. Site 152-82 is the location of the 1726 Philip Taber House. A post-1750 home now stands on the lot. Finally, Site 152-91 marks the original location of the Rogers-Darrow House, since moved. None of these sites will be impacted by proposed development within the Seaside project area. Table 3 provides a brief description of each site.

Table 3: Reported Historic-Period Archaeological Sites in the Vicinity of the Project Area

Site	Period	Description
152-71	Historic	Booth Bros. Quarry, granite, 1892-1940
152-74	Historic	Dimmock Road Cemetery, 1777-1801, smallpox epidemic victims
152-80	Historic	Jonathan Rogers House, stone-ender, ca. 1750
152-82	Historic	Philip Taber House, location of 1726 house, post-1750 reconstruction
152-91	Historic	Rogers-Darrow House location, ca. 1710 house moved after 1936

V. RESULTS OF FIELDWORK

BEC Environmental Planner Stephen Lecco provided plans which clearly document the location of utilities and other areas of ground disturbance resulting from construction and maintenance activities over the past 70 years. The available utility plans date from 1939, 1950 and 1957, with the 1957 plan folding in the earlier utility information (see Figure 8). The installation of the utilities networks caused extensive ground disturbance, along water and electrical and sewer lines, steam tunnels and areas excavated for underground fuel storage (up to 10,000 gallons in capacity). Soil boring logs from 1999 were also made available by BEC, which provided important additional information about project area soil conditions. A former employee of the Seaside Regional Center and town resident, Joseph Zoubek, was also interviewed (Mr. Zoubek was fishing on-site during the walkover and spoke to AHS staff). Mr. Zoubek was a building and grounds manager at the facility between 1978 and 1996, and provided additional first-hand information regarding various phases of construction and ground-disturbing activities across the site.

The Seaside Regional Center property was walked over and inspected by Senior Archaeologists Brian Jones and Daniel Forrest on October 25, 2007. The purpose of the walkover portion of the survey was to establish the archaeological sensitivity of the property in order to make recommendations regarding the necessity of Phase Ib archaeological investigations. Because the coastal zone along Long Island Sound is considered to have a high sensitivity for the presence of prehistoric and early historic-period archaeological sites, the focus of the survey was the documentation of areas of relatively deep ground disturbance. Such areas are unlikely to contain the remains of archaeological sites that have retained the integrity necessary to qualify for listing on the National Register of Historic Places. For archaeological sites to be considered significant, they must qualify for inclusion on the National Register of Historic Places. Apparently undisturbed areas are considered to have high archaeological sensitivity and were recommended for further testing.

The field survey consisted of two site visits by AHS archaeologists. The first was aimed primarily at visually inspecting the grounds and taking 25 hand-auger samples in order to make a more direct evaluation of subsurface soil conditions relative to archaeological sensitivity (Figure 9). The purpose of the second visit was to "ground-truth" the initial evaluation with hand-excavated shovel test pits (Figure 10). The shovel test pits provided a more detailed definition of soil conditions so that the delineation of archaeologically sensitive areas could be refined. Based on the results of the Phase Ia survey, one prehistoric site was located (Site 152-137), and the area of recommended Phase Ib testing was significantly reduced (Figure 11).

A. Results of Walkover Survey

The walkover survey began with the brief inspection of the basement of the Main Building to ensure that no large-scale tunnel system connecting the Seaside buildings was present. Tunnel networks were created at other state facilities built during the same period, some large enough to drive delivery trucks through, thereby causing a significant degree of ground disturbance. No such tunnels were found to exist at Seaside, a fact supported by further interviews with BEC project engineers and former employee Joseph Zoubek. The only large-diameter utilities associated with the buildings were steam, water main and sewer lines (Figure 8).

The entire property was first walked over, and the locations of utility covers and other signs of ground disturbances (especially significant fills and cuts) were carefully noted. The majority of the project area is covered by lawn, with scattered trees and ornamental shrubs planted along the edges of roadways, parking lots and building foundations (Photograph 1). The mature trees include a mix of hardwood species. The entrance to the property is bordered by large conifers, including Atlantic white cedar. An overgrown field of roughly two acres in size is located in the northwest corner of the property; it is covered in tall grasses, milkweed and immature briars.

Overall, the grounds have a natural, slightly rolling appearance that suggested minimal ground disturbance in most areas. The exceptions were the significantly raised road bed between Employee Building I and the Main Building, the very level grounds in front of the Main Building, and the clearly filled zone along the seawall. It was evident that an older natural drainage swale between Employee Building I (labeled as "Nurses' Quarters" on the early hospital plans) and the Main Building had been covered and piped directly through the seawall (see building names on Figure 2). The utilities plans provided by BEC further indicated that this area was significantly disturbed by a series of electrical, sewer and water mains, as was the area surrounding the Employee Building II (labeled as "Employees' Quarters" on the 1957 utility plan) to the west (Figure 8). Significant cuts and fills also appeared to be associated with the location of the Maintenance and Storage Building, especially its southern and eastern sides where fill deposits appear to have been placed within the natural swale. A stand of *Phragmites* reeds is growing along the edge of the swale where these fill deposits have impounded some of the surface-water flow. A second surface-water feature is present on the western side of the project area. This small stream flows southwards through a narrow ditched channel just east of the Duplex House and west of Employee Building II (Photograph 2). The northern sections of this stream were dry during the walkover survey, indicating the discharge within this channel is intermittent.

The eastern, western and northwestern portions of the grounds appeared to be the least altered portions of the original landscape. The periphery of the project area shows no topographic anomalies, no sharp changes in vegetation, and no areas of bare mineral soils exposed at the ground surface. Several manholes for the sewer system installed in the 1980s were identified in the northeastern and southwestern sections of the project area, but otherwise, these areas appeared to be relatively intact.

B. Results of Subsurface Survey

B.1. Soil Probe Sampling

Areas of apparently intact soils identified during the walkover survey were subjected to limited subsurface survey to refine archaeological sensitivity estimates. These areas were sampled using a 1-inch hand-auger soil probe. The probe was able to penetrate the soil to a depth of about two feet in most cases. In some locations, dense gravelly soils resulted in shallow refusals. In total, 25 hand-auger samples were taken from across the grounds. The results of the soil probe survey are depicted on Figure 9. In general, the soil auger samples suggested that relatively intact soils were concentrated around the periphery of the project area. Soil columns in the southeastern portion of the property retained relatively intact, weathered subsoil horizons (Cores 2-5). The grounds in front of (south of) the Main Building proved to be heavily modified and disturbed (Cores 7-12).

Core 13 was placed to evaluate an area of surface disturbance, but was unable to penetrate the gravelly and mottled sediments. The area of potential soil disturbance is visible as a 5-foot-wide linear section of bare soils extending 160 feet (50 meters) northwards from a sewer system man-hole (Photograph 3). Mineral soils are exposed at the ground surface. Mr. Zoubek, a former employee of Seaside Regional Center, stated that the area had been barren as far back as he could recall, though he was not aware of any utility lines that are or were located beneath the disturbance. Core 14, taken near the edge of the western stream drainage just west of the linear soil disturbance, revealed dark brown loamy fill deposits overlying olive-gray colored fine silty sands, indicating that hydric soils associated with the natural drainage were buried during the development of the Seaside property. Although the margins of wetlands have a high potential to contain prehistoric archaeological resources, wetlands themselves were rarely occupied. The lawn areas west of the ditched stream appeared to contain intact subsoils (Core 15). Cores 16 and 17 were placed in the overgrown field in the northwestern section of the project area. Both probes revealed apparently intact soil profiles. Core 18 was placed west of a greenhouse and the former Seaside sewage treatment facility. Coal ash deposits were found immediately beneath the ground surface. Cores 20 through 22 were placed to the east of the entrance drive linking the campus section with Shore Road. Intact soil profiles were encountered in the northern two-thirds of this section. Core 22 was placed northwest of the Maintenance Building, and revealed a truncated soil profile with an apparently intact lower subsoil horizon preserved beneath a thin fill deposit. Core 23, located west of the shed exhibited similarly truncated soils. Core 24 was located northwest of the Therapy Building on an area of relative high ground. Soils here appeared relatively intact. Along the treeline of the northeast corner of the property, Core 25 produced a dense sample of coal ash, similar to that of Core 18. No artifacts were recovered during the soil probe sampling.

B.2. Shovel Test Pit Sampling

Based on the results of the soil probe sample, a small number of shovel test pits were placed in areas of potentially intact and therefore archaeologically sensitive soils. The purpose of the test pit sampling was not that of typical Phase Ib testing; i.e., to locate archaeological sites. Rather, the testing was designed to further refine the areas of archaeological sensitivity so that Phase Ib survey could be tightly targeted and efficient. A total of 27 test pits were excavated during the Phase Ia survey. Eleven of the test pits (~40%) encountered fully intact soils, buried intact soils, or truncated soil columns with intact subsoils. The remaining 16 test pits encountered either pervasively disturbed sediments, or in-filled wetland soils, neither of which are likely to contain significant archaeological resources.

Test pits with intact soils were widely distributed but generally isolated within the project area (Figure 10). The test pit data suggest that the only relatively large areas of intact and archaeologically sensitive soils are in the northern and northwestern sections of the project area. Four of the six test pits (J14 – J19) excavated within the overgrown field in the northwestern section encountered intact soil columns. Only the northeastern (J18) and southeastern (J14) corners of the field contained disturbed soils. The remaining test pits revealed well-developed soils with a moderately thick plowzone covering a thick and well-weathered B-horizon. The plowzone and upper subsoil horizons consist of fine sandy loams with traces of fine gravel and occasional cobbles. The density of cobbles and rock fragments was much lower than is typical for till-derived soils in southeastern Connecticut. A second relatively large area of intact soils was identified along the northern section of the project area. Three test pits excavated to the east

of the entrance road encountered either fully intact soil columns (J20, J22) or intact soils preserved beneath a thin veneer of fill (J21). Intact soils in this sections were comparable in texture to those found in the overgrown field, but the B-horizon subsoils were less weathered. Both the upper (B2/1) and lower (B2/2) subsoils in the northern section tended toward a more olive-brown color, in contrast to the yellow-brown hues seen to the southwest. The color contrast is likely related to the different parent sediments from which these soils were developed. The northern section is underlain by "Thick Till" deposits (Figure 3), which have slower and more unpredictable drainage characteristics at depths greater than two feet than the "Till" deposits beneath the field. The soils found in the northern section appear to have been moderately well-drained and would have provided suitable conditions for historic or prehistoric period use/occupation.

An apparently isolated area of intact soils was found on the southern half of a small knoll located behind (northwest of) the Therapy and Activity Building (Figure 10). Here, test pit J26 encountered intact and well-drained subsoils preserved beneath 27 centimeters (11 inches) of fill deposits. J1, excavated just 15 meters to the north of J26, revealed pervasively disturbed soils, suggesting that previous earth-moving activity has likely impacted the northern portions of the knoll. The cause of the soil disturbance in the area of J1 is suggested by the presence of a poured concrete culvert near within the stream drainage. It appears that a small earthen road once ran across this section of the project area, through the section sampled by J1.

To the east and south of the knoll is a large area of soil disturbance. The disturbed section wraps around the Therapy and Activity Building and continues south along the edges of the Main Building. This area was sampled by test pits J2, J4, J5, and J6, all of which encountered Sanatorium-era fill deposits with an abundance of coal and coal ash overlying coarsely-mottled sandy loams and gravels.

Test pit J3, located in the extreme northeastern corner of the project area, revealed thinly stratified fill deposits overlying an intact soil profile. The eight-centimeter-thick buried plowzone may have been truncated, but the subsoils below showed no evidence of disturbance. The natural soils in this section are coarser in texture than those encountered in the western half of the property. The B-horizon soils in J3 contained an abundance of small cobbles and fine gravels suspended in a fine sandy loam matrix. The subsoils appeared well-weathered (dark yellow-brown in color) with no oxidation mottles or other indications of wet conditions.

Test pit J25, excavated 100 east of the Main Building and 100 feet north of the seawall, encountered an intact soil column of fine sandy loams overlying sand and gravel outwash deposits. The proximity of this section to the shoreline indicates that any intact soils have a high potential for containing prehistoric period archaeological resources.

Test pits J8 – J11 were excavated along the eastern and western margins of the western stream drainage. All four test pits encountered a very homogenous dark brown sandy loam at the ground surface. The absence of even small pebbles or other clasts within this sediment indicates it is likely a screened loam fill. The 20-to-30-centimeter thick loam fill deposit was found to be directly overlying hydric mineral sediments in pits J9, J10, and J11. These sediments consisted of gray-brown silty fine to very fine sands with mottles of re-oxidized iron. Test pit J8 was terminated at a shallow depth due to a large rock or ledge outcrop exposed near the ground surface. The results of testing in this section suggest that the natural stream drainage was significantly wider than the present-day ditched channel. The hydric soils found beneath the fill in these test pits indicate a broad and generally wet swale used to extend over a 150-foot wide

section of the property. Prehistoric or historic-period archaeological resources are not anticipated within this section based on the poor drainage and subsequent earth-moving activity.

Three of the four test pits excavated to the west of the in-filled wetland encountered pervasively disturbed soils. Test pits J13, located to the south of the Superintendent's House, and J23 and J24, located to the east of the cottage, revealed coarsely mottled Sanatorium-era fill deposits with an abundance of coal and coal ash overlying unweathered glacial sediments. No significant archaeological resources are likely to have been preserved in this area.

Test pit J12, placed 80 feet (25 meters) east-northeast of the Superintendent's Cottage was the only test pit in this section of the project area to encounter intact soils. An apparently intact plowzone was found to extend 27 centimeters below the ground surface and to overlie intact subsoils. A large boulder or ledge was encountered at a depth of 55 centimeters in this pit. This soil column indicates that some intact and archaeologically sensitive areas escaped the extensive disturbance even in this heavily modified section of the campus.

Finally, test pit J27 was placed along the margins of the eastern stream drainage south of the shed. Black sandy loam and cobble fill was found to overly gray silty gravels, suggesting that the eastern stream drainage was also filled during the construction and development of the campus.

B2.1 Cultural Material

The majority of the artifacts recovered during the test pit sampling phase of the subsurface survey were associated with the institutional use. These included large quantities of coal, coal ash, ironstone ceramics, clear container glass, steel wire, plastic, and other refuse that was distributed throughout most of the fill deposits. These materials were noted and discarded in the field. A small number of earlier historic-period and prehistoric-period artifacts were also recovered from the test pits. These include a total of 10 pieces of quartz debitage (waste produced during the manufacture of stone tools), and a Late Woodland-period quartz Levanna projectile point (J19: plowzone). The debitage was recovered from test pits J5 (two flakes from fill deposits), J12 (one flake from the plowzone), and J15 (seven flakes from the plowzone). The recovery of lithic artifacts clearly indicates the presence of an archaeological site within the project area. Based on these results, the area surrounding test pits J12, J15, and J19 was assigned site number 152-137 (see Figure 11) (see detailed artifact inventory list for Site 152-137 in Appendix IV). The Levanna projectile point indicates the site was used during the Late Woodland period (1,200 BP to 500 BP).

Potential late 18th- to early 19th-century artifacts recovered during the survey include a sherd of undecorated creamware (J12: plowzone), and several sherds of lead-glazed red earthenwares (J6: Fill, J11: plowzone, J25: plowzone). With the exception of the creamware sherd from J12, which is included in Site 152-137, these historic-period artifacts were not assigned to a specific site. The low density and the wide distribution of these artifacts indicates that further testing will be required to determine if they are associated with a discrete archaeological site or are simple "field scatter" typically found on agricultural lands in Connecticut. These artifacts were inventoried as 152-FSSS (see artifact inventory list in Appendix IV). None of the pre-Sanatorium-era artifacts can be confidently associated with the 19th-century Rogers House which once stood on the property. No remnants of the Rogers House or any other pre-Sanatorium-era structures were identified during the survey, however, the Phase Ia survey was not designed to locate sites; site location is the purpose of a Phase Ib survey.

VI. SUMMARY AND RECOMMENDATIONS

The Phase Ia archaeological survey of the Seaside Regional Center indicates that the majority of the property has been affected by previous ground disturbance. Although the subsurface testing undertaken for the Phase Ia survey was limited in scope and tightly targeted, it provided sufficient information on the existing soil conditions to determine the potential of the project area to contain significant buried cultural resources. Construction of the sanatorium buildings, roadways, and utilities involved the displacement and redeposition of soils within the property. Based on the results from background research, pedestrian survey, soil probe sampling and limited test pit survey, we conclude that 27.2 acres of the 32-acre project area have low archaeological sensitivity. The limited potential for the majority of the project area to contain significant archaeological resources is underscored by the evidence for pervasive soil disturbance in the vicinity of all the campus buildings, within utility corridors, and within the two natural surface-water drainage features. All of these areas have been subjected to grading, cutting, and/or filling that have displaced or destroyed any archaeological materials that might once have been present. We estimate that the remaining 4.8 acres of the project area have a high potential to contain archaeological resources (Figure 11).

The ecological and archaeological context of the Seaside Regional Center property clearly indicates that undisturbed, well-drained soils within the project area have a high potential to contain archaeological resources. Archaeological surveys conducted along Connecticut's shoreline consistently yield evidence of dense prehistoric settlements. Long Island Sound and the innumerable coves and bays along the shore provided both abundant and predictable food resources to Native Americans. Rising sea levels have submerged much of the Archaic-period coastline, but Woodland-period coastal sites are abundant and should be anticipated where freshwater was available near the shore, and where level well-drained terrain was present. Both of these conditions were met by the Seaside property prior to the construction of the state facilities in the 1930s. Evidence of Woodland-period use of the project area was recovered from the western side of the project area. This is notable, as the testing program was specifically designed to evaluate soil conditions relative to archaeological sensitivity, not to sample for archaeological resources. The density of the test pits in the Phase Ia survey is well below that mandated by SHPO for Phase Ib survey.

Potentially significant archaeological resources in the project area are not limited to prehistoric Native American sites. European settlement of present-day Waterford dates back to the 17th century and the area surrounding the project area is dotted with standing early houses and the reported sites of earlier houses. Although no standing structures in the vicinity of Seaside date to the earliest phase of English settlement, at least one of the nearby houses is said to have been constructed from material salvaged from a 17th-century or very early 18th-century house.

It is AHS's recommendation that the 4.8 acres of intact soils within the project area be subjected to Phase Ib archaeological reconnaissance survey. SHPO standards mandate testing at intervals no greater than 15 meters within areas of moderate to high archaeological potential. At 18 pits per acre (testing at 15-meter intervals), the Phase Ib testing will require approximately 90 test pits. We further estimate, in accordance with the *Primer*, that 28 additional test pits will be required to complete array testing around isolated finds and to allow for expansion of the testing should additional areas of intact soils be identified during the close-interval sampling. A maximum of 118 pits is therefore recommended to ensure the completion of the Phase Ib testing in accordance with the CEPA process and SHPO's *Primer* guidelines. We recommend no

further archaeological investigations in the remainder of the project, which consists of 27.2 acres of disturbed soils.

VII. REFERENCES

Bachman, R.L.
2000 A*n Illustrated History of the Town of Waterford.* Waterford, CT: Bicentennial Committee, Town of Waterford.

Baker, W.
1854 Map of New London County, Connecticut. Philadelphia.

Beers, F. W.
1868 Atlas of New London County, Connecticut, From Actual Surveys. New York, NY: F. W. Beers, A. D. Ellis & G. G. Soule.

Bucher, R.
1984 The Colonial Lands of New London. Unpublished manuscript at the office of the Waterford Town Clerk.

Caulkins, F.M.
1895 *History of New London, Connecticut*. Revised edition with index. Originally published in 1860. New London, CT: H. P. Utley.

Connecticut State Tuberculosis Commission
1932 *Biennial Report, 1932*.

Cunningham, Jan
1994 "The Seaside," National Register of Historic Places nomination. Hartford, CT: Connecticut State Historic Preservation Office.

Department of Public Works (DPW)
2007 Public Scoping Meeting Presentation, Seaside Regional Center Development, Waterford, Connecticut, September 20, 2007.

DeForest, J.W.
1852 *History of the Indians of Connecticut*. Hartford: Wm. Jas. Hamersley.

Dowhan, Joseph J. and Robert J. Craig
1976 *Rare and Endangered Species of Connecticut and their Habitats.* State Geological and Natural History Survey of Connecticut, Report of Investigations, No. 6.

Hale, C.R.
1935 Connecticut Headstone Inscriptions. Manuscript, Connecticut State Library.

Harper, Mary, Bruce Clouette, Brian Jones, Ross Harper, Daniel Forrest and Lisa Centola
2006 Report: Archaeological Survey and Historical Documentation of the Former Norwich State Hospital Property, Norwich and Preston, Connecticut. Prepared for

Connecticut Department of Economic and Community Development. Storrs, CT: AHS, Inc.

Harper, Mary, Julie Hartman-Brodeur, Brian Jones and Bruce Clouette
1998 Report: Townwide Archaeological Assessment Survey, Waterford, Connecticut. Prepared for the Town of Waterford. Storrs, CT: PAST, Inc.

Harper, Ross and Bruce Clouette
2007 Report on the Phase III Data Recovery Program at the Daniels Homestead, Site 152-128, Waterford, Connecticut. Prepared for the Connecticut Department of Transportation. Storrs, CT: AHS, Inc.

Hempstead, Joshua
1901 *The Diary of Joshua Hempstead*. Providence: New London Historical Society.

Hurd, D. Hamilton (comp.)
1882 *History of New London, County, Connecticut, with Biographical Sketches of Many of its Pioneers and Prominent Men*. Philadelphia, PA: J. W. Lewis.

Jones, Brian, Bruce Clouette, Mary Harper, Daniel Forrest, Ross Harper and Lisa Centola
2006 Report on the Historic Resource Evaluation Phase I and Phase II Surveys, Route 82/85/11 Corridor Project, East Lyme, Montville, Salem and Waterford, Connecticut. Prepared for Maguire Group, Inc. Storrs, CT: AHS, Inc.

Lester, W.
1833 Map of New London and Windham Counties in Connecticut. New Haven.

McBride, K.
1984 The Lower Connecticut River Valley Archaeological Project: Final Report on Six Years of Survey. Storrs: PAST, Inc.

McCahon, Mary
1990 Jordan Village Historic District. National Register Nomination Form. On file at the Connecticut Historical Commission.

"Pequot"
1861a "Another Letter from Waterford," *Mystic Pioneer*, September 14.

1861b "Letter from Waterford," *Mystic Pioneer*, November 9.

Rogers, James S.
1902 *James Rogers of New London, Connecticut, and his Descendents.* Boston, MA: privately printed.

Senich, Karen
2007 Letter from Karen Senich, State Historic Preservation Office, to Jeff Bolton, Connecticut Department of Public Works, Regarding Seaside Regional Center, Sale and Development, Waterford, Connecticut.

Stacy, M.
1933 "Cohanzie District of Waterford Named After Pequot Indian in 1750," *New London Day*, July 20.

1934 "Oswegatchie Known as Pine Neck in Early Days; Site of Uncas' Old Fort," *New London Day*, December 20.

1945 "Several Skeletons Unearthed at the Wigwams, Waterford, Home of Nehantic Indians," *New London Day*, August 30.

State of Connecticut
2007 Purchase and Sale Agreement between the State of Connecticut and Seaside in Waterford, LLC.

Sturtevant, W.
1975 "Two 1761 Wigwams at Niantic." *American Antiquity* 40(4): 437-444.

U.S. Census Office
1860 Census of Population, manuscript returns, New London County, microfilm, Connecticut State Library, Hartford, CT.

U.S. Geological Survey
1893 New London Quadrangle, 15-minute series, surveyed in 1890. In Topographical Maps of Connecticut. Hartford: Connecticut State Librarian.

Walling, H. F.
1854 Map of New London County, Connecticut. Philadelphia, PA: William E. Baker.

Wagner, Gay
1996 Historical and Architectural Survey of Waterford: Southern Half. Two volumes. Town of Waterford and the Connecticut Historical Commission.

Wherry, J.
1997a Three Forts in Early New London. Unpublished manuscript. Mashantucket: Mashantucket Pequot Museum and Research Center

1997b Nameag Fort Hill. Unpublished manuscript. Mashantucket: Mashantucket Pequot Museum and Research Center.

1997c Noank Antecedents. Unpublished manuscript. Mashantucket: Mashantucket Pequot Museum and Research Center.

APPENDIX I

FIGURES

Seaside Regional Center - Waterford, Connecticut

Location of the Project Area

Figure 1

AHS

250 0 250 Feet

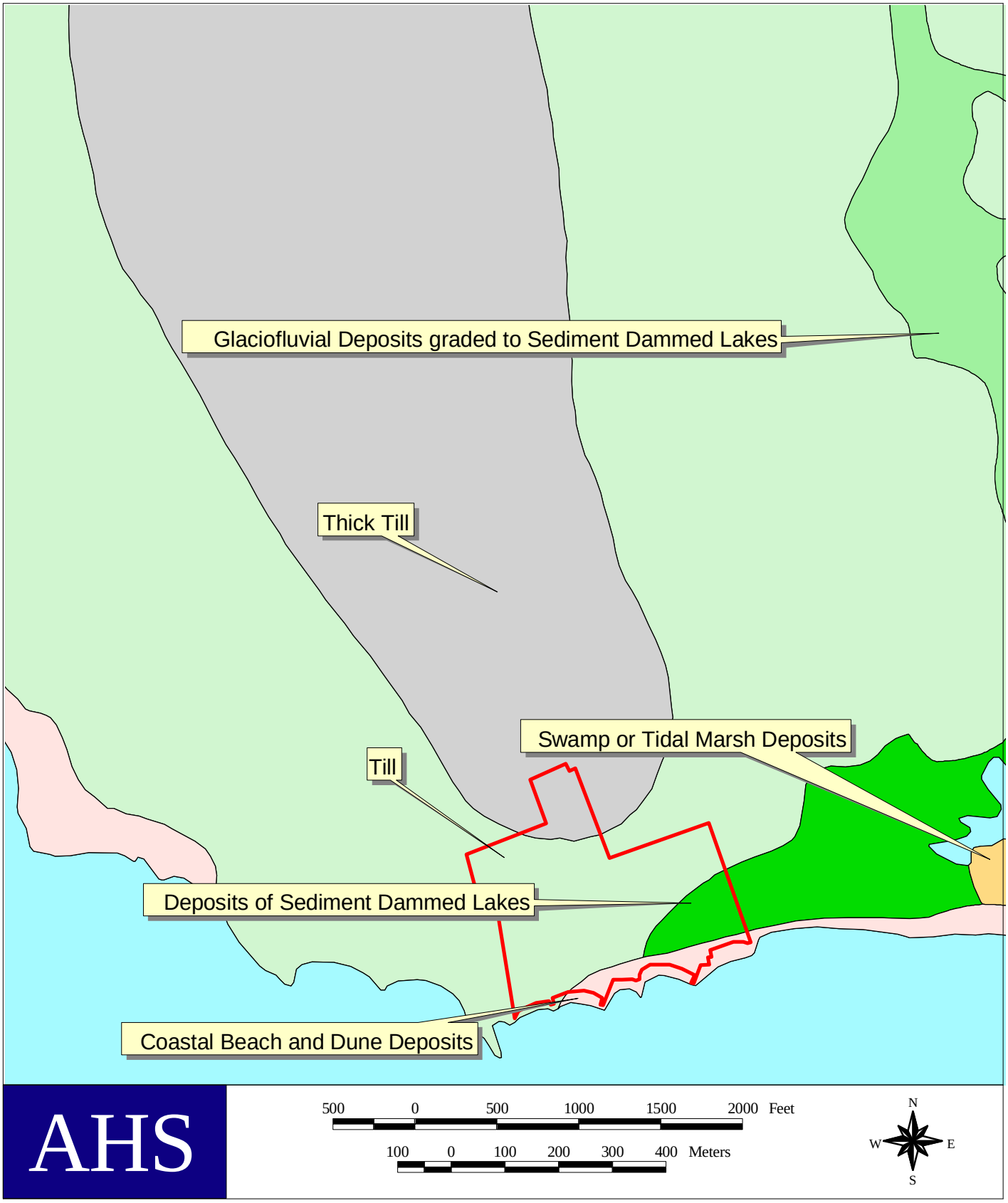
50 0 50 Meters

N W E S

Seaside Regional Center - Waterford, Connecticut

Existing Conditions and Buildings

Figure 2



Seaside Regional Center - Waterford, Connecticut

Glacial Geology of the Project and Surrounding Area

Figure 3

USGS Niantic and New London Quad Sheets, 1:30000

AHS

1000 0 1000 2000 3000 4000 5000 Feet

250 0 250 500 750 1000 1250 Meters

N W E S

Seaside Regional Center - Waterford, Connecticut

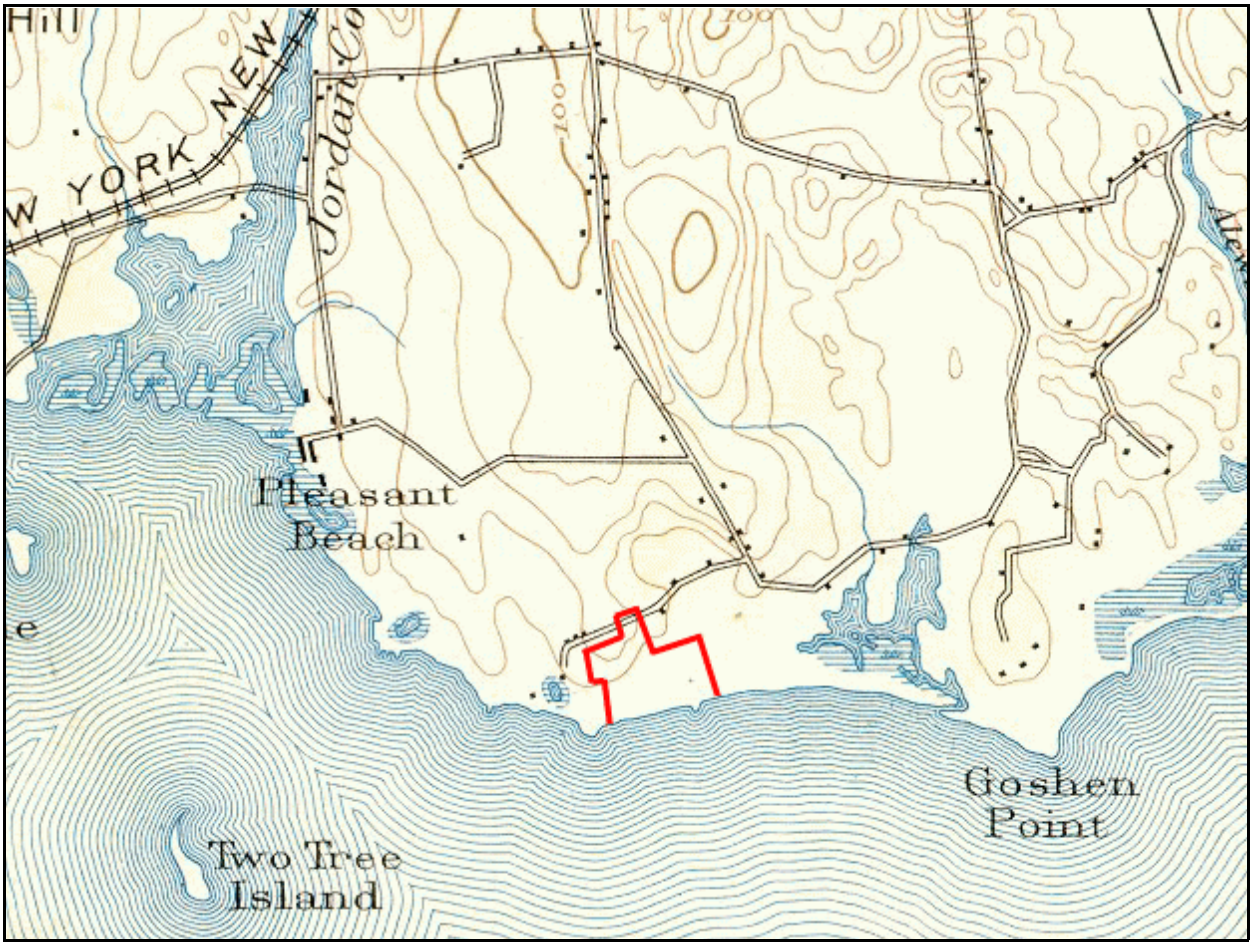
Documented Archaeological Sites within One Mile of the Project Area

Figure 4

Figure 5: **Project area as shown on 1854 Walling county wall map. The notation "J. Rogers" refers to Jonathan Rogers, a mariner.**

Figure 6: **Project area as shown on 1868 Beers atlas map. A "boat house" is shown near the homestead of Jonathan Rogers, probably outside the project area.**

Figure 7: **Project area as shown on the 1893 U.S.G.S. New London Quardangle, surveyed in 1890. No buildings are shown within the project area.**



This page intentionally left blank

Seaside Regional Center
Waterford, Connecticut

1957 Plan of Existing Utilities

Figure 8

NOTES

1 ELEVATIONS SHOWN HEREON ARE BASED ON THE MEAN SEA LEVEL DATUM.

2 COORDINATES SHOWN HEREON REFER TO THE STATE OF CONNECTICUT RECTANGULAR COORDINATE SYSTEM.

LEGEND FOR UTILITIES

ELECTRIC AND TELEPHONE ——E——T——E——T——

SANITARY SEWER ——————————

STORM SEWER — — — — — —

WATER ——————————

MANHOLE (FOUND) ○

MANHOLE (NOT FOUND) ●

HYDRANT ⊄

POLE ⊸

CATCH BASIN □

STEAM ——S——S——S——S——S——

UTILITIES SHOWN HEREON ARE PLOTTED FROM SURFACE INDICATIONS AND RECORDS AS WELL AS VERBAL INFORMATION OBTAINED AT THE INSTITUTION.

80 0 80 160 240

REVISED SEPT 21, 1957

ROAD

LONG ISLAND SOUND

30 BED COTTAGE

GREENHOUSE

SEWAGE TREATMENT

GARAGE

TRANSFORMER

WATER PUMPING STA.

METER PIT

MAINTENANCE AND STORAGE BLDG.

3000 GALLON UNDERGROUND OIL STORAGE TANK

TENNIS COURT

PARKING

DUPLEX COTTAGE

EMPLOYEES QUARTERS

SUPT RES

HORSE'S HOME

SEWER PUMPING STATION

THERAPY AND ACTIVITY BLDG.

PARKING AREA

HOSPITAL

SPRINKLERS

SPRINKLER

FIRE VALVE

N-172 600

N-172 200

N-171 800

N-171 400

N-170 800

N-170 200

This page left intentionally blank

Soil Auger Results:

- fill/disturbance
- intact soil horizons
- truncation of upper subsoil
- undetermined/shallow refusal
- buried wetland sediments

AHS

250 0 250 500 750 Feet

50 0 50 100 150 Meters

N W E S

Seaside Regional Center - Waterford, Connecticut

Results of the Phase Ia Soil Auger Investigation

Figure 9

Results of Subsurface Testing:

Shovel Test Pits : Soil Conditions	Soil Probes: Soil Conditions
Disturbed	Disturbed
Filled Wetland	Undetermined
Intact	Filled Wetlands
Intact (buried)	Intact
Intact subsoil	Intact subsoils

AHS

250 0 250 Feet

50 0 50 Meters

N W E S

Seaside Regional Center - Waterford, Connecticut

Results of Shovel Test Pit Sampling

Figure 10

Results of Archaeological Assessment

Area of Archaeological Sensitivity
(Phase Ib Survey Recommended)

1.2 Ac.

Shovel Test Pits : Soil Conditions

- Disturbed
- Filled Wetland
- Intact
- Intact (buried)
- Intact subsoil

Soil Probes: Soil Conditions

- Disturbed
- Undetermined
- Filled Wetlands
- Intact
- Intact subsoils

AHS

300 0 300 Feet

50 0 50 Meters

N
W E
S

Seaside Regional Center - Waterford, Connecticut

Results of Archaeological Assessment

Figure 11

APPENDIX II

PHOTOGRAPHS

Photograph 1: Existing vegetation on the Seaside property. Photograph taken from 50 feet east of the Superintendent's House looking east.

Photograph 2: Southern section of the western stream drainage. Photograph taken from the seawall looking northward.

Photograph 3: Area of soil disturbance located north of the seawall and west of the New Sewage Pump Station building. Photograph taken looking south toward Long Island Sound.

APPENDIX III

TEST PIT FORMS

APPENDIX IV

ARTIFACT INVENTORY

Archaeological and Historical Services, Inc.

Detailed Site Summary Report

Material	Description	Count
Lithic	quartz flake	6
Lithic	quartz primary cobble reduction debris	2
Lithic	quartz projectile point	1
Historic Ceramic	untyped creamware	1
Historic Ceramic	untyped whiteware	2
Glass	blue-green window glass	1
Glass	clear window glass	1
Other Historic	coal	3

Total Artifacts: 17

Archaeological and Historical Services, Inc.

Artifact Inventory

11/02/07 **Site: 152 – 137**

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
1.00		J12		5-27	cm bs	Ap (Plowzone)	I		1	quartz flake			1
2.00		J12		5-27	cm bs	Ap (Plowzone)	I		1	untyped creamware sherd		1762-1820	1
3.00		J12		5-27	cm bs	Ap (Plowzone)	I		1	coal fragment	0.38 gm		1
4.00		J15		5-26	cm bs	Ap (Plowzone)	I		2	coal fragment	1.08 gm		1
5.00		J15		5-26	cm bs	Ap (Plowzone)	I		2	quartz primary cobble reduction debris			1
6.00		J15		5-26	cm bs	Ap (Plowzone)	I		5	quartz flake			1
7.00		J18		5-32	cm bs	Fill 1?	I		2	untyped whiteware sherd		1820-	1
8.00		J18		5-32	cm bs	Fill 1?	I		1	blue-green window glass fragment			1
9.00		J18		32-38	cm bs	C?/Trench?	I		1	clear window glass fragment			2
10.00		J19		3-34	cm bs	Ap (Plowzone)?	I		1	Levanna quartz projectile point whole - *possibly repaired*		Late Woodland	1

Archaeological and Historical Services, Inc.

Detailed Site Summary Report

Material	Description	Count
Lithic	quartz flake	1
Lithic	quartz primary cobble reduction debris	1
Lithic	unidentified lithic unidentified historic lithic	1
Historic Ceramic	red earthenware (no glaze)	3
Historic Ceramic	red earthenware brown lead glaze	2
Historic Ceramic	ironstone	2
Historic Ceramic	untyped whiteware	2
Faunal	unidentified shell	1
Metal	brass sheet	1
Metal	iron machine cut machine headed nail	1

Total Artifacts: 15

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
1.00		J1		4-23	cm bs	Fill 1	I		1	ironstone decorated handle sherd *recent break; 2 fragments mend to form 1 sherd*		1813-1900+	1
2.00		J1		4-23	cm bs	Fill 1	I		1	unidentified lithic unidentified historic lithic *possible marble tile piece*			1
3.00		J5		17-32	cm bs	Fill 2	I		1	quartz primary cobble reduction debris			1
4.00		J5		17-32	cm bs	Fill 2	I		1	quartz flake			1
5.00		J6		4-15	cm bs	Fill 1	I		2	untyped whiteware sherd		1820-1900+	1
6.00		J6		4-15	cm bs	Fill 1	I		1	red earthenware brown lead glaze sherd			1
7.00		J6		30-40	cm bs	Fill 2	I		1	red earthenware (no glaze) sherd			2
8.00		J6		30-40	cm bs	Fill 2	I		1	red earthenware brown lead glaze sherd			2
9.00		J11		3-29	cm bs	Ap (Plowzone)?	I		1	red earthenware (no glaze) sherd			1
10.00		J24		5-30	cm bs	Fill 1	I		1	unidentified shell fragment	0.64 gm		1
11.00		J25		6-32	cm bs	Ap (Plowzone)?	I		1	iron machine cut machine headed nail whole			1
12.00		J25		6-32	cm bs	Ap (Plowzone)?	I		1	red earthenware (no glaze) sherd			1
13.00		J25		6-32	cm bs	Ap (Plowzone)?	I		1	embossed brass sheet fragment *with the letters .."CHERE"..*			1
14.00		J26		20-27	cm bs	Fill 2	I		1	ironstone sherd		1813-1900+	1

APPENDIX V

SITE FORM

HISTORIC RESOURCES INVENTORY
PREHISTORIC ARCHAEOLOGICAL SITES
HIST-7 NEW 9/77

STATE OF CONNECTICUT
CONNECTICUT HISTORICAL COMMISSION
59 SOUTH PROSPECT STREET, HARTFORD, CONNECTICUT, 06106

FOR OFFICE USE ONLY														
Town No.:152							**Site no.:**137							
UTM:	1	8	7	3	9	8	8	0	4	5	7	6	2	6	5
QUAD: Niantic														
NR: ☐ACT ☐ELIG. ☐NO														
SR: ☐ACT ☐ELIG. ☐NO														

DISTRICT ☐**YES** ☐**NO**

IDENTIFICATION

1. SITE NAME
Seaside Regional Center

STATE SITE NO.

CAS NO.

2. TOWN/CITY
Waterford

VILLAGE

COUNTY
New London

3. STREET AND NUMBER (and/or location)
4 Seaside Drive

4. OWNER(S)
State of Connecticut and Seaside in Waterford LLC
☒ **PUBLIC** ☒ **PRIVATE**

5. ATTITUDE TOWARD EXCAVATION
Positive

6. USE *(Present)*
Fallow Field / overgrown lawn

(Historic)
institution and farm

DESCRIPTION

7. PERIOD
☐Paleo ☐Early Archaic ☐Middle Archaic ☐Late Archaic ☐Early Woodland ☐Middle Woodland ☒Late Woodland ☐Contact ☐Unknown ☐Other*(specify)*

8. DATING METHOD
C-14 ☐ Intuition ☒Other*(specify)*typology - Levanna Pt.
Comparative Materials

9. SITE TYPE
☐Quarry ☐Camp ☐Rockshelter ☐Shell Midden ☐Cemetery ☐Village ☒Other*(specify)*unknown

10. APPROXIMATE SIZE AND BOUNDARIES
Minimally 200m by 40m. Site is bounded by soil disturbance from Seaside Hospital construction

11. STRATIGRAPHY
☐Surface finds ☐Plowed ☐Not Stratified ☒Stratified ☐Major Disturbance ☐Other*(specify)*

ENVIRONMENT

12. SOIL
USDA SOIL SERIES: Woodbridge Fn Sdy Lm
CONTOUR ELEVATION: 10-20ft
SLOPE %: ☒ 0-5 ☐ 5-15 ☐ 15-25 ☐ over 25
TEXTURE: ☐Sand ☐Clay ☐Silt ☒Other *(specify)*fn sdy lm
ACIDITY: ☐ less than 4.5 ☐ 4.5-5.5 ☒ 5.6-6.5 ☐ 6.6-7.3 ☐ 7.4-8.4

13. WATER
NEAREST WATER SOURCE: small stream
SIZE AND SPEED: small
DISTANCE FROM SITE: 25m
SEASONAL AVAILABILITY: intermittent

14. VEGETATION
PRESENT: lawn grass - small shrubs
PAST:

CONDITION

15. SITE INTEGRITY
☐ Undisturbed ☒ Good ☒ Fair ☐ Destroyed

16. THREATS TO SITE
☐ None Known ☐ Highways ☐ Vandalism ☒ Developers ☐ Other *(specify)* ☐ Renewal ☐ Private ☐ Deterioration ☐ Zoning ☐ Unknown

17. SURROUNDING ENVIRONMENT
☒ Open Land ☐ Woodland ☐ Residential ☐ Scattered Buildings visible from site ☐ Commercial ☐ Industrial ☐ Rural ☐ High Building Density ☒ Coastal ☐ Isolated

18. ACCESSIBILITY TO PUBLIC – VISIBLE FROM PUBLIC ROAD
☒ Yes ☐ No

RESEARCH POTENTIAL

19. PREVIOUS EXCAVATIONS

☐ SURFACE COLLECTED	*BY WHOM/AFFILIATION*	*DATE*
☐ POT HUNTED	*BY WHOM/AFFILIATION*	*DATE*
☒ TESTED	*BY WHOM/AFFILIATION* Ph 1a by AHS	*DATE* 10/2007
☐ EXCAVATION	*BY WHOM/AFFILIATION*	*DATE*

20. PRESENT LOCATION OF MATERIALS

AHS, Inc. 569 Middle Turnpike, Storrs, CT 06268

21. PUBLISHED REFERENCES

Report: Phase Ia Archaeological Reconnaissance Survey, Seaside Regional Center Development, Waterford, Connecticut. Prepared for Baystate Environmental Consultants, Inc. 2007

22. RECOVERED DATA *(Identify in DETAIL, including features, burials, faunal material, etc.)*

Eight quartz flakes and one quartz Levanna projectile point were recovered from three test pits excavated during a Phase Ia archaeological assessment of the Seaside Regional Center. All of the artifacts were recovered from the plowzone. Seven of the quartz flakes came from a single pit. Subsurface testing of the area was minimal and intended only to establish the existing soil conditions within the property. The site is located very close to Long Island Sound and adjacent to a small freshwater stream. Much of the surrounding landscape has been disturbed by construction, but further testing will be required to establish the boundaries and potential significance of this site.

SIGNIFICANCE

23. ARCHAEOLOGICAL OR HISTORICAL IMPORTANCE

The significance of this site is currently unknown due to the limited subsurface testing. Undisturbed areas within this site are expected to have a high potential for containing additional evidence of pre-Colonial period acitvity

PHOTOGRAPH

PHOTOGRAPHER	**Place 35 mm contact print here**
DATE	
VIEW	
NEGATIVE ON FILE	

ADDITIONAL INFORMATION

REPORTED BY

NAME Daniel Forrest	**ADDRESS** 569 Middle Turnpike, Storrs, CT 06268
ORGANIZATION AHS, Inc.	**DATE** 11/1/2007

FOR OFFICE USE ONLY

FIELD EVALUATION

COMMENTS

Phase I(b) Archaeological Reconnaissance Survey

Seaside Regional Center Development
Waterford, Connecticut

Submitted to

Baystate Environmental Consultants
120 Mountain Avenue
Bloomfield, CT 06002

by

Archaeological and Historical Services, Inc.
569 Middle Turnpike
P.O. Box 543
Storrs, CT 06268

December 12, 2007

Author:
Daniel Forrest

MANAGEMENT SUMMARY

Six areas of potential archaeological sensitivity were identified in a Phase I(a) Archaeological Reconnaissance Survey (assessment-level survey) of the Seaside Regional Center in Waterford, Connecticut. Phase I(b) Archaeological Reconnaissance Survey subsurface testing was conducted in order to identify all archaeological resources within the areas. The Phase I(b) subsurface testing, in which shovel test pits were excavated at 15-meter intervals, determined that four of the areas (Areas 1-4) are too disturbed to contain significant archaeological remains. Only one of these areas, Area 4, in the southeastern corner of the property, produced evidence of a prehistoric site, but the entire small lithic assemblage from this area was mixed with Seaside Hospital-era fill deposits, thus the prehistoric component has no integrity or information potential. The increasing artifact density at the western edges of this area suggests an archaeological site was once present in the area of the main hospital building, but that it was destroyed by subsequent construction, grading, and development. Very small numbers of pre-Hospital era historic-period artifacts were recovered from Areas 1 and 4, but were found in disturbed contexts, thus their integrity and information potential have been destroyed. Areas 1-4 appear to have no potential for yielding intact significant archaeological remains, thus no further archaeological investigations appear to be warranted in these areas.

Areas 5 and 6 yielded potentially significant early historic-period and prehistoric-period artifacts. A possible historic-period buried stone feature was identified in Area 5, along with a small assemblage of 18th- to early 19th-century ceramics and window glass. Quartz debitage was found in five of the 18 test pits excavated in Area 5, indicating a prehistoric component is also present. In Area 6, to the north of Area 5, a Late Woodland-period projectile point and quartz debitage were recovered during the Phase I(a) survey. Additional quartz debitage and a single unifacial stone tool were recovered during the Phase I(b) survey. A small number of 18th-to early 19th-century ceramics were also recovered from Area 6. The two areas were collectively designated Site 152-137. Areas 5 and 6 (Site 152-137) are potentially significant archaeological resources. Phase II Intensive Archaeological Survey of the two areas is recommended to determine whether they meet the criteria for nomination to the National Register of Historic Places.

I. INTRODUCTION AND SCOPE OF WORK

A. Introduction

The Seaside Regional Center is a 36-acre property owned by the State of Connecticut in Waterford (Figure 1). The property is bordered on the south by Long Island Sound, on the north by Shore Road, and on the east and west by residential properties. Along the shore is a granite seawall which separates the lawned "campus" from a narrow beach. The campus includes buildings and service roads associated with its construction by the state in 1934 as the Seaside Sanatorium, the first institution in the United States especially designed for the heliotropic treatment of children infected with tuberculosis. Heliotherapy involved prolonged exposure to the sun, and was believed to have some effectiveness in alleviating the symptoms of a certain type of pediatric tuberculosis. The sanatorium buildings face south and incorporate extensive south-facing multistory open terraces. The existing seawall was built in 1938 to create a sand beach for the patients (Cunningham 1994: Section 8, p. 2). Because of its significance in early health treatment, and because a number of the Seaside Buildings were designed by the renowned architect Cass Gilbert, the property was listed in the National Register of Historic Places in 1995.

By the 1950s tuberculosis became curable by the use of antibiotics and the need for sanatoriums declined. The Seaside Sanatorium closed in 1958 and then reopened as a state geriatric facility; by 1961 it was used as a facility for mentally and physically challenged children (DPW 2007). Seaside was downsized in the 1980s and closed in 1997. Shortly thereafter the state decided to sell the property. In 1999, a preferred developer was chosen, Seaside in Waterford, LLC, but zone changes and other legal actions postponed the drafting of a Purchase and Sale Agreement (PSA) until this year (DPW 2007). The terms of the PSA require redevelopment of the property in accordance with the Town of Waterford zoning regulations, provisions for public access to the waterfront portion of the property, and preparation of an Environmental Impact Evaluation (EIE) pursuant to Connecticut General Statutes, Section 22a Connecticut Environmental Protection Act (CEPA). Moreover, "reasonably necessary measures to mitigate any issues that may be identified at the conclusion of the EIE" must be undertaken (State of Connecticut 2007: 10).

Although the Seaside property comprises 36 acres, the state is selling 32 acres, known as the Seaside Parcel. The state will retain ownership of approximately four acres along Shore Road which are currently utilized by the State Department of Developmental Services (DDS). The state will also retain the seawall and the narrow beach located south of the seawall (Figure 1). An easement will be granted to the State for an area from the seawall landward to Elevation 12 (approximately). The Town of Waterford will also retain an easement over the Seaside Parcel in order to access a town-owned pump station. The 32-acre parcel to be sold is the project area for the purpose of the CEPA/EIE and Phase I(b) Archaeological Reconnaissance Survey.

The specific extent of the redevelopment of the Seaside has not yet been determined. However, the terms of the PSA require that Seaside in Waterford, LLC 1) "install and maintain" a landscaped area along the boundary of the state parcel abutting the driveway into the property from Shore Road; 2) provide public accessways to "the shorefront lawn areas and the Beach for passive recreation and construct amenities to further the public use and enjoyment" of the areas, including construction of a ca. 25-car parking lot and park; and 3) enter into an agreement with the state for "construction of various public access and recreation facilities on the Seaside Parcel and Beach." Moreover, the PSA requires that Seaside in Waterford, LLC's redevelopment plan provide for the preservation and use of four of the major Seaside buildings in accordance with

the requirements of the Seaside Preservation Zoning District and subject to the approval of the State Historic Preservation Office (SHPO). The four historically and architecturally significant buildings form a core component of the National Register-listed property and they include: the Tudor Revival-style Main Building, Employee Building I, the Superintendent's House, and the Duplex House (collectively the "Historic Buildings"). The PSA also binds Seaside in Waterford, LLC to the oversight of the SHPO "for any and all improvements, repairs and for alterations" of the Seaside Parcel and "the buildings located thereon" (State of Connecticut 2007, pp. 5-6).

Although the state's intent in the Request For Proposals/Request For Qualifications for buyers of the Seaside Parcel was "preservation and restoration of [the] historic structures" (State of Connecticut 2007, p. 1), and the PSA requires Seaside in Waterford, LLC to make improvements to the exteriors of Historic Buildings as approved by the SHPO (State of Connecticut 2007, pp. 9-10), the PSA also contains a provision for not preserving the four historic buildings: "If any of the Historic Buildings are damaged to an extent that they are no longer susceptible to renovation, as determined by the Purchaser's engineers, based on generally accepted sound engineering principles, then the Purchaser shall have the option ... to apply to the town for a modification of the site plan for the property" (State of Connecticut 2007, p. 16). The opinion of the SHPO must also be obtained if any of the historic buildings are not to be retained in the redevelopment.

Baystate Environmental Consultants (BEC), EIE consultants to the State Department of Public Works (DPW), requested that Archaeological and Historical Services, Inc. (AHS) conduct the first step in the CEPA/EIE process regarding cultural resources: a Phase I(a) Archaeological Reconnaissance Survey, also known as an assessment-level survey. AHS completed the Phase I(a) survey in early November 2007 (Forrest et al. 2007). The survey indicated that the majority of the property has been affected by previous ground disturbance which has reduced the potential for finding intact archaeological (subsurface) sites. The Phase I(a) survey included a small amount of subsurface testing; although limited in scope and tightly targeted, it provided sufficient information on the existing soil conditions to determine the potential of the project area to contain significant buried cultural resources. For the purposes of the CEPA process, archaeological sites must qualify for inclusion on the National Register of Historic Places to be considered significant.

In total, 4.8 acres of the 32-acre project area were determined to have a high potential for containing buried archaeological resources in the Phase I(a) survey. This acreage was divided into six discrete areas located around the periphery of the hospital property, where previous soil-disturbance appeared to be relatively limited; two of the areas are contained within Site 152-137, identified in the Phase I(a) survey (see Areas 1-6 on Figure 2). AHS recommended that Phase I(b) Archaeological Survey, including systematic subsurface testing, be completed within these six areas to identify any potentially significant archaeological resources (Forrest et al. 2007). Phase I(b) survey is a required step in meeting cultural resource management obligations pursuant to CEPA. The purpose of Phase Ib survey is to locate all archaeological sites which may be impacted by a proposed project. BEC and the DPW concurred with AHS's recommendation and the Phase I(b) survey was conducted in late November 2007. AHS summarized the Phase I(b) survey results in an end-of-fieldwork memorandum (Harper 2007); the comprehensive survey results are presented in this report.

B. Scope of Work

In Connecticut, archaeological survey must be conducted in accordance with the SHPO's *Environmental Review Primer for Connecticut's Archaeological Resources* (hereafter *Primer*). The *Primer* requires that Phase I(b) subsurface testing be conducted in areas of moderate to high archaeological sensitivity, identified in a Phase I(a) Archaeological Reconnaissance Survey, at intervals no greater than 15 meters (18 pits per acre). The testing interval is designed to find virtually all buried archaeological sites, even small ones such as a Native American campsite or small colonial-period house cellar. The six areas of archaeological sensitivity total 4.8 acres. AHS estimated that testing at 15-meter intervals would require a maximum of 90 test pits; an additional block of 28 test pits was also proposed for use in particularly sensitive micro-areas missed by the interval testing and/or to clarify ambiguous findspot areas. The maximum test pit total was therefore estimated at 118.

The six areas of sensitivity include the following, all of which are depicted on Figure 2:

Area 1: In the northernmost section of the project, Area 1 is bounded by Shore Road to the north and Seaside Drive to the west and encompasses approximately 1.2 acres of land.

Area 2: This area is just northwest of the former Therapy and Activity Building, near the northeast border of the project area, and encompasses 0.2 acres of land.

Area 3: Area 3 is in the extreme northeast corner of the project area and encompasses 0.3 acres of land.

Area 4: Area 4 is a 0.9-acre section in the southeast corner of the project just east of the Main Hospital Building and north of the seawall.

Area 5: Area 5 is a 0.3-acre area in the southwest portion of the project, east/northeast of the former Superintendent's House. This area is included within the bounds of Site 152-137, an archaeological site identified in the Phase I(a) Assessment Survey.

Area 6: This 1.9-acre area is in the northwest portion of the project area immediately north of the former Duplex Building. Primarily in an open field, Area 6 is included within the bounds of Site 152-137, identified in the Phase I(a) survey.

The scope of work also included cleaning, cataloguing, inventory and curation of all recovered artifacts, synthesis of the Phase I(a) and I(b) data and evaluation of the potential significance of identified artifacts or site areas, and recommendations for further archaeological study or mitigation of impacts to identified sites.

The survey tasks are described in detail in Section II.

II. SURVEY TASKS AND METHODOLOGY

A Phase I(b) Archaeological Reconnaissance Survey involves systematic subsurface testing of all areas with the potential to contain significant archaeological resources that might be affected by a proposed undertaking. The specific tasks, as defined by the *Primer*, are described below.

A. Phase I(b) Subsurface Testing

Phase Ib subsurface testing involves the excavation of small test pits in order to identify potentially significant buried archaeological sites. The six archaeologically sensitive areas at Seaside are on the western, northern and eastern perimeters, including two areas within Site 152-137, identified in the Phase I(a) survey (Figure 2). In accordance with the *Primer*, all of the test pits were dug by shovel and trowel, in 10 to 20-centimeter levels, with all soil screened through ¼-inch mesh to identify even very small artifacts. In lawn areas, the sod was cut away carefully and placed on heavy plastic, and all excavated soil was screened onto the plastic. The pits were backfilled immediately upon completion and the soil and sod replaced. Disturbance to lawn areas was minimal. The pits measured about two by two feet in plan and were excavated to between one and three feet deep, depending upon soil conditions. By *Primer* standards, the test pits must reach the point at which no cultural material can be found or the pits cannot reasonably be completed (such as reaching glacial till, the water table, or rocks or roots). The stratigraphy of every pit was recorded (see test pit profiles in Appendix III).

The test pits were mapped onto project plans as they were excavated. Areas of disturbance and areas of identified archaeological remains were also mapped; this information will help the project development avoid identified potentially significant sites, if possible, and develop a plan of action for mitigating project impacts to identified sites, should they prove to meet National Register of Historic Places eligibility criteria.

B. Laboratory Processing

All recovered artifacts were transported to AHS's laboratory facilities in Storrs for cleaning, identification, inventory, and curation. After appropriate cleaning, the artifacts were rebagged into clear plastic zipper bags; included in each bag is an acid-free label identifying the artifact, the pit number in which it was found, its stratigraphic provenience, the designated site number, and the project. Each artifact was then identified by specialists in prehistory and history and entered into AHS' database inventory program. All artifacts were assigned unique identification numbers and identified as to type and date to the degree possible (e.g., hand-painted polychrome creamware sherd, 1762-1820). Also included in the inventory are provenience data and project identification. The artifacts were inventoried as sites, when warranted, such as Site 152-137. Recovered artifacts which were not considered to merit formal site designation because of disturbance, for example, were collectively inventoried as "152FSSS," reflecting their evaluation as "findspots" rather than formal sites which warrant recordation in the state sit files (152 represents the town number, "FS" represents the findspot designation, and "SS" refers to the Seaside Project) (see artifact inventory lists in Appendix IV).

C. Data Synthesis

This task involved the synthesis of collected data in the end-of-fieldwork summary (Harper 2007) and in this report, which more fully presents the survey results and recommendations regarding identified archaeological sites. The Phase I(b) Archaeological survey fieldwork was performed between November 21st and 28th, 2007.

III. RESULTS OF SUBSURFACE SURVEY

A total of 93 test pits were excavated within the six areas of archaeological potential (Figure 3). Eighty-six of the test pits were completed as part of the 15-meter-interval systematic testing, three pits were placed at the discretion of the field supervisor to sample off-transect areas, and one array of four test pits was completed around a possible historic-period feature. The results are summarized by the sensitivity areas identified in the Phase I(a) survey.

A. Area 1

Test pits in Area 1 in the northernmost portion of the project (Photograph 1) were placed on two north-south-oriented transects (T1 and T2). Nine test pits were excavated along T1 and seven were dug along T2 (Figure 3). A single judgement pit (J28) was placed in the southeastern corner. The test pits yielded a small number of historic-period artifacts, including possible 18th-century ceramics. T1-1, dug in the southwestern corner of Area 1, produced a single sherd of black lead-glazed red earthenware and an iron nail fragment. Both artifacts were found within shallow fill deposits overlying a possible utility trench. Three untyped creamware (manufactured 1760-1820) sherds were recovered from T1-7 and T2-3, but were recovered from hospital-era fill deposits. Two creamware sherds were found in shallow fills in T1-7, along with a wire nail, a late 19th-century glass button, and 33 fragments of scrap sheet iron (only a sample of the sheet iron was collected). The test pit profile suggests the artifact-bearing sediments in T1-7 are utility trench fills. The creamware sherd from T2-3 was found in fill deposits that also contained brick fragments (see test pit profiles in Appendix III). A post-1866 rim-fired cartridge casing was recovered from the underlying fill layer, clearly indicating that the creamware from T2-3 is from a disturbed context.

Fill deposits within Area 1 varied in thickness, color, and texture, but all appear to be related to hospital-era construction or demolition activities. The recent age of the fills is evidenced by refuse such as asphalt, plastic and Styrofoam that was found in many of the test pits. Although intact soils were found in 9 of the 17 test pits excavated in this area, the only artifacts recovered from undisturbed soils were a single sherd of whiteware and a fragment of modern clear window glass, both of which are likely associated with the hospital. No prehistoric artifacts were recovered during the Phase I(b) testing in Area 1. Despite intensive testing, no potentially significant archaeological resources were found in this area. The recovered artifacts were inventoried as general refuse, under 152-FSSS in Appendix IV.

B. Area 2

Five test pits were excavated on two short transects in Area 2 (Photograph 2), located at the top of a small knoll near the former Therapy and Activity Building (Figure 3). Three pits were dug on transect T3 and two pits were dug on T4. Generally shallow fill deposits were found to overlie largely intact upper subsoils on the knoll. Hospital-era refuse, including coal, coal ash, modern bottle glass, was found in the thin fill deposits. No potentially early historic-period artifacts were identified within the fill layers. The fill deposits averaged just 29 centimeters in thickness. The uppermost subsoil encountered beneath the fill layers was consistent with a well-weathered upper B-horizon. These dark yellow-brown sandy loams were found to extend at least 20 centimeters (8 inches) in depth, and, in turn, were underlain by lower B-horizon loamy sands. All intact soils were sterile (i.e., contained no cultural material). No

archaeologically significant remains were recovered from Area 2. The recovered late-period scatter from Pit T3-3 was inventoried as part of 152-FSSS (see Appendix IV).

C. Area 3

Area 3 is located in the northeastern corner of the project area (Photograph 3). Five test pits on two transects (T5 and T6) were excavated here. Dense accumulations of modern brown container glass (beer bottles), coal, and coal ash were found in two shallow fill layers just below the ground surface but were not collected. The upper fill layer is a dark brown loamy sand and gravel, roughly 20 centimeters (8 inches) in thickness, underlain by a dark yellow-brown gravelly sand with dense cobbles. The lower fill is also generally thin, averaging just under 20 centimeters in thickness. Intact lower subsoil (B2/2) was found in one of the test pits (T5-2), but no artifacts were found in this undisturbed context. Shallow bedrock was encountered at depths between 38 and 52 centimeters (15 and 20 inches) in four of the five test pits. T6-2, excavated at the southern end of Area 3, showed undisturbed glacial deposits (C-horizon) at a depth of 60 centimeters (24 inches). No potentially significant historic period artifacts were recovered during the Phase I(b) testing of Area 3 nor were any prehistoric period artifacts found.

D. Area 4

A total of 15 test pits were excavated along four transects (T7 through T10) in this area (Photograph 4) in the southeastern corner of the project area. In addition, a single judgement pit (J29) was used to test the southwestern corner of the area, which fell outside the systematically sampled section. Eight of the pits contained artifacts, including a small number of 18th-century/early 19th-century ceramics (creamware) and 11 quartz flakes from the manufacture of prehistoric stone tools. With the exception of a single sherd of creamware recovered from a buried plowzone near the northwestern corner of the tested area (T7-1), all of the artifacts were found in disturbed soils (see test pit profiles in Appendix III).

Between one and five distinct fill strata were found in Area 4. The fill layers contained a mixture of hospital-era refuse (coal, coal ash, plastic, asphalt, cement, etc.) and both historic and prehistoric-period artifacts. The small prehistoric lithic assemblage contains only pieces of debitage (waste material produced during the manufacture of stone tools). No stone tools or temporally diagnostic artifacts were found. The quartz flake density was low (1 to 4 flakes per positive test pit), with the majority of debitage coming from the T7 transect at the western edge of the tested area.

The results of the Phase I(b) survey in this area suggests that a site with both prehistoric and late 18th- to early 19th-century components was once located in the general vicinity, possibly within the footprint of the main hospital building just to the west; however, construction of the hospital and development of the campus apparently displaced the artifacts and destroyed the integrity of the components. Because of the poor stratigraphic context of these finds at Area 4, they are not considered significant and are included in the project field scatter inventory 152-FSSS (See Appendix IV).

E. Area 5

Subsurface testing in Area 5 (Photograph 5), in the southwestern section of the project area and at the southern end of archaeological Site 152-137, included the excavation of 10 test pits on three transects (T11 through T13), and a single array of four test pits (A1-4) placed around a possible historic-period feature (Figure 3). Eleven of the test pits contained potentially

significant historic-period and/or prehistoric-period artifacts (see artifact inventory list in Appendix IV). The prehistoric artifacts include 14 pieces of quartz debitage. Quartz density reached a peak of five artifacts per test pit in T13-3, near the western edge of Area 5. All other test pits with quartz artifacts yielded one or two individual fragments of debitage. Five of the debitage fragments found in Area 5 (four flakes and one fragment of block shatter) retain cobble cortex, suggesting that locally-collected beach cobbles were used as a lithic source during the prehistoric occupation(s). No stone tools were found during the Phase I(b) testing in Area 5, and the age of the prehistoric component(s) at the southern end of Site 152-137 is undetermined.

The soil context for the small quartz assemblage from Area 5 is ambiguous. The uppermost strata encountered in almost all of the test pits excavated in Area 5 is a dark brown fine sandy loam with traces of gravel. The thickness of the stratum and its color and texture suggest it may be a largely intact plowzone. All but three of the quartz artifacts were recovered from this soil. Small quantities of coal, coal ash, and other hospital-era refuse were found within these near-surface deposits, but these occur at lower densities than within the fill strata identified in other areas of the hospital campus.

Three flakes from T12-2 were recovered from fill deposits overlying a possible historic period stone feature. The ceramics recovered from these fill deposits, discussed below, suggest the fill deposits may predate the construction of the hospital.

The recovered historic-period materials include nine 18th- to early 19th-century artifacts. Possible 18th-century ceramics include individual sherds of untyped creamware from T12-2, T13-3, and T13-4, a single sherd of untyped pearlware from T13-4, and one sherd of clear lead-glazed red earthenware from T13-4. A total of four fragments of blue-green window glass, likely dating from the late 18th to early 19th centuries, was also recovered from two test pits (T13-4 and T12-2). With the exception of the creamware and window glass from T12-2, all of these artifacts were recovered from the dark brown sandy loam (possible plowzone). The highest density of historic-period artifacts occurred in the northwest corner of Area 5. T13-4 yielded a total of nine ceramic sherds. Discounting coal and a handful of probable hospital-era brick fragments, historic-period artifact counts varied between 1 and 2 in all other test pits.

Several of the potentially significant historic-period artifacts were found in association with a stone feature in test pit T12-2. The feature consists of a dense concentration of large round cobbles partially exposed at a depth of 45 centimeters (18 inches) below the ground surface (Photograph 6). None of the stone appeared to be stacked, such as for a stone wall; however, some of the stones show mechanically drilled quarry marks, suggesting they may be associated with a mid-19th-century granite quarry that was located immediately west of the project area (Forrest et al. 2007: 18). The stone feature obviously extends beyond the test pit boundary, but no evidence of it was found in the array test pits placed at two-meter intervals around T12-2, suggesting the feature is relatively small in horizontal extent. The north and west array pits (A1 and A4) contained small numbers of 18th- to 19th-century ceramics. Two distinct fill layers were found overlying the stone layer in T12-2. No hospital-era artifacts were found in these fills, suggesting they may have been deposited before the hospital was constructed.

Based on the Phase I(b) results, AHS believes that Area 5 may by significant. Both the prehistoric quartz assemblage and the 18th- to early 19th-century ceramics and glass recovered from the southern end of Site 152-137 predate the construction of Seaside. The potential significance of the archaeological resource is further suggested by the identification of a stone feature likely dating to the historic period, its function and date as yet unknown. The Phase I(b)

testing in Area 5 resulted in the expansion of the estimated boundaries of Site 152-137 slightly to the south (see Figure 3).

F. Area 6

The final area of Phase I(b) survey was in Area 6, the northwestern section of the Seaside property and in the northern half of Site 152-137 (Photograph 7). This area is currently covered by an overgrown field of grass, immature shrubs, and milkweed. A total of 35 test pits on five transects (T14 through T18) were excavated in this area (Figure 3). The soils were found to be less disturbed here than in the rest of the project area, with very little evidence of hospital-era fill deposits or soil truncations (cuts) (see test pit profiles in Appendix III). Two-thirds of the test pits (23 of 35) contained prehistoric and/or historic-period artifacts. Potentially significant artifacts (i.e., those predating the hospital) were most common in the western half of the area, with a small secondary cluster in the northeast corner.

Thirty-one quartz flakes and a single quartz tool were recovered from Area 6 (see artifact inventory list in Appendix IV). All of the prehistoric artifacts were recovered from intact or likely intact plowzone soils. The tool, found in T17-4, is a unifacially retouched flake that likely served as an expedient scraper. T17-4 is located just 25 meters southwest of J19, a test pit excavated during the Phase I(a) survey that produced a quartz Late Woodland-period Levanna projectile point (Figure 3). Quartz flakes and other pieces of debitage are concentrated in the southwestern section of Area 6. Flake density reached a peak of seven per test pit in T16-2, and all adjacent test pits contained at least two quartz artifacts. The trend towards higher artifact density to the southwest, along the eastern border of the Seaside property, suggests that the prehistoric component of the site extends into the adjacent residential properties.

Almost 30% (9 out of 31) of the quartz debitage from Area 6 retains cobble cortex, supporting the interpretation that locally collected beach cobbles were the primary lithic resource exploited at Site 152-137. No diagnostic (stylistically datable) prehistoric artifacts were found during the Phase I(b) survey, but the debitage is consistent with the manufacture of broad-bladed, relatively thin bifaces, such as the Late Woodland-period Levanna projectile point found in the northern section of the field during the Phase I(a) survey. Distinctive bifacial thinning flakes were recovered from the Phase I(b) test pits. Well-formed bifacial thinning flakes are evidence of a staged bifacial reduction technique, such as that likely used to make Levanna and Madison points. A different technique was used to produce older quartz projectile points.

The historic-period assemblage recovered from Area 6 includes small numbers of late 18th- to early 19th-century artifacts such as a single sherds of annular decorate pearlware (T18-4), untyped pearlware (T14-2, T16-4, T17-2), untyped creamware (T15-8, T17-5), brown lead-glazed red earthenware (T17-6), and blue-green window glass (T15-2, T18-4). These artifacts likely predate the earliest map of the area (1854, see Figure 4), but may be associated with one of the Rogers' family houses shown on the map. Several late 19th-century artifacts were also found in the field, including single sherds of yellowware (T16-5) and undecorated whiteware (T15-2), three sherds of green transfer printed whiteware (T14-2) and a single fragment of milk glass (T17-3). The age of the later historic-period artifacts suggests they may be associated with the Jonathon Rogers house, or possibly a mid-19th century boat house, both shown on the 1868 Beer's Atlas (Figure 5). No evidence of any historic-period foundations, ruins, or other archaeological features were identified in Area 6 in the Phase I(b) testing.

Relatively little hospital-era refuse was found in Area 6, further suggesting this section of the project area was largely spared the effects of grading and other ground disturbance. Based on

the Phase I(b) results, Area 6 in the northern end of Site 152-137 may contain significant archaeological resources dating to both the prehistoric and historic periods. The Phase I(b) testing in Area 6 resulted in the expansion of the estimated boundaries of Site 152-137 to the east (see Figure 3).

IV. CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the Phase I(b) archaeological survey of the six areas of archaeological sensitivity, it is AHS's opinion that only the two areas (Areas 5 and 6), falling within the approximate boundaries of Site 152-137, have the potential to contain significant archaeological resources. The four remaining areas of archaeological potential tested during the Phase I(b) survey (Areas 1-4) are too disturbed to contain significant archaeological remains. Only one of these four areas, Area 4, in the southeastern corner of the property, produced evidence of a prehistoric site, but the entire small lithic assemblage from this area was mixed with hospital-era fill deposits, thus the prehistoric component has no integrity or information potential. The increasing artifact density at the western edges of this area suggests an archaeological site was once present in the area of the main hospital building, but that it was destroyed by construction, grading, and development. Very small numbers of pre-hospital-era historic-period artifacts were recovered from Areas 1 and 4, but from disturbed contexts, which destroyed their integrity and information potential. See Photograph 8 for a representative sample of hospital-era artifacts recovered from Areas 1 through 4. It is AHS's opinion that Areas 1-4 have no potential for yielding intact significant archaeological remains. No further archaeological investigations appear to be warranted in these areas.

Phase I(b) testing in Areas 5 and 6, the north and south ends of Site 152-137, along the western edges of the Seaside property, yielded evidence of both prehistoric and historic-period occupations (Photographs 9 and 10). This corroborates the results of the Phase I(a) survey, in which Site 152-137 was identified, and indicates Site 152-137 is a potentially significant archaeological resource. The site extends along the well-drained soils on the western edge of a small freshwater stream. The stream and the now-filled wetlands that once bordered its lower reaches would have provided both potable water and edible emergent plant species that are known to have attracted prehistoric foragers. The historic-period component of the site appears to be associated with a stone feature of unknown function or age in the south at Area 5. A small number of historic-period ceramics and 19th-century window glass suggests the feature may predate the construction of the hospital. Artifacts of a comparable age were also found in the northern half of the site (Area 6). Prehistoric artifacts recovered during the Phase I(b) survey include non-diagnostic quartz debitage and an informal quartz tool, but the quartz debitage is consistent with the Late Woodland-period Levanna point found during the Phase I(a) survey of the field in Area 6. Much of the quartz debitage retains cobble cortex, suggesting the stone material used during the prehistoric occupation(s) of the site was collected from nearby beaches.

A state archaeological site inventory form was completed for Site 152-137 (Appendix V).

AHS recommends that a Phase II Intensive Archaeological Survey be conducted at the two loci of Site 152-137 (in Areas 5 and 6) in order to determine if the site or either loci is eligible for listing on the National Register of Historic Places. Figure 6 shows the areas of recommended Phase II survey. In accordance with the *Primer*, the survey should include close-interval testing (test pits at 5-meter intervals) of all potential artifact-bearing intact soils in the site area as well as small-scale block excavations of the stone feature identified in the southern portion of the site. At the standard 5-meter testing interval, AHS estimates that a Phase II survey would require approximately 250 test pits. We further recommend that up to three one-by-one meter excavation units be placed around the stone feature in Area 5 to determine its age, function and significance relative to the National Register of Historic Places.

V. REFERENCES

Cunningham, Jan

1994 "The Seaside," National Register of Historic Places nomination. Hartford, CT: Connecticut State Historic Preservation Office.

Department of Public Works (DPW)

2007 Public Scoping Meeting Presentation, Seaside Regional Center Development, Waterford, Connecticut, September 20, 2007.

Forrest, Daniel, Brian Jones and Bruce Clouette

2007 Report: Phase I(a) Archaeological Reconnaissance Survey, Seaside Regional Center Development, Waterford, Connecticut. Storrs, CT: AHS, Inc. Prepared for Baystate Environmental Consultants, November 6, 2007.

Harper, Mary G.

2007 End-of-Fieldwork Summary Letter from Mary G. Harper, AHS, Inc., to Stephen Lecco, BEC, Inc., Regarding Phase I(b) Survey at Seaside Regional Center, Waterford, Connecticut, December 5, 2007.

State of Connecticut

2007 Purchase and Sale Agreement between the State of Connecticut and Seaside in Waterford, LLC.

APPENDIX I

FIGURES

AHS

Seaside Regional Center - Waterford, Connecticut

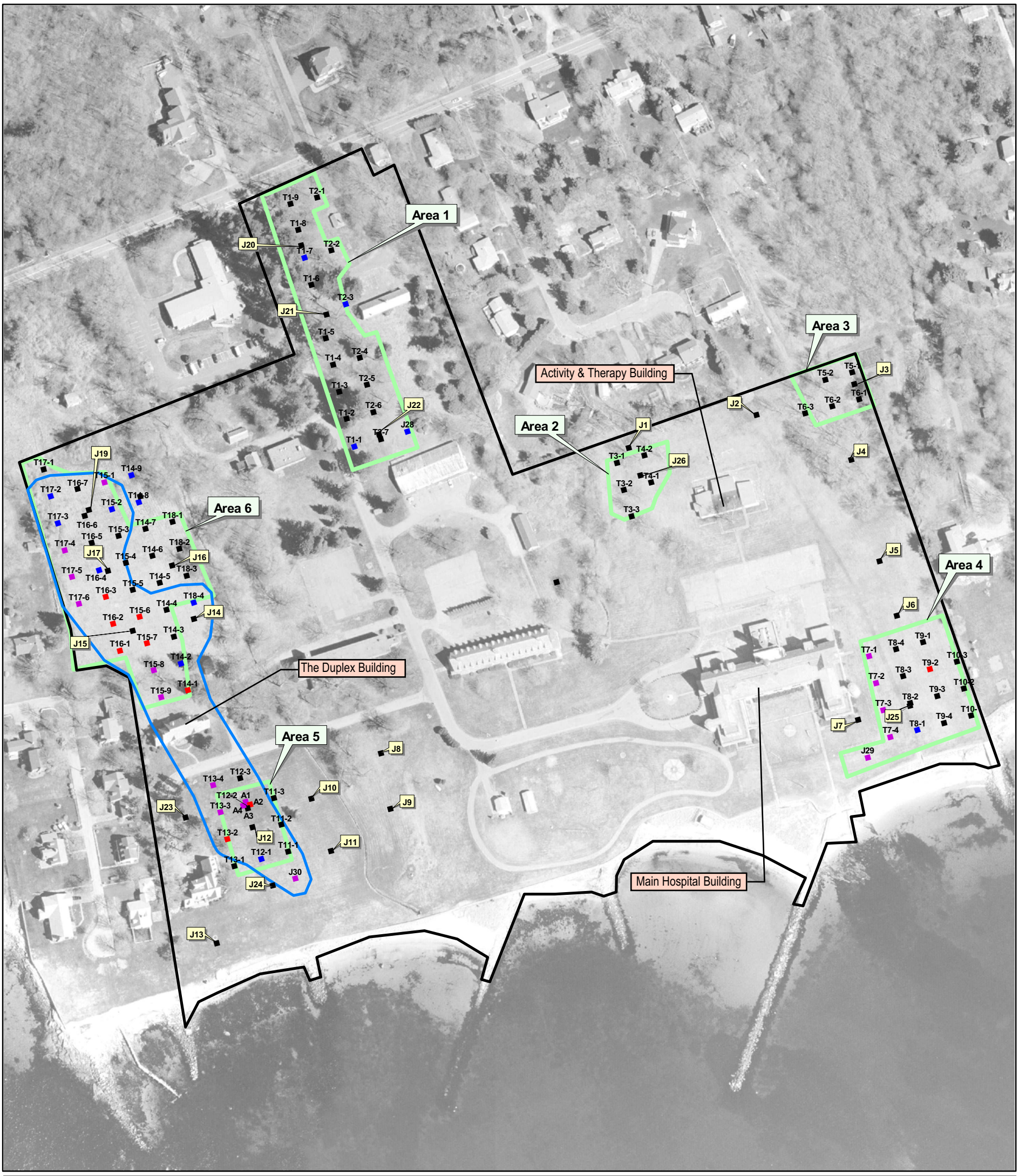
Location of the Project Area

Figure 1

Seaside Regional Center - Waterford, Connecticut

Results of Phase I(a) Archaeological Survey

Figure 2



Legend

Phase I(a) and Phase I(b) test pits

- Prehistoric period artifacts
- 18th - 19th century historic period artifacts
- Both prehistoric & 18th -19th century historic period artifacts
- Sterile or only late historic period to hospital era artifacts

- Areas of Phase I(b) subsurface testing
- Project Area
- Boundary of Site 152-137 (revised based on Ph. I(b) results)

AHS

200 0 200 Feet

50 0 50 Meters

N W E S

Seaside Regional Center - Waterford, Connecticut

Results of Phase I(b) Archaeological Survey

Figure 3

Figure 4: **Project area as shown on 1854 Walling county wall map. The notation "J. Rogers" refers to Jonathan Rogers, a mariner.**

Figure 5: **Project area as shown on 1868 Beers atlas map. A "boat house" is shown near the homestead of Jonathan Rogers, probably outside the project area.**

AHS

250 0 250 Feet

50 0 50 Meters

N
W E
S

Seaside Regional Center - Waterford, Connecticut

Areas of Recommended Phase II Archaeological Survey

Figure 6

APPENDIX II

PHOTOGRAPHS

Photograph 1: Area 1, Test pit T1-4. Camera facing south.

Photograph 2: South section of Area 2. Camera facing south.

Photograph 3: Area 3 in wooded background. Picture taken from lawn edge just west of Area 3 – Camera facing east.

Photograph 4: View of Area 4 from the eastern edge of the project area – camera facing southwest. Building to the right is the Main Hospital Building. Long Island Sound is visible in background.

Photograph 5: View of Area 5 from the south - camera facing north. Building in the background is “The Duplex”.

Photograph 6: Stone Feature in Test pit T12-2. Trowel pointing to the north.

Photograph 7: View of Area 6 from the southeast – camera facing north.

Photograph 8: Representative Hospital-era artifacts recovered from Areas 1 through 4 (152-FSSS). From upper left corner and moving clockwise: wire nail (Area 2, T3-3), two pieces of coal (Area 1, T1-7), brick fragment (Area 1, T2-3), blue and white glass marble (Area 4, T7-4), two handle sherds of green-decorated ironstone (Area 2, J1), and modern period green-edged porcelaineous plate sherd (Area 4, T8-1).

Photograph 9: Representative prehistoric quartz artifacts recovered from Areas 5 and 6 (Site 152-137). From right to left: retouched flake (Area 6, T17-4), Levanna projectile point (Area 6, J19), two flakes showing cobble cortex (Area 6, J15), and a flake (Area 5, J12).

Photograph 10: Representative 18th to early 19th century artifacts recovered from Areas 5 and 6 (Site 152-137). From upper left corner moving clockwise: undecorated creamware sherd (Area 5, T13-3), undecorated pearlware sherd (Area 5, A4), black lead glazed red earthenware sherd (Area 6, T14-9), clear lead glazed red earthenware (Area 5, A1), blue-green window glass (Area 6, J18), and blue-green window glass (Area 5, T12-1).

APPENDIX III

TEST PIT FORMS

APPENDIX IV

ARTIFACT INVENTORY LISTS

Archaeological and Historical Services, Inc.

Site Summary Report

Site: 152-137

12/12/07

Material	Total
Lithic	62
Historic Ceramic	52
Faunal	2
Metal	10
Glass	26
Other Historic	57

Total Artifacts: 209

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
1.00		J12		5-27	cm bs	Ap (Plowzone)	I		1	quartz flake			1
2.00		J12		5-27	cm bs	Ap (Plowzone)	I		1	untyped creamware sherd		1762-1820	1
3.00		J12		5-27	cm bs	Ap (Plowzone)	I		1	coal fragment	0.38 gm		1
4.00		J15		5-26	cm bs	Ap (Plowzone)	I		2	coal fragment	1.08 gm		1
5.00		J15		5-26	cm bs	Ap (Plowzone)	I		2	quartz primary cobble reduction debris			1
6.00		J15		5-26	cm bs	Ap (Plowzone)	I		5	quartz flake			1
7.00		J18		5-32	cm bs	Fill 1?	I		2	untyped whiteware sherd		1820-1900+	1
8.00		J18		5-32	cm bs	Fill 1?	I		1	blue-green window glass fragment			1
9.00		J18		32-38	cm bs	C?/Trench?	I		1	clear window glass fragment			2
10.00		J19		3-34	cm bs	Ap (Plowzone)?	I		1	Levanna quartz projectile point whole *possibly repaired*		Late	1
11.00		T11-2		5-32	cm bs	Fill 1	I		1	brick fragment	0.40 gm		1
12.00		T11-3		20-30	cm bs	Fill 1	I		1	blue transfer printed whiteware sherd		1820-1900+	1
13.00		T12-1		5-34	cm bs	Fill 1	I		1	coal ash fragment	0.22 gm		1
14.00		T12-1		5-34	cm bs	Fill 1	I		5	coal fragment	2.36 gm		1
15.00		T12-1		5-34	cm bs	Fill 1	I		1	brick fragment	3.76 gm		1
16.00		T12-1		5-34	cm bs	Fill 1	I		1	blue-green window glass fragment			1
17.00		T12-2		5-26	cm bs	Fill 1	I		2	quartz flake			1
18.00		T12-2		5-26	cm bs	Fill 1	I		1	quartz flake w/ cortex			1
19.00		T12-2		5-26	cm bs	Fill 1	I		1	untyped creamware sherd		1762-1820	1
20.00		T12-2		5-26	cm bs	Fill 1	I		1	red earthenware (no glaze) possibly slip decorated			1
21.00		T12-2		26-45	cm bs	Fill 2	I		1	granite unidentified historic lithic *with large drill hole from 1.75" mechanical drill*			2

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
21.00		T12-2		26-45	cm bs	Fill 2	I		1	granite unidentified historic lithic *with large drill hole from 1.75" mechanical drill*			2
22.00		T12-2		26-45	cm bs	Fill 2	I		1	granite unidentified historic lithic *with drill hole from .5" possible hand drill*			2
23.00		T13-2		4-31	cm bs	Ap (Plowzone)?	I		1	quartz flake			1
24.00		T13-3		6-32	cm bs	Ap/Fill 1?	I		3	quartz flake			1
25.00		T13-3		6-32	cm bs	Ap/Fill 1?	I		2	quartz flake w/ cortex			1
26.00		T13-3		6-32	cm bs	Ap/Fill 1?	I		2	coal ash fragment	1.80 gm		1
27.00		T13-3		6-32	cm bs	Ap/Fill 1?	I		2	coal fragment	1.40 gm		1
28.00		T13-3		6-32	cm bs	Ap/Fill 1?	I		1	clear window glass fragment			1
29.00		T13-3		6-32	cm bs	Ap/Fill 1?	I		1	untyped creamware sherd		1762-1820	1
30.00		A1		5-28	cm bs	Fill 1/Ap?	I		1	red earthenware (no glaze) sherd			1
31.00		A1		5-28	cm bs	Fill 1/Ap?	I		1	red earthenware clear lead glaze sherd			1
32.00		A1		5-28	cm bs	Fill 1/Ap?	I		1	quartz flake			1
33.00		A2		5-34	cm bs	Fill 1/Ap?	I		1	quartz microflake *recent break; 3 fragments refit to form 1 flake*			1
34.00		A2		5-34	cm bs	Fill 1/Ap?	I		1	quartz shatter w/ cortex			1
35.00		A2		5-34	cm bs	Fill 1/Ap?	I		1	brick fragment	16.68 gm		1
36.00		A2		5-34	cm bs	Fill 1/Ap?	I		1	unidentified shell fragment	0.06 gm		1
37.00		A4		5-34	cm bs	Ap?/Fill 1	I		1	unidentified shell fragment	0.30 gm		1
38.00		A4		5-34	cm bs	Ap?/Fill 1	I		1	quartz flake fragment			1
39.00		A4		5-34	cm bs	Ap?/Fill 1	I		1	coal fragment	4.62 gm		1
40.00		A4		5-34	cm bs	Ap?/Fill 1	I		1	red earthenware (no glaze) sherd			1
41.00		A4		5-34	cm bs	Ap?/Fill 1	I		1	untyped pearlware rim sherd		1780-1840	1

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
42.00		T13-4		6-36	cm bs	Ap (Plowzone)?	I		1	untyped pearlware sherd		1780-1840	1
43.00		T13-4		6-36	cm bs	Ap (Plowzone)?	I		1	untyped creamware sherd		1762-1820	1
44.00		T13-4		6-36	cm bs	Ap (Plowzone)?	I		3	red earthenware (no glaze) sherd			1
45.00		T13-4		6-36	cm bs	Ap (Plowzone)?	I		1	red earthenware clear lead glaze sherd			1
46.00		T13-4		6-36	cm bs	Ap (Plowzone)?	I		3	blue-green window glass fragment			1
47.00		T13-4		6-36	cm bs	Ap (Plowzone)?	I		1	quartz possible flake			1
48.00		T13-4		6-36	cm bs	Ap (Plowzone)?	I		1	coal ash fragment	0.12 gm		1
49.00		T14-1		4-31	cm bs	Fill 1	I		1	quartz biface thinning flake			1
50.00		T14-2		20-44	cm bs	Buried Ap?	I		1	iron nail fragment			1
51.00		T14-2		20-44	cm bs	Buried Ap?	I		1	iron sheet fragment			1
52.00		T14-2		20-44	cm bs	Buried Ap?	I		1	iron unidentified fragment			1
53.00		T14-2		20-44	cm bs	Buried Ap?	I		20	ceramic tile fragment *possible shingle with tar coating*			1
54.00		T14-2		20-44	cm bs	Buried Ap?	I		2	coal fragment	1.86 gm		1
55.00		T14-2		20-44	cm bs	Buried Ap?	I		1	slate shingle fragment			1
56.00		T14-2		20-44	cm bs	Buried Ap?	I		5	clear unidentified curved glass fragment			1
57.00		T14-2		20-44	cm bs	Buried Ap?	I		1	green unidentified curved glass fragment			1
58.00		T14-2		20-44	cm bs	Buried Ap?	I		1	black unidentified curved glass fragment *mends; with cuprous overlay*			1
59.00		T14-2		20-44	cm bs	Buried Ap?	I		1	untyped pearlware sherd		1780-1840	1
60.00		T14-2		20-44	cm bs	Buried Ap?	I		2	green transfer printed whiteware rim sherd		1830-1900+	1
61.00		T14-2		20-44	cm bs	Buried Ap?	I		1	green transfer printed whiteware sherd *with partial maker's mark*		1830-1900+	1
62.00		T14-7		10-20	cm bs	Fill 1	I		1	coal fragment	1.36 gm		1

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
63.00													
										number not assigned			
64.00		T14-8		5-19	cm bs	Fill 1	I		1	untyped whiteware rim sherd		1820-1900+	1
65.00		T14-8		5-19	cm bs	Fill 1	I		7	untyped whiteware sherd		1820-1900+	1
66.00		T14-8		5-19	cm bs	Fill 1	I		1	yellowware sherd		1820-1900+	1
67.00		T14-8		5-19	cm bs	Fill 1	I		1	untyped salt glazed stoneware sherd			1
68.00		T14-8		5-19	cm bs	Fill 1	I		1	clear unidentified curved glass fragment			1
69.00		T14-9		18-30	cm bs	Fill 2	I		1	black lead glazed red earthenware sherd			1
70.00		T14-9		18-30	cm bs	Fill 2	I		1	coal fragment	4.68 gm		1
71.00		T14-9		18-30	cm bs	Fill 2	I		3	coal ash fragment	1.34 gm		1
72.00		T15-1		6-30	cm bs	Ap (Plowzone)/Fill 1	I		1	coal fragment	0.20 gm		1
73.00		T15-1		6-30	cm bs	Ap (Plowzone)/Fill 1	I		2	blue-green unidentified curved glass fragment			1
74.00		T15-1		6-30	cm bs	Ap (Plowzone)/Fill 1	I		1	black lead glazed red earthenware rim sherd			1
75.00		T15-1		6-30	cm bs	Ap (Plowzone)/Fill 1	I		1	quartz primary cobble reduction debris			1
76.00		T15-2		10-20	cm bs	Ap (Plowzone)?	I		2	coal fragment	6.08 gm		1
77.00		T15-2		10-20	cm bs	Ap (Plowzone)?	I		1	untyped whiteware sherd		1820-1900+	1
78.00		T15-2		10-20	cm bs	Ap (Plowzone)?	I		1	blue-green window glass fragment			1
79.00		T15-3		5-32	cm bs	Ap (Plowzone)/Fill?	I		1	clear unidentified curved glass fragment			1
80.00		T15-3		5-32	cm bs	Ap (Plowzone)/Fill?	I		1	solarized unidentified curved glass fragment			1
81.00		T15-6		10-28	cm bs	Ap (Plowzone)	I		2	quartz flake			1
82.00		T15-6		10-28	cm bs	Ap (Plowzone)	I		2	quartz microflake w/ cortex			1
83.00		T15-7		5-32	cm bs	Ap (Plowzone)/Fill?	I		1	quartz microflake w/ cortex			1

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
84.00		T15-7		5-32	cm bs	Ap (Plowzone)/Fill?	I		3	quartz flake			1
85.00		T15-8		6-31	cm bs	Ap (Plowzone)	I		2	quartz flake			1
86.00		T15-8		6-31	cm bs	Ap (Plowzone)	I		1	blue-green window glass fragment			1
87.00		T15-8		6-31	cm bs	Ap (Plowzone)	I		1	untyped creamware sherd		1762-1820	1
88.00		T15-9		5-35	cm bs	Ap (Plowzone)	I		3	red earthenware (no glaze) flower pot sherd			1
89.00		T15-9		5-35	cm bs	Ap (Plowzone)	I		1	red earthenware (unidentified lead glaze) green			1
90.00		T15-9		5-35	cm bs	Ap (Plowzone)	I		5	*appears modern* quartz flake			1
91.00		T16-1		20-32	cm bs	Ap (Plowzone)	I		2	quartz flake			1
92.00		T16-2		20-31	cm bs	Ap (Plowzone)	I		1	quartz flake w/ cortex			1
93.01		T16-2		20-31	cm bs	Ap (Plowzone)	I		3	quartz flake			1
93.02		T16-2		20-31	cm bs	Ap (Plowzone)	I		3	quartz microflake			1
94.00		T16-2		20-31	cm bs	Ap (Plowzone)	I		1	coal fragment	0.56 gm		1
95.00		T16-3		5-41	cm bs	Ap (Plowzone)	I		1	iron unidentified fragment			1
96.00		T16-3		5-41	cm bs	Ap (Plowzone)	I		1	*possible buckle frame* iron unidentified fragment			1
97.00		T16-3		5-41	cm bs	Ap (Plowzone)	I		3	coal fragment	2.12 gm		1
98.00		T16-3		5-41	cm bs	Ap (Plowzone)	I		2	quartz flake			1
99.00		T16-3		5-41	cm bs	Ap (Plowzone)	I		2	quartz primary cobble reduction debris			1
100.00		T16-4		10-28	cm bs	Ap (Plowzone)	I		1	untyped pearlware sherd		1780-1840	1
101.00		T16-4		10-28	cm bs	Ap (Plowzone)	I		1	red earthenware (no glaze) sherd			1
102.00		T16-4		10-28	cm bs	Ap (Plowzone)	I		1	iron nail fragment			1
103.00		T16-5		5-33	cm bs	Ap (Plowzone)	I		1	clear window glass fragment			1

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
104.00		T16-5		5-33	cm bs	Ap (Plowzone)	I		1	yellowware sherd		1820-1900+	1
105.00		T17-2		6-34	cm bs	Ap (Plowzone)	I		2	red earthenware (no glaze) sherd			1
106.00		T17-2		6-34	cm bs	Ap (Plowzone)	I		1	untyped pearlware decorated sherd		1780-1840	1
107.00		T17-2		6-34	cm bs	Ap (Plowzone)	I		1	blue-green unidentified curved glass fragment			1
108.00		T17-2		6-34	cm bs	Ap (Plowzone)	I		1	iron nail whole			1
109.00		T17-3		6-21	cm bs	Ap (Plowzone)?	I		1	iron nail whole			1
110.00		T17-3		6-21	cm bs	Ap (Plowzone)?	I		1	untyped whiteware sherd		1820-1900+	1
111.00		T17-3		6-21	cm bs	Ap (Plowzone)?	I		1	red earthenware (no glaze) sherd			1
112.00		T17-3		6-21	cm bs	Ap (Plowzone)?	I		1	brick fragment	0.18 gm		1
113.00		T17-3		6-21	cm bs	Ap (Plowzone)?	I		1	opaque white/milk unidentified curved glass fragment			1
114.00		T17-4		6-26	cm bs	Ap (Plowzone)	I		1	cuprous center fire shotgun shell post 1850 fragment			1
115.00		T17-4		6-26	cm bs	Ap (Plowzone)	I		1	coal ash fragment	0.88 gm		1
116.00		T17-4		6-26	cm bs	Ap (Plowzone)	I		1	untyped porcelain sherd			1
117.00		T17-4		6-26	cm bs	Ap (Plowzone)	I		1	quartz retouched flake w/ cortex *possible uniface*			1
118.00		T17-5		6-28	cm bs	Ap (Plowzone)	I		1	quartz primary cobble reduction debris			1
119.00		T17-5		6-28	cm bs	Ap (Plowzone)	I		1	untyped creamware sherd		1762-1820	1
120.00		T17-5		6-28	cm bs	Ap (Plowzone)	I		1	coal fragment	0.52 gm		1
121.00		T17-6		6-36	cm bs	Ap (Plowzone)?	I		1	red earthenware brown lead glaze sherd			1
122.00		T17-6		6-36	cm bs	Ap (Plowzone)?	I		1	clear window glass fragment			1
123.00		T17-6		6-36	cm bs	Ap (Plowzone)?	I		2	quartz flake			1
124.00		T18-4		6-20	cm bs	Ap (Plowzone)?	I		1	annular pearlware sherd		1790-1820	1

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
125.00		T18-4		6-20	cm bs	Ap (Plowzone)?	I		1	blue-green window glass fragment			1
126.00		J30		6-43	cm bs	Ap (Plowzone)?	I		1	untyped creamware sherd		1762-1820	1
127.00		J30		6-43	cm bs	Ap (Plowzone)?	I		2	quartz microflake			1
128.00		J30		6-43	cm bs	Ap (Plowzone)?	I		2	brick fragment	0.26 gm		1
129.00		J30		6-43	cm bs	Ap (Plowzone)?	I		1	iron nail whole			1

Archaeological and Historical Services, Inc.

Site Summary Report

Site: 152-FSSS

12/12/07

Material	Total
Lithic	18
Historic Ceramic	26
Faunal	5
Metal	52
Glass	15
Other Historic	52

Total Artifacts: 168

Archaeological and Historical Services, Inc. **Artifact Inventory** **Site: 152 - FSSS**

12/12/07 **Site Name:** **Scatter Name:** **Page 1**

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
1.00		J1		4-23	cm bs	Fill 1	I		1	ironstone decorated handle sherd *recent break; 2 fragments mend to form 1 sherd*		1813-1900+	1
2.00		J1		4-23	cm bs	Fill 1	I		1	unidentified lithic unidentified historic lithic *possible marble tile piece*			1
3.00		J5		17-32	cm bs	Fill 2	I		1	quartz primary cobble reduction debris			1
4.00		J5		17-32	cm bs	Fill 2	I		1	quartz flake			1
5.00		J6		4-15	cm bs	Fill 1	I		2	untyped whiteware sherd		1820-1900+	1
6.00		J6		4-15	cm bs	Fill 1	I		1	red earthenware brown lead glaze sherd			1
7.00		J6		30-40	cm bs	Fill 2	I		1	red earthenware (no glaze) sherd			2
8.00		J6		30-40	cm bs	Fill 2	I		1	red earthenware brown lead glaze sherd			2
9.00		J11		3-29	cm bs	Ap (Plowzone)?	I		1	red earthenware (no glaze) sherd			1
10.00		J24		5-30	cm bs	Fill 1	I		1	unidentified shell fragment	0.64 gm		1
11.00		J25		6-32	cm bs	Ap (Plowzone)?	I		1	iron machine cut machine headed nail whole			1
12.00		J25		6-32	cm bs	Ap (Plowzone)?	I		1	red earthenware (no glaze) sherd			1
13.00		J25		6-32	cm bs	Ap (Plowzone)?	I		1	embossed brass sheet fragment *with the letters .."CHERE"..*			1
14.00		J26		20-27	cm bs	Fill 2	I		1	ironstone sherd		1813-1900+	1
15.00		T1-1		5-14	cm bs	Fill 1	I		1	black lead glazed red earthenware sherd			1
16.00		T1-1		5-14	cm bs	Fill 1	I		1	iron nail shank			1
17.00		T1-6		4-17	cm bs	Fill 1	I		6	lead waster fragment			1
18.00		T1-6		4-17	cm bs	Fill 1	I		3	slate possible shingle fragment			1
19.00		T1-6		4-17	cm bs	Fill 1	I		2	asphalt fragment			1
20.00		T1-6		4-17	cm bs	Fill 1	I		1	coal ash fragment	0.06 gm		1
21.00		T1-7		3-16	cm bs	Fill 1	I		33	iron sheet fragment *only a sample was collected*			1

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
22.00		T1-7		3-16	cm bs	Fill 1	I		1	iron wire nail fragment			1
23.00		T1-7		3-16	cm bs	Fill 1	I		2	untyped creamware sherd		1762-1820	1
24.00		T1-7		3-16	cm bs	Fill 1	I		2	clear window glass fragment			1
25.00		T1-7		3-16	cm bs	Fill 1	I		1	four hole opaque white/milk glass button whole			1
26.00		T1-7		3-16	cm bs	Fill 1	I		4	coal fragment	1.88 gm		1
27.00		T2-3		4-19	cm bs	Fill 1	I		18	brick fragment *only a sample was collected*	42.70 gm		1
28.00		T2-3		4-19	cm bs	Fill 1	I		1	untyped creamware sherd		1762-1820	1
29.00		T2-3		19-36	cm bs	Fill 2	I		8	brick fragment *only a sample was collected*	81.38 gm		2
30.00		T2-3		19-36	cm bs	Fill 2	I		1	possible .22 caliber cuprous rim fire cartridge post 1866 whole *crushed*			2
31.00		T3-3		5-20	cm bs	Fill 1	I		1	iron wire nail whole			1
32.00		T3-3		5-20	cm bs	Fill 1	I		1	iron tack whole			1
33.00		T3-3		5-20	cm bs	Fill 1	I		3	iron nail fragment			1
34.00		T3-3		5-20	cm bs	Fill 1	I		1	unidentified calcined bone fragment	0.16 gm		1
35.00		T3-3		5-20	cm bs	Fill 1	I		1	clear unidentified curved glass fragment			1
36.00		T3-3		5-20	cm bs	Fill 1	I		2	clear unidentified curved glass fragment			1
37.00		T7-1		5-24	cm bs	Fill 1	I		2	blue-green window glass fragment			1
38.00		T7-1		5-24	cm bs	Fill 1	I		1	plastic fragment			1
39.00		T7-1		5-24	cm bs	Fill 1	I		4	brick fragment	8.70 gm		1
40.00		T7-1		5-24	cm bs	Fill 1	I		1	untyped whiteware sherd		1820-1900+	1
41.00		T7-1		5-24	cm bs	Fill 1	I		1	quartz flake w/ cortex			1
42.00		T7-1		5-24	cm bs	Fill 1	I		1	iron wire nail whole			1

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
43.00		T7-1		24-40	cm bs	Fill 2	I		1	quartz flake			2
44.00		T7-1		24-40	cm bs	Fill 2	I		1	untyped creamware sherd		1762-1820	2
45.00		T7-1		40-50	cm bs	Ap (Plowzone)?	I		1	untyped creamware sherd		1762-1820	3
46.00		T7-2		25-40	cm bs	Fill 3	I		1	untyped creamware sherd		1762-1820	1
47.00		T7-2		25-40	cm bs	Fill 3	I		1	brick fragment	1.88 gm		1
48.00		T7-2		25-40	cm bs	Fill 3	I		2	quartz flake			1
49.00		T7-2		40-56	cm bs	Fill 3	I		1	coal fragment	0.40 gm		2
50.00		T7-3		30-40	cm bs	Fill 2	I		1	blue-green window glass fragment			1
51.00		T7-3		30-40	cm bs	Fill 2	I		1	quartz primary cobble reduction debris			1
52.00		T7-4		4-18	cm bs	Fill 1	I		1	quartz flake w/ cortex			1
53.00		T7-4		4-18	cm bs	Fill 1	I		1	annular pearlware sherd		1790-1820	1
54.00		T7-4		4-18	cm bs	Fill 1	I		1	multi-color glass marble whole *blue and white*			1
55.00		T7-4		4-18	cm bs	Fill 1	I		1	plastic fragment *only a sample was collected*			1
56.00		T7-4		4-18	cm bs	Fill 1	I		2	coal fragment *only a sample was collected*	1.02 gm		1
57.00		T7-4		4-18	cm bs	Fill 1	I		1	coal ash fragment *only a sample was collected*	0.70 gm		1
58.00		T8-1		6-26	cm bs	Fill 1	I		1	coal ash fragment	0.18 gm		1
59.00		T8-1		6-26	cm bs	Fill 1	I		3	coal fragment	3.66 gm		1
60.00		T8-1		6-26	cm bs	Fill 1	I		1	slag fragment	1.70 gm		1
61.00		T8-1		6-26	cm bs	Fill 1	I		1	concrete/cement fragment			1
62.00		T8-1		6-26	cm bs	Fill 1	I		1	asphalt fragment			1
63.00		T8-1		6-26	cm bs	Fill 1	I		1	slate shingle fragment			1

Inv#	Locus	Unit	Quad	Depth	Datum	Soil	Ph	Fea.	Count	Item Description	Weight	Period	Bag #
64.00		T8-1		6-26	cm bs	Fill 1	I		1	red earthenware (no glaze) sherd			1
65.00		T8-1		6-26	cm bs	Fill 1	I		1	porcellaneous ware green edged rim sherd *modern*		1820-1900	1
66.00		T8-1		6-26	cm bs	Fill 1	I		1	porcellaneous ware green edged burnt rim sherd *modern*		1820-1900	1
67.00		T8-1		6-26	cm bs	Fill 1	I		1	molded clear unidentified curved glass fragment			1
68.00		T8-1		6-26	cm bs	Fill 1	I		2	green unidentified curved glass fragment			1
69.00		T8-1		6-26	cm bs	Fill 1	I		1	iron bottle opener whole			1
70.00		T8-1		6-26	cm bs	Fill 1	I		2	unidentified non calcined bone fragment	23.00 gm		1
71.00		T8-1		26-42	cm bs	Fill 2	I		1	brick fragment	5.24 gm		2
72.00		T8-1		26-42	cm bs	Fill 2	I		1	worn clear unidentified curved glass fragment			2
73.00		T8-1		26-42	cm bs	Fill 2	I		1	iron nail whole			2
74.00		T8-3		6-35	cm bs	Fill 1	I		1	northern quahog (Mercenaria mercenaria) fragment	9.84 gm		1
75.00		T9-2		5-37	cm bs	Fill 1	I		2	quartz flake			1
76.00		T9-2		5-37	cm bs	Fill 1	I		2	quartz flake w/ cortex			1
77.00		J28		7-29	cm bs	Ap (Plowzone)	I		1	untyped pearlware sherd		1780-1840	1
78.00		J28		7-29	cm bs	Ap (Plowzone)	I		1	blue-green window glass fragment			1
79.00		J29		4-25	cm bs	Fill 1	I		1	quartz flake			1
80.00		J29		4-25	cm bs	Fill 1	I		3	untyped creamware sherd		1762-1820	1
81.00		J29		4-25	cm bs	Fill 1	I		1	refined earthenware (no glaze) sherd			1

APPENDIX V

SITE 152-137 INVENTORY FORM

HISTORIC RESOURCES INVENTORY
PREHISTORIC ARCHAEOLOGICAL SITES
HIST-7 NEW 9/77

STATE OF CONNECTICUT
CONNECTICUT HISTORICAL COMMISSION
59 SOUTH PROSPECT STREET, HARTFORD, CONNECTICUT, 06106

FOR OFFICE USE ONLY														
Town No.:152							**Site no.:**137							
UTM:	1	8	7	3	9	9	3	0	4	5	7	6	0	5	0

QUAD: Niantic
NR: ☐ACT ☐ELIG. ☐NO
SR: ☐ACT ☐ELIG. ☐NO
DISTRICT ☐**YES** ☐**NO**

IDENTIFICATION

1. SITE NAME
Seaside

STATE SITE NO.

CAS NO.

2. TOWN/CITY
Waterford

VILLAGE

COUNTY
New London

3. STREET AND NUMBER (and/or location)
4 Seaside Drive

4. OWNER(S)
State of Connecticut
☒ **PUBLIC** ☐ **PRIVATE**

5. ATTITUDE TOWARD EXCAVATION
Positive

6. USE *(Present)*
Fallow Field / overgrown lawn

(Historic)
fishing, homestead

DESCRIPTION

7. PERIOD
☐Paleo ☐ Early Archaic ☐ Middle Archaic ☐ Late Archaic ☐ Early Woodland ☐ Middle Woodland ☒ Late Woodland ☐ Contact ☐ Unknown ☐ Other*(specify)*

8. DATING METHOD
C-14 ☐ Intuition ☒Other*(specify)*typology - Levanna Pt.
Comparative Materials

9. SITE TYPE
☐Quarry ☐Camp ☐Rockshelter ☐Shell Midden ☐Cemetery ☐Village ☒Other*(specify)*unknown

10. APPROXIMATE SIZE AND BOUNDARIES
Minimally 200m by 40m. Site is bounded by soil disturbance from Seaside Hospital construction and residential development to the west

11. STRATIGRAPHY
☐Surface finds ☐Plowed ☐Not Stratified ☒Stratified ☐Major Disturbance ☐Other*(specify)*

ENVIRONMENT

12. SOIL
USDA SOIL SERIES: Woodbridge Fn Sdy Lm
CONTOUR ELEVATION: 10-20ft
SLOPE %: ☒ 0-5 ☐ 5-15 ☐ 15-25 ☐ over 25
TEXTURE: ☐Sand ☐Clay ☐Silt ☒Other *(specify)*fn sdy lm
ACIDITY: ☐ less than 4.5 ☐ 4.5-5.5 ☒ 5.6-6.5 ☐ 6.6-7.3 ☐ 7.4-8.4

13. WATER
NEAREST WATER SOURCE: small stream
SIZE AND SPEED: small
DISTANCE FROM SITE: 25m
SEASONAL AVAILABILITY: intermittent

14. VEGETATION
PRESENT: lawn grass - small shrubs
PAST:

CONDITION

15. SITE INTEGRITY
☐ Undisturbed ☒ Good ☒ Fair ☐ Destroyed

16. THREATS TO SITE
☐ None Known ☐ Highways ☐ Vandalism ☒ Developers ☐ Other *(specify)* ☐ Renewal ☐ Private ☐ Deterioration ☐ Zoning ☐ Unknown

17. SURROUNDING ENVIRONMENT
☒ Open Land ☐ Woodland ☒ Residential ☐ Scattered Buildings visible from site ☐ Commercial ☐ Industrial ☐ Rural ☐ High Building Density ☒ Coastal ☐ Isolated

18. ACCESSIBILITY TO PUBLIC – VISIBLE FROM PUBLIC ROAD
☒ Yes ☐ No

RESEARCH POTENTIAL

19. PREVIOUS EXCAVATIONS

	BY WHOM/AFFILIATION	DATE
☐ SURFACE COLLECTED		
☐ POT HUNTED		
☒ TESTED	Ph I(a) & Ph I(b) by AHS	11/2007
☐ EXCAVATION		

20. PRESENT LOCATION OF MATERIALS
AHS, Inc. 569 Middle Turnpike, Storrs, CT 06268

21. PUBLISHED REFERENCES
Report: Phase Ia Archaeological Reconnaissance Survey, Seaside Regional Center Development, Waterford, Connecticut. Prepared for Baystate Environmental Consultants, Inc. 2007, Storrs, CT: AHS, Inc.
Report: Phase Ib Archaeological Reconnaissance Survey, Seaside Regional Center Development, Waterford, Connecticut. Prepared for Baystate Environmental Consultants, Inc. 2007, Storrs, CT: AHS, Inc.

22. RECOVERED DATA *(Identify in DETAIL, including features, burials, faunal material, etc.)*
Eight quartz flakes and one quartz Levanna projectile point were recovered from three test pits excavated during a Phase I(a) survey of the Seaside Regional Center. All of the artifacts were recovered from the plowzone. Seven of the quartz flakes came from a single pit. The site is located very close to Long Island Sound and adjacent to a small freshwater stream. Phase I(b) survey at the south and north ends of the site produced 51 additional pieces of quartz debitage and a single unifacially retouched quartz flake. The quartz distribution suggests the prehistoric component(s) extends westward into adjacent residential properties. A section of the site between the north and south ends was destroyed by hospital construction (buildings, roads, utilities).

SIGNIFICANCE

23. ARCHAEOLOGICAL OR HISTORICAL IMPORTANCE
The significance of this site is currently unknown due to the limited subsurface testing. Undisturbed areas within this site are expected to have a high potential for containing additional evidence of pre-Colonial period acitvity. Phase II Intensive survey was recommended to determine the age, integrity, function and spatial parameters of the site.

PHOTOGRAPH

PHOTOGRAPHER

DATE

VIEW

NEGATIVE ON FILE

Place 35 mm contact print here

ADDITIONAL INFORMATION

Site 152-137 also includes a historic-period component (see attached site form).

REPORTED BY

NAME
Daniel Forrest

ADDRESS
569 Middle Turnpike, Storrs, CT 06268

ORGANIZATION
AHS, Inc.

DATE
12/2007

FOR OFFICE USE ONLY

FIELD EVALUATION

COMMENTS

HISTORIC RESOURCES INVENTORY
HISTORIC ARCHAEOLOGICAL SITES
HIST-5 NEW 9/77

STATE OF CONNECTICUT
CONNECTICUT HISTORICAL COMMISSION
59 SOUTH PROSPECT STREET, HARTFORD, CONNECTICUT, 06106

FOR OFFICE USE ONLY														
Town No.:152							**Site no.:**137							
UTM:	1	8	7	3	9	9	3	0	4	5	7	6	0	5	0
QUAD: Niantic														**DISTRICT** ☐YES ☐NO
NR: ☐ACT ☐ELIG. ☐NO														
SR: ☐ACT ☐ELIG. ☐NO														

IDENTIFICATION

1. SITE NAME
Seaside

STATE SITE NO.

CAS NO.

2. TOWN/CITY
Waterford

VILLAGE

COUNTY
New London

3. STREET AND NUMBER (and/or location)
4 Seaside Drive, Waterford, CT

4. OWNER(S)
State of Connecticut
☒ **PUBLIC** ☐ **PRIVATE**

5. ATTITUDE TOWARD EXCAVATION
Positive

6. USE *(Present)*
Fallow field/Lawn

(Historic)
fishing, homestead

DESCRIPTION

7A. PERIOD
☐Contact ☐17th C. ☒18th C. ☒19th C. ☐20th C. ☐Unknown ☐Other*(specify)*

7B. ESTIMATED OCCUPATION RANGE
late 18th - early 19th century

8. DATING METHOD	**DOCUMENTS**	**COMPARATIVE MATERIALS**	**OTHER**
	Walling 1854, Beers 1868	ceramic typologies	

9. SITE TYPE
☐Contact ☐ Commercial ☒ Rural ☐ Other*(specify)*
☐Agrarian ☐ Industrial ☐ Urban ☒ Unknown

10. APPROXIMATE SIZE AND BOUNDARIES
Minimally 200m by 40m (inclusive of a prehistoric component). Site is bounded by construction disturbance from Seaside Hospital on the north, south and east, and by residential development on the west.

11. STRATIGRAPHY
☐No Visible evidence ☐Standing Ruins ☐Stratified ☐Not Stratified ☒Other*(specify)*buried stone feature
☐Surface finds ☐Cellar hole ☒Plowed ☒Major Disturbance

ENVIRONMENT

12. SOIL

USDA SOIL SERIES: Woodbridge Fn Sdy Lm
CONTOUR ELEVATION: 10-20 ft
SLOPE %: ☒ 0-5 ☐ 5-15 ☐ 15-25 ☐ over 25
TEXTURE: ☐Sand ☐Clay ☐Silt ☒Other *(specify)*sandy loam
ACIDITY: ☐ less than 4.5 ☐ 4.5-5.5 ☐ 5.6-6.5 ☐ 6.6-7.3 ☐ 7.4-8.4

13. WATER

NEAREST WATER SOURCE: small stream
SIZE AND SPEED: small
DISTANCE FROM SITE: 25 m
SEASONAL AVAILABILITY: perennial

14. VEGETATION

PRESENT: overgrown field, immature shrubs, & lawn
PAST:

CONDITION

15. SITE INTEGRITY
☐ Undisturbed ☒ Good ☒ Fair ☐ Destroyed

16. THREATS TO SITE
☐ None Known ☐ Highways ☐ Vandalism ☒ Developers ☐ Other *(specify)* ☐ Renewal
☐ Private ☐ Deterioration ☐ Zoning ☐ Unknown

17. SURROUNDING ENVIRONMENT
☒ Open Land ☐ Woodland ☒ Residential ☒ Scattered Buildings visible from site
☐ Commercial ☐ Industrial ☐ Rural ☐ High Building Density ☒ Coastal ☐ Isolated

18. ACCESSIBILITY TO PUBLIC – VISIBLE FROM PUBLIC ROAD
☒ Yes ☐ No

RESEARCH POTENTIAL

19. PREVIOUS EXCAVATIONS

	BY WHOM/AFFILIATION	DATE
☐ SURFACE COLLECTED		
☐ POT HUNTED		
☒ TESTED	Ph I(a) & Ph I(b) by AHS	11/2007
☐ EXCAVATION		

20. PRESENT LOCATION OF MATERIALS
AHS, Inc. 569 Middle Turnpike, Storrs, CT 06268

21. PUBLISHED REFERENCES
Report: Phase Ia Archaeological Reconnaissance Survey, Seaside Regional Center Development, Waterford, Connecticut. Prepared for Baystate Environmental Consultants, Inc. 2007, Storrs, CT: AHS, Inc.
Report: Phase Ib Archaeological Reconnaissance Survey, Seaside Regional Center Development, Waterford, Connecticut. Prepared for Baystate Environmental Consultants, Inc. 2007, Storrs, CT: AHS, Inc.

22. RECOVERED DATA *(Identify in DETAIL, including features, burials, faunal material, etc.)*
Relatively small numbers of late 18th to early 19th-century ceramics and other domestic artifacts were recovered. Types include annular pearlwares, undecorated creamware, black lead-glazed red earthenware, and unglazed red earthenwares. Later 19th century types recovered as well: green transfer-printed whiteware, yelloware, porcelaineous types. A buried stone feature was identified: a dense concentration of large rounded cobbles at 45 centimeters deep. Two large rock fragments recovered from the buried surface of the feature have 1.75-inch bore holes, suggesting they may be associated with mid-19th century Rogers quarry located just west of the hospital property. Domestic artifacts may be associated with one of the Jonathon Rogers (elder & younger) houses shown on 1854 Walling and 1868 Beers maps.

SIGNIFICANCE

23. ARCHAEOLOGICAL OR HISTORICAL IMPORTANCE
The significance of this site is currently unknown without further testing. Undisturbed areas within this site may have a high potential for containing additional early historic-period archaeological resources. This section of Waterford was settled in the 17th century and appears to have been home to members of the Rogers family for much of the 18th and 19th centuries. Phase II Intensive survey has been recommended to determine the precise age, function, and size of this historic-period locus.

PHOTOGRAPH

PHOTOGRAPHER	**Place 35 mm contact print here**
DATE	
VIEW	
NEGATIVE ON FILE	

ADDITIONAL INFORMATION
Note: this locus is part of a multicomponent site; a prehistoric component is described in a second site form (attached).

REPORTED BY

NAME Daniel Forrest	**ADDRESS** 569 Middle Turnpike, Storrs, CT
ORGANIZATION AHS, Inc.	**DATE** 12/2007

FOR OFFICE USE ONLY

FIELD EVALUATION

COMMENTS