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*Final Report  
Historical Resources Assessment for the  
Naval Station Newport Viewshed Study,  
Newport County, Rhode Island*



GRAY & PAPE, INC.  
ARCHAEOLOGY • HISTORY • HISTORIC PRESERVATION

MARCH 9, 2012

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Gray & Pape Project No. 09-43101

*Final Report  
Historical Resources Assessment for the  
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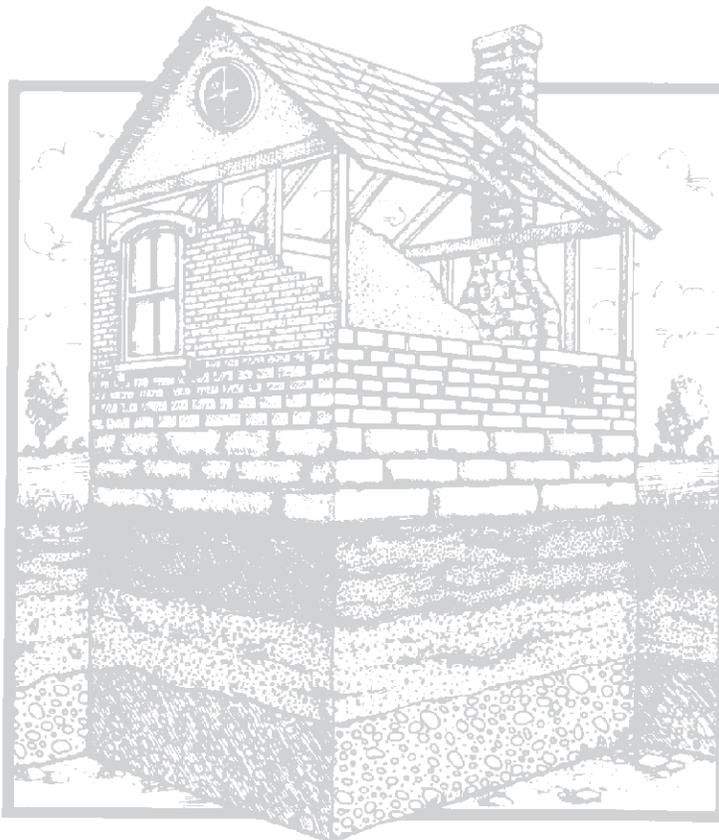
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CULTURAL RESOURCES CONSULTANTS

**Project 09-43101**

*Final Report*

**Historical Resources Assessment for the  
Naval Station Newport Viewshed Study,  
Newport County, Rhode Island**

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**Nicolas Avery  
Senior Principal Investigator  
March 9, 2012**

## ABSTRACT

Gray & Pape, Inc., has contracted with Tetra-Tech, Inc., to undertake a viewshed analysis study for proposed Wind Energy Facilities in Newport County, Rhode Island. Tetra-Tech has requested that a historical architecture survey be conducted to inventory all above-ground cultural resources within the Area of Potential Effects. For the purpose of this investigation, the project's Area of Potential Effects initially was broadly defined as extending 1.5 miles around the locations of the proposed wind turbines. It was later expanded to include the southeast corner of lower Newport Harbor and the entire eastern coast of Conanicut Island (Jamestown). The project Area of Potential Effects is within Newport County, Rhode Island.

The wind turbine facilities are proposed to be located on United States Navy land in Newport, Middletown, and Portsmouth, Rhode Island. The project Area of Potential Effects was established in consultation with the Rhode Island Historic Preservation and Heritage Commission and follows the parameters of the 2004 *National Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission*. In accordance with the terms specified above, fieldwork conducted in the course of this survey was designed to provide the client with information on the density of historical properties that would be visually impacted by construction of the turbines. In consultation with the Rhode Island Historic Preservation and Heritage Commission, the scope of the project was expanded to include specific locations to determine visual effects through viewshed analysis and photosimulation of the proposed wind turbines. Fieldwork took place between November 2009 and March 2010. Results showed that virtually all of the proposed turbines would be visible throughout the Area of Potential Effects, and it was recommended that to lessen the overall visual impact, groups that showed the least amount of visual effects would be the preferred ones for construction.

*Nota bene:* Since the initial report submission in January, 2011, the number of proposed turbines for consideration was reduced from 22 to 12. Turbines 1, 3, 8, 11, 12, 13, 15, 17, 19 and 22 were eliminated from consideration. Some of the remaining turbines were reduced in height as well to conform to FAA regulations. The RIHPHC also requested additional views with photo simulations. Consequently, an addendum to Chapter 5 of the original report with updated photosimulations was created to reflect these changes. That revised information has been incorporated into this final report submission.

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June 2011- Revised January 2012

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## **1.0 INTRODUCTION**

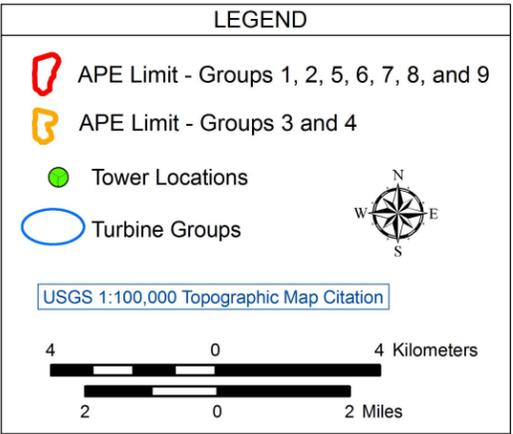
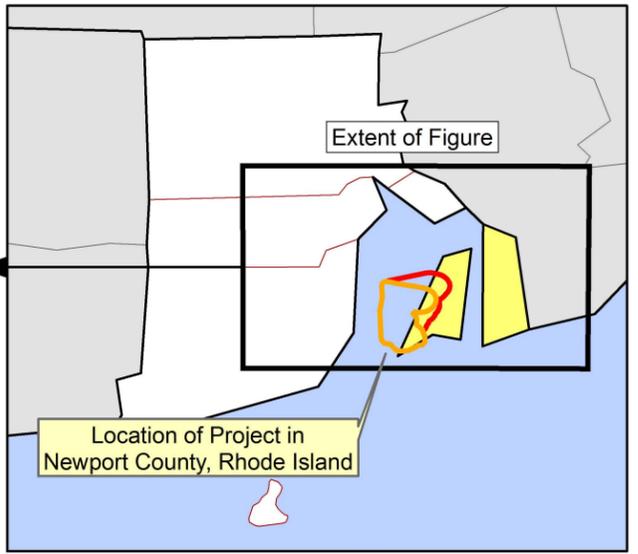
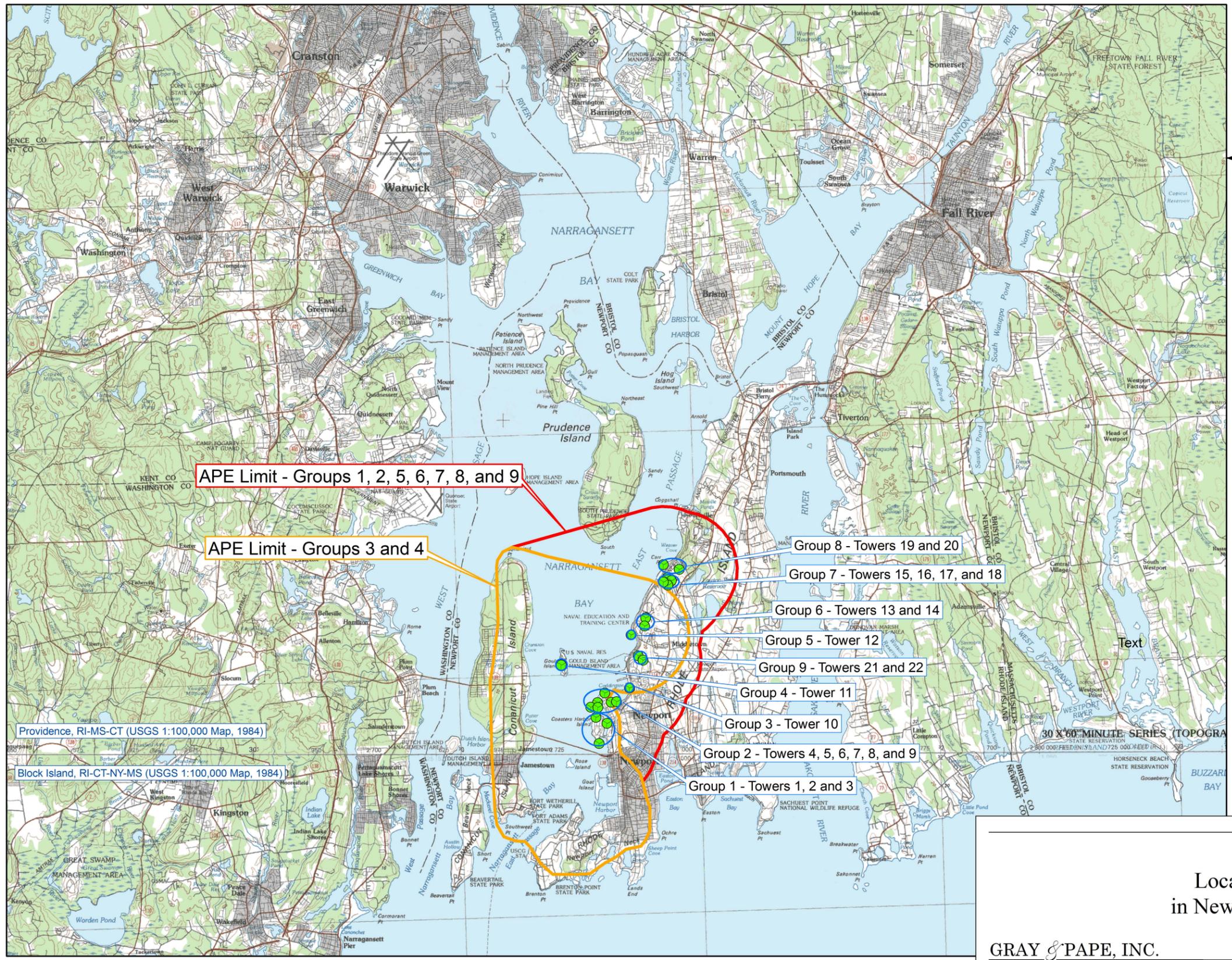
Gray & Pape, Inc. (Gray & Pape), has contracted with Tetra-Tech, Inc. (Tetra-Tech), to undertake a historical architectural survey for the proposed Naval Station Newport Wind Energy Facilities in Newport County, Rhode Island (Figure 1). Tetra-Tech has requested that a reconnaissance-level historical architecture survey be conducted to inventory potentially affected above-ground cultural resources within an Area of Potential Effects (APE) as well as an archaeological walkover to assess the condition of previously identified archaeological sites. For the purpose of this investigation, the project's APE is broadly defined as extending 1.5 miles around the locations of the proposed wind turbines. There are up to 22 potential locations for the proposed turbines, but the number of turbines proposed has not yet been determined. These potential locations have been arranged into nine groups.

The reconnaissance survey was conducted with reference to the 2004 *National Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission* and the U.S. Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* (United States Department of the Interior [USDI] 1983). The preparation of this report and any recommendations concerning the potential eligibility of cultural resources identified during the survey were made with reference to *36 CFR Part 800: Protection of Historic Properties* (Advisory Council for Historic Preservation [ACHP] 1999, as amended); *36 CFR 60: National Register of Historic Places*; the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation*; and *National Register Bulletin 15, How to Apply the National Register Criteria for Evaluation* (USDI 1981, 1983, 1991).

### **1.1 Project Description**

Gray & Pape undertook a preliminary architectural and archaeological reconnaissance-level survey of resources located within the APE of the proposed Naval Station Newport Wind Energy Facilities. The wind turbines are proposed to be located at up to 22 discrete locations located in the Towns of Newport, Middletown, and Portsmouth on land owned by the U.S. Navy. The project APE was established in consultation with the Rhode Island Historic Preservation and Heritage Commission (RIHPHC). In accordance with the terms specified above, architectural and archaeological fieldwork conducted in the course of this survey was designed to provide the client with information on impacts to historical resources visible from each potential wind tower grouping in order to rank the groupings by level of potential effect.

The architectural survey was performed between November 2009 and March 2010. Senior Principal Investigator Nicolas Avery supervised the architectural survey as well as the archival literature review and background research for the project. Archaeologist Jacob Freedman conducted the archaeological walkover survey. Mr. Avery oversaw the report preparation and Senior Manager Raymond Pasquariello supervised all other aspects of the project. Julisa Meléndez and Madonna Ledford oversaw editing and Ruth Myers and Peter Molgaard prepared all of the GIS data and mapping for the report as well as the photosimulations of the wind tower locations..



Location of the Project Area in Newport County, Rhode Island

GRAY & PAPE, INC.  
ARCHAEOLOGY · HISTORY · HISTORIC PRESERVATION

Figure 1

## **1.2 Acknowledgements**

Gray & Pape would like to extend our thanks to the residents of Newport County. Local community members very generously shared their knowledge of the project area's history and cultural resources, and provided information that was immensely helpful to the preparation of this report. We are deeply grateful for the patience and hospitality extended to us during our investigations in the project area.

Staff at the RIHPHC provided valuable input during the early stages of the project. The organization devoted staff time and resources to assist with the literature review at the RIHPHC and offered their expertise on Rhode Island and Newport County history and resources. Shannon Kam of the Naval Station Newport Environmental Protection Department afforded survey staff access to the Naval Station Newport.

## **1.3 Report Organization**

This report is organized in 5 sections and 4 appendices. Section 1 provides the introductory material regarding the project. In Section 2, the project research design and methods are presented. Historical contexts are included in Section 3. The contexts provide a general discussion of the history of the project APE, as well as narratives of communities within the APE and of general patterns and trends that are represented by extant architecturally and historically significant resources. Results of the project investigations are described in Section 4. Section 5 contains the project's conclusions and recommendations regarding further work.

Appendix A includes the project area map, which shows the locations of the wind towers and all previously identified and recommended historic districts that were identified during the course of the investigation. Appendix B lists in tabular format all previously identified and recommended historic districts located within the project APE. Appendix C contains the plates, which include the photosimulations. Appendix D contains the photo log.

## **2.0 RESEARCH DESIGN AND PROJECT METHODS**

The built environment yields immediate evidence of the character of the historical architectural properties that are located in a given area, as well as their relative integrity and ubiquity. A visual record of previous activities and periods of growth or change, therefore, can be discerned through study of the architectural resources in a given area. However, historically significant patterns, trends, and events, and association with significant persons are not always immediately apparent through a visual survey alone. Historical research, including review of maps, atlases, and local histories helps develop a fuller understanding of the influences that shaped an area's development and change over time.

### ***2.1 Background Research and Literature Review Strategy Methods***

The purpose of the background research and literature review is to generate a sense of the kind, quantity, and location of historical resources located within the viewshed area. This information establishes the context for interpreting above-ground structural remains. To that end, Gray & Pape assembled a series of historical maps to provide detailed information on known and potential resource locations in the project area. Researchers collected maps from the Rhode Island Historical Society and University of Rhode Island (Blaskowitz 1777a and b; Arrowsmith and Lewis 1812; Beers 1870; Everts and Richards 1895; Walling 1862; Rider 1903), as well as online through the David Rumsey Historical Map Collection Cartography Associates and Historic Map Works. Researchers also reviewed town histories available at Portsmouth and Middletown Public libraries (e.g. Arnold 1876; Bayles 1888; Denison 1879; Garman 1978, 1983, 2003; James 1975) to understand the organic development of the four mainland communities. Internet sources provided information on the Narragansett Bay islands (Lighthouse Friends 2009; Narragansett Bay 2009; Prudence Island on the Web 2009; Rhode Island Department of Environmental Management 2009; Rhode Island Lighthouse Foundation 2009). The National Register of Historic Places Nomination Forms for the historic districts in Newport County provided necessary information related to the district boundaries, as well as key bibliographic sources. The most important community summaries are available in the RIHPHC's series on historical and architectural resources, compiled in the late 1970s, and reprinted and published online (Rhode Island Historic Preservation and Heritage Commission 2010). The reader can assume that the RIHPHC's 1970 series is the principal source for the contextual overview, except where other sources are specifically referenced.

Archaeologists created a contextual overview from published summaries on southern New England archaeology (Byers 1954; Curran and Dincauze 1977; Dincauze 1974, 1976, 1993; Dincauze and Mulholland 1974; Dineen 1996; Kenyon 1983; Luedtke 1986; McWeeney 1999; Newby et al. 2005; Snow 1980), as well as cultural resource studies from the viewshed communities (Fragola and Mair 2005; Garman and Russo 1995; Macomber, Gerald and Russo 1995; Simmons 1970). Finally, researchers reviewed the archaeological site files maintained by the RIHPHC to compile an up-to-date list of known sites in the proposed

turbine locations. Together, this information created the context for assessing known and potential archaeological sites in the proposed wind turbine locations.

## **2.2 Previously Identified Historic Architectural Resources**

The last major architectural reconnaissance survey conducted in Newport County was in 1979. Eleven Historic Districts previously listed in the Rhode Island State Register of Historic Places or National Register of Historic Places are located in the APE; ten others have been identified as potentially eligible for inclusion in the Rhode Island State Register of Historic Places or the NRHP. Appendix A maps their locations and they are listed in Appendix B.

## **2.3 Historical Architectural Survey Field Methods**

The project's field survey team assembled in Newport, Rhode Island, in November 2009 to review the project parameters, field maps and survey forms, photo documentation requirements, landscape assessments, and all other aspects of the survey methods. The field survey commenced in November 2009 and concluded in March 2010. One survey team consisting of two people undertook the preliminary survey. The survey team was composed of staff with training in American architectural history, architectural field survey techniques, and digital photography. A Gray & Pape Principal Investigator was a member of the team throughout the survey. The survey methods complied with the *Secretary of the Interior's Standards and Guidelines for Identification* (USDI 1983) as well as the survey guidelines promulgated by the RIHPHC.

### **2.3.1 Field Methods**

Gray & Pape's survey team began preliminary historical architectural survey for any and all properties that might be considered eligible for inclusion in the NRHP. For a property to be listed, it must meet at least one of the four NRHP criteria. Information on architectural styles, association with various aspects of social history and commerce, and ownership are all integral parts of the nomination. Each nomination generally provides a narrative section that describes the site or building in detail and justifies why it is historically significant. The National Register of Historic Places criteria are described below.

Criterion A is applied to districts, sites, buildings, structures, or objects associated with an event that indicates that the resource has made a contribution to the broad patterns of American history. Criterion B is applied when the resource is associated with significant people in America's history. The third criterion, C, concerns the distinctive characteristics of a resource through its construction and architecture, including having high artistic value or being the work of a master. The final criterion, D, is applied if the property has yielded or may be likely to yield information important to prehistory or history. Archaeological sites are most often listed under Criterion D.

Another factor considered during survey was the level of a property's integrity. Integrity refers to the level to which a property still displays its historical character through physical

attributes of materials or setting. A building that has undergone extensive alterations through removal of original material or unsympathetic additions would be said to be of low integrity.

Gray & Pape's survey team began a preliminary historic architectural survey of all properties 50 years or older located within the project APE according to the following parameters. The survey team members traversed all passable publicly owned roads located within the project APE. Survey team members did not enter any privately owned driveways or roads. In all instances, historical architectural resources were observed and documented from the publicly owned right-of-way unless a property owner invited the team onto the site. Buildings that may be construed as public, such as churches, stores, and schools, also were approached more closely. Every effort was made to identify and record each resource over 50 years old within the project APE. Given the sometimes remote character of the properties, Gray & Pape acknowledges that visual access to all properties from publicly owned rights-of-way was not possible. For all properties, Gray & Pape sought to respect the wishes of owners concerning access.

During the course of fieldwork, Gray & Pape compiled Excel databases listing all properties 50 years or older within the APE. Historical properties that were viewable from a public right-of-way or publicly accessible and fell within the viewshed were recorded. Notes on address, architectural style, condition, and physical description were taken. Locations of inventoried resources were marked on field maps with an identifying number.

Gray & Pape's fieldwork investigations also considered each resource within the context of their view towards the proposed wind tower groupings. Mapping generated by Gray & Pape was referred to in order to determine how many of the proposed towers would be viewable from any identified historical resource.

### **2.3.2 Viewshed Analysis Methods**

The first step in identifying whether a historical property would be visually affected by the proposed project was to create viewshed maps, also known as Zone of Visual Influence (ZVI) mapping. These maps identify the geographic area within which there is a relatively high probability that some portion of the proposed project would be visible. The overall accuracy of viewshed mapping is dependent on the number and location of control points (study points representing proposed wind tower generators [WTG]) used in the viewshed calculation. WindPro computer modeling calculates the potential for tower visibility by combining information on the height and location of proposed towers and compares that to topographical information about the APE. The resulting composite viewshed map identifies with color coding the geographic area within the APE where some portions of the proposed wind towers are theoretically visible.

By themselves, the ZVI maps do not determine how much of each WTG is visible above intervening landforms or vegetation (e.g., 100 percent, 50 percent, 10 percent, etc., of total turbine height). Instead, these maps identify the geographic area within which there is a relatively high probability (theoretical visibility) that *some portion* of one or more WTGs

would be visible. The primary purpose of these maps is to assist in determining the potential visibility of the proposed project from the identified historical resources.

In this evaluation, ArcGIS 9.1 and WindPro software were used to generate a viewshed overlay map based on publicly available digital topographic and vegetation data sets. Viewshed overlays were created first by importing a digital elevation model (DEM) of the study area. The DEM, obtained through the United States Geological Survey (USGS) from its National Elevation Dataset, is based on the best available digital elevation data, including 1:24,000-scale USGS topographic maps (10-foot contour intervals) and is accurate to a 32.8-foot grid cell resolution. The computer then scanned 360 degrees across this DEM from each control point, distinguishing between grid cells that would be hidden from view and those that would be visible based solely on topography. Areas of the surrounding landscape where each control point would be visible were identified; areas in shadow would not be visible.

Vegetation data was extracted from the USGS National Land Cover Data Set 2001 (NLCD). The NLCD dataset was developed from Landsat 7 Thematic Mapper (TM) imagery and is accurate to a 98.4-foot grid cell resolution. The screening effect of vegetation then was incorporated by adding 40 feet in height to DEM grid cells that are wooded (according to NLCD dataset) or have dense residential construction and repeating the calculation procedure. Based on field observations, most trees in wooded areas of the study area are taller than 40 feet, thus the height represents a conservative estimate of the effect of vegetative and building screening.

Finally, the ZVI maps indicate locations in the surrounding landscape in which one or more turbine high points may be visible. These maps do not imply the magnitude of visibility (i.e. how much of each WTG is potentially visible), the viewer's distance from each visible WTG, or the aesthetic character of what may be seen. Such interpretation is accomplished with the use of photosimulations.

### **2.3.3 Photosimulation Methods**

Photo simulations of the proposed wind energy project were prepared from various locations within the APE as recommended by the RIHPHC. Photo simulations were developed by inserting a photo rendering of a three-dimensional computer model of the proposed project into the base photograph taken from each corresponding resource. The three-dimensional computer model was developed with WindPro software.

Simulated perspectives (camera views) were matched to the corresponding base photograph for each simulated view by replicating the precise Universal Transverse Mercator (UTM) coordinates of the field camera position (as recorded by GPS) and the focal length of the camera lens used (e.g. 50 mm). Precisely matching these parameters assures scale accuracy between the base photograph and the subsequent simulated view. The camera's target position was set to match the bearing of the corresponding existing condition photograph as recorded in the field. With the existing conditions photograph displayed as a "viewport background", minor camera adjustments were made (horizontal and vertical positioning, and

camera roll) to align the horizon in the background photograph with the corresponding features of the 3D model.

The proposed condition model was rendered using the base photograph as a “background environment map”. The 3D model was rendered using sunlight settings approximating the date and time of day the base photograph was taken. Consequently, the scale, alignment, elevations, and location of the visible elements of the proposed facilities are true to the conceptual design. The rendered view then was opened using *Adobe PhotoShop 7.0* software for post-production editing (i.e. remove portions of the WTG that fall below foreground topography).

The photo simulations were taken from various locations in the APE looking toward the proposed wind energy facilities. The views were intended to be representative, rather than comprehensive. A photo simulation shows the number of WTGs visible from that specific point, not the total number of WTGs visible throughout the APE. In actuality, the number of WTGs visible from any given location will vary depending on where the observer is located. Consequently, the photo simulations are illustrative, whereas the data used to generate the viewshed analysis results are quantifiable. As previously noted, the visual effects of the proposed project will not be uniform throughout the APE. Topographical variations often result in viewsheds of very different expanses from vantage points that are relatively close together. Additionally, the electronic viewshed analysis did not take into account the influence of screening by vegetation that is shorter than the 40-foot standard. As a result, it is not unusual for historical resources in close proximity to each other to have very different levels of visual effects.

## **2.4 Archaeological Field Methods**

Previous archaeological investigations had identified twelve historical and prehistoric archaeological sites that yielded or were likely to yield artifacts pertaining to previous human habitation and activities (Louis Berger & Associates, Inc. 1998; Department of the Navy 2007). As part of their agreement with Tetra Tech, Gray & Pape archaeologists conducted a walkover survey of these locations to assess their continuing potential to reveal historical and prehistoric information. Archaeologists searched for visible evidence of structural foundations, cellar holes, walk- or driveways, cart paths, surface scatters, refuse middens, property markers or bounds, deflated soils, or burial markers indicative of cultural activity. Archaeologists also noted existing conditions at each location and took digital photographs to document the existing conditions. Results of the walkover survey are discussed in Section 4.2.

## **3.0 HISTORICAL CONTEXTS**

### ***3.1 Project Area Location and Physiographic Setting***

The Naval Station Newport Viewshed Study encompasses portions of the towns of Newport, Middletown, and Portsmouth, on Aquidneck Island, portions of Jamestown, on Conanicut Island, and Dyer, Coaster's Harbor, Goat, Prudence, and Rose Islands in Narragansett Bay (Figure 1). Each of these communities is in Newport County, which is included in the greater Narragansett Bay Estuary physiographic setting. Located in southeastern Rhode Island and bordering southeastern Massachusetts, Narragansett Bay is a north-south trending estuary approximately 19 miles long and 9.5 miles wide. Conanicut, Prudence, and Aquidneck islands divide the bay into the west and east Sakonnet passages. Figure 2 shows the area hydrology.

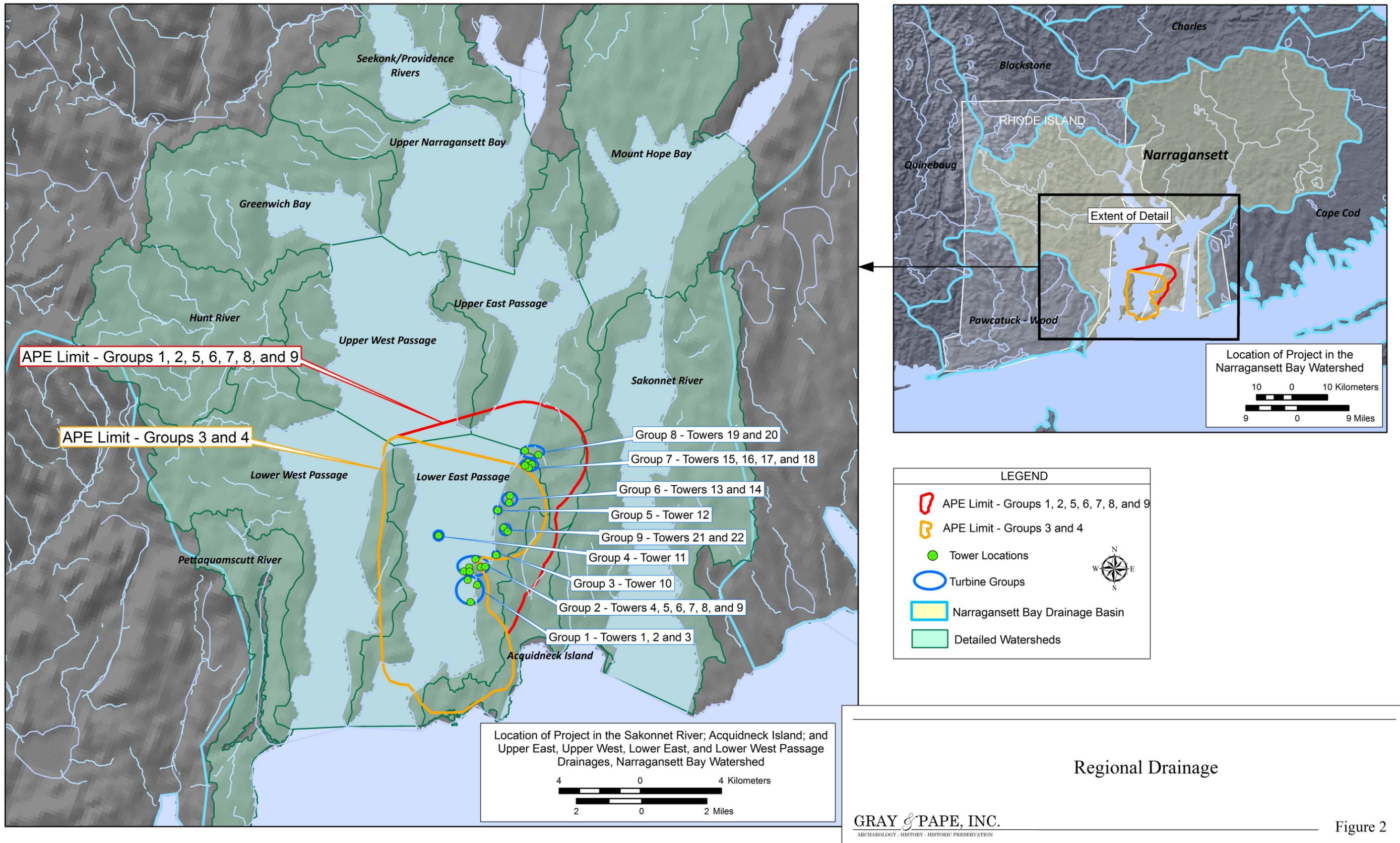
Pleistocene and recent sedimentary deposits consist of glacial drift and post-glacial sediments overlying bedrock (Figure 3) with approximately 50 feet of Holocene estuarine deposits over the glacial drift (McMaster 1960). A southward flowing drainage system existed during pre-glacial times, but glacial and post-glacial deposition altered the valleys into deep channels filled with Quaternary sediments (McMaster 1984). Post-glacial deposition began about 15,500 B.P. when pro-glacial Lake Narragansett formed in what is today the Bay. After approximately 500 years, the lake drained and a river flowed along the axis of the lake into Long Island Sound (Peck and McMaster 1991).

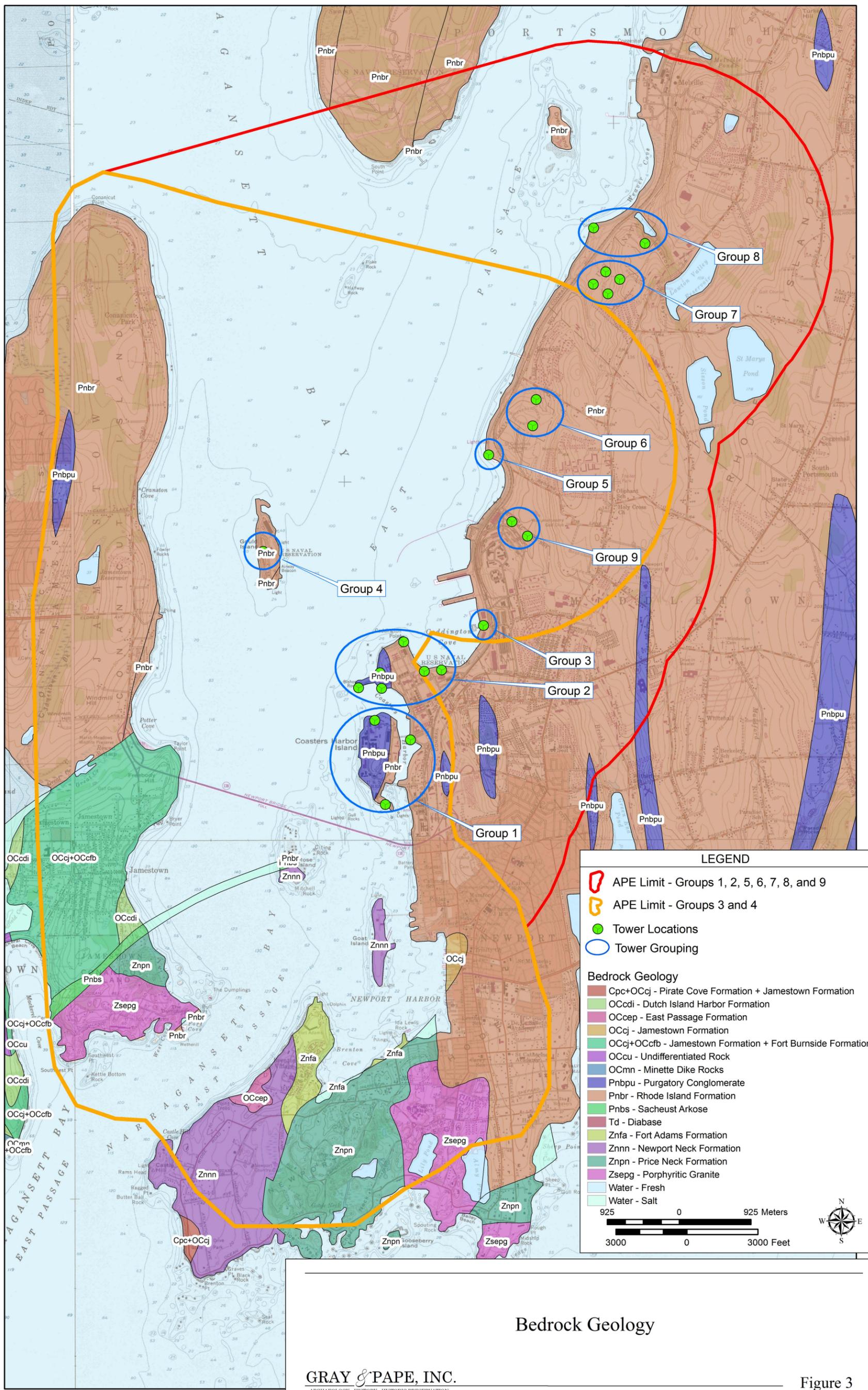
This Early Holocene surface was inundated by the sea in the East Passage trunk valley about 9000 B.P. The sea subsequently inundated northward via this trunk valley and its branches. Silt and clay sediments associated with estuarine deposition circulation are lens-like in shape and 39 feet, or more, thick. These were deposited in the upper Narragansett Bay and around Hope Island by 7500 B.P. and in Mt. Hope Bay by 6250 B.P. (McMaster 1984).

The principal topographic feature of Aquidneck Island is the central ridge that runs along the island, broken in places by Butts, Lehigh, Almy, Turkey, Quaker, and Slate hills with several small valleys arrayed among the hills. The highest elevation is Slate Hill, which rises about 260 feet above sea level. Because the forests were cleared for early farms and settlements, Aquidneck Island is relatively open and affords expansive views of Narragansett Bay from many points. The major transportation arteries are West and East Main roads and State Route 24, which connects West Main Road to the Sakonnet River Bridge. Conanicut Island is relatively low-lying with the highest elevation about 130 feet above sea level. The coastline is dramatic and contains rugged cliffs, rocky promontories, and adjacent reefs.

### ***3.2 Community Histories***

As stated above, the following overviews of the viewshed area are derived from the RIHPHC town reports for Newport, Portsmouth, Middletown, and Jamestown, except where other authors are explicitly cited.





### 3.2.1 Newport

Ancient Native Americans lived around Narragansett Bay for thousands of years prior to European settlement, using resources from both the land and the sea to meet their subsistence needs. Two tribes inhabited the area, the Narragansetts and the Wampanoags (also known as the Pokonokets), with the Narragansetts being the dominant tribe and the largest group of Algonquin-speaking peoples in southern New England (RIHPHC 1979). The earliest known written records describing the area are those of the European explorer, Giovanni da Verrazano, who sailed along the coast of New England and entered Narragansett Bay in 1524. Verrazano described the Native occupants and noted that they were divided into two groups: the Pokonokets or Wampanoags occupying the eastern side of the bay, and the Narragansetts on the west. The Narragansetts were reputedly the largest tribal presence in the region, with over 5000 members—perhaps 20 percent of the entire southern New England population at that time. Following Verrazano’s voyage, contact between Europeans and Native Americans lapsed until 1614 when the Dutch explorer Adriaen Block navigated the large island between New York and Rhode Island. Following those exploratory voyages, regional settlement concentrated around Boston and Long Island until 1636, when settlers from the Massachusetts Bay Colony founded permanent, European colonies in Rhode Island. The first settlement was that of Roger Williams, Anne Hutchinson, and their families, who abandoned the Bay Colony for greater religious freedom than they had known under the Boston Puritans. Hutchinson, Williams, and their families settled in the area east of the modern city of Providence. William Blackstone and his family might have arrived earlier, but it was Roger Williams who secured the colony’s patent in 1644 and created a government under that patent. It is therefore Roger Williams who is generally credited with establishing the colony (James 1975:3). Hutchinson and others eventually moved on from Providence to establish Portsmouth and Newport.

Williams created positive relationships with Narragansett leaders, including Canonicus and Miantonomi, and the Wampanoag leader, Massasoit. All the settlers needed peace to create a successful colony, and the Narragansetts and the Wampanoags probably were willing to forge alliances with the English for protection against their western enemies, the Pequots and Mohegans. The Narragansetts subsequently deeded land on Aquidneck Island to Anne Hutchinson, the religious leader and Puritan dissenter who hived off from the Providence community to settle Portsmouth with John Clarke, William Coddington, and Nicholas Easton. The Narragansetts then granted part of Prudence Island to Roger Williams and John Winthrop. Clarke, Coddington, and Easton left Portsmouth to establish a new settlement at Newport in 1639 (James 1975).

Newport grew rapidly because of the island’s deep harbor and adjacent fertile soils. Soon after arriving, early settlers constructed a wharf and shipbuilding became a leading industry. As the century closed there were at least 400 houses supported by grist- and sawmills, tanneries, cooperages, breweries, and bakeries. Local residents worked as shipwrights, housewrights, blacksmiths, masons, cordwainers, mechanics, silversmiths, and other artisans. Settlement focused around the town spring, and nearby early hide-tanning pits, adjacent to a stream in the area around today’s Colony House.

Rhode Island's early prosperity derived from trade with England and Newfoundland as well as with the towns along Long Island Sound and the Carolina counties (James 1975). In these markets, Rhode Islanders sold meat products, as well as cattle fattened on the rich lands around Narragansett Bay. Eventually, that trade grew to include wood and timber, as well as garden produce, butter, cheese, flour, tobacco, fish, furniture, and silver. By the early decades of the eighteenth century, Newport's seaborne commerce gave it economic dominance, but was challenged for prominence by Providence to the north. By the middle of the century, Newport was one of the most prosperous ports in the colonies and was the major slave port of the British Empire. Known as "Triangular Trade", the slave trade had three components: the capture or purchase of slaves from Africa; the exchange of slaves for molasses in the Caribbean; and the sale of molasses for rum in Newport and adjacent maritime towns. Not all slaves were traded in the Caribbean; some were brought north where they were sold to coastal plantation owners, or retained as agricultural laborers, domestic servants, or common laborers in Rhode Island, Connecticut, and Massachusetts (Chan 2007). Rhode Island's slave-owning families included the Channings and Ellerys of Newport, as well as the Browns of Providence, and the large de Wolfe family of Bristol. In 1774, Newport outlawed slavery, a decision that would have negative consequences on the City's economic success.

Newport and Providence created a united front during the Revolutionary War (1775–1783), although neither suffered direct attack. Providence is the commercial center of the state and governmental capital today, but its primacy could not have been predicted in the years when Newport's position on Aquidneck Island granted it supremacy in seaborne commerce and trade. Newport's harbor was protected and deep, thereby facilitating commercial trade and transportation and giving it a maritime edge over other nearby towns, such as Jamestown, Middletown, and Portsmouth. At the furthest point of Narragansett Bay, Providence remained relatively safe from harassment, but Newport was vulnerable to maritime attack. British troops occupied Newport between 1776 and 1779 and Newporters witnessed the destruction of their maritime trade during the occupation. After the war, Newport's economy revived through maritime trade with the Orient, and, to a modest degree, the growth of commercial whaling and the sale of whaling byproducts. Some coal-fired industries prospered in the early decades of the nineteenth century, including the Newport Steam Mill, the Perry Mill, the John D. Williams Woolen Mill, and the Coddington Mill in the southern Thames Street waterfront area. Local mills produced cotton goods, particularly print cloths. Distilling, however, was the most important manufacturing activity, producing rum and gin for local consumption as well as foreign distribution.

During the American Civil War, Newport developed as a naval port and became home to the Naval War College. Nearby, the Navy operated a torpedo station on Goat Island. Newport lacked powerful rivers and thus did not participate in the extensive river-powered industrialization experienced by many interior Rhode Island towns. The lack of industrial development ultimately provided an economic asset to the town when residents of Philadelphia, Boston, and New York sought more peaceful environments for their vacation homes. Eventually, Newport became a haven for writers, philosophers, and artists who

appreciated the coastal environment away from commerce and industry. Wealthy families, such as the Astors and Vanderbilts, constructed elaborate mansions overlooking Narragansett Bay, euphemistically described as “summer cottages”. Imitating the chateaux and castles of Europe, the mansions placed Newport at center stage during American’s Gilded Age (ca. 1860–1900). The D.G. Beers (1870) overview of Newport provides visual evidence of the City’s well-laid out roads along Newport Harbor and facing Goat and Coaster’s Harbor islands (Figure 4). That map also depicts the Old Colony and Newport Railroad entering town from the north, as well as the large estates arrayed at the southern end of the island facing the Atlantic Ocean.

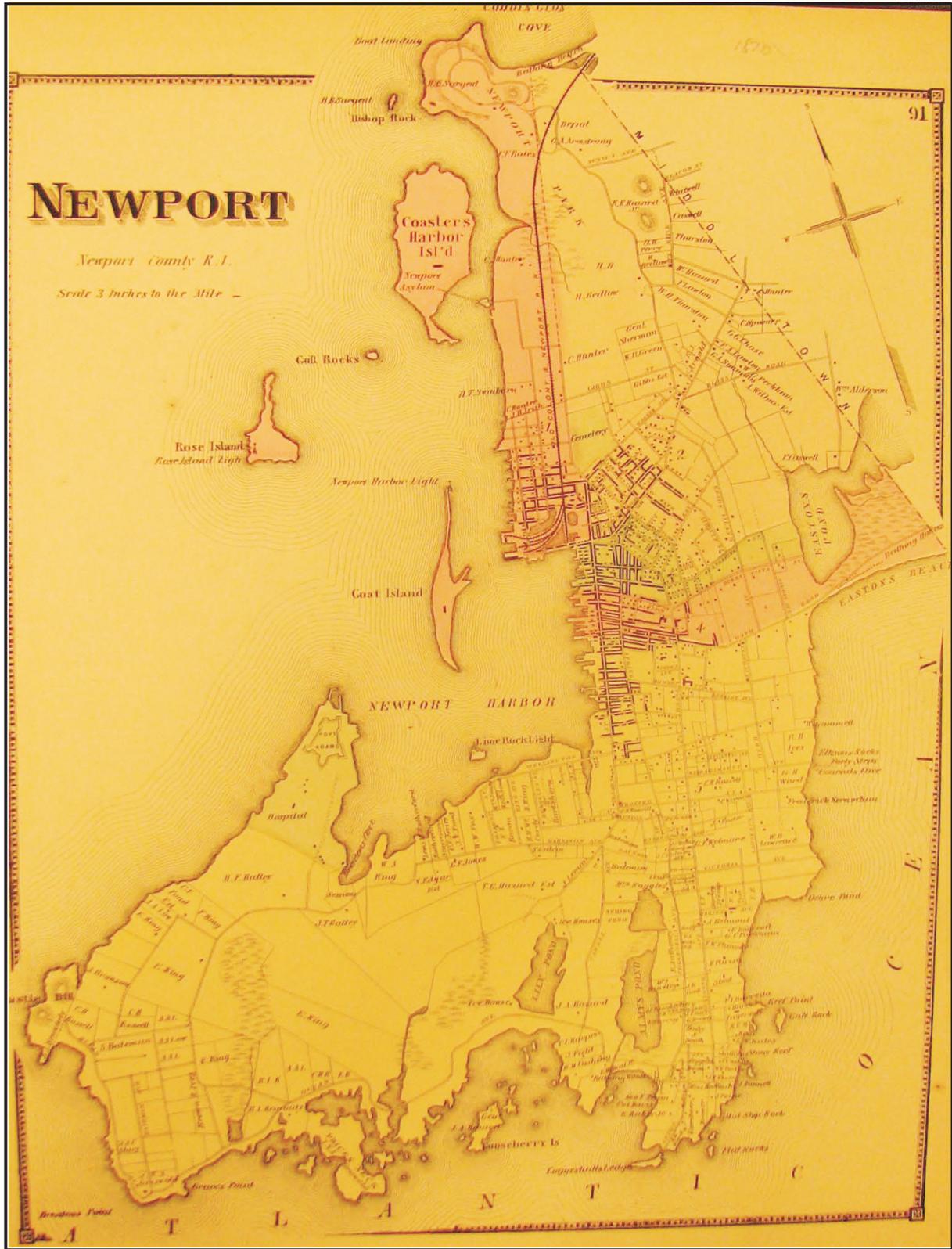
In the twentieth century, the United States Navy provided employment for thousands of Newporters through support services, including housing, grocery stores, schools, and religious institutions. Summer tourism flourished in the twentieth century as many wealthy “cottagers,” opened their Newport mansions to the public. Today, Newport draws from an extensive stock of colonial buildings to beckon tourists and visitors from around the globe.

### **3.2.2 Coaster’s Harbor Island**

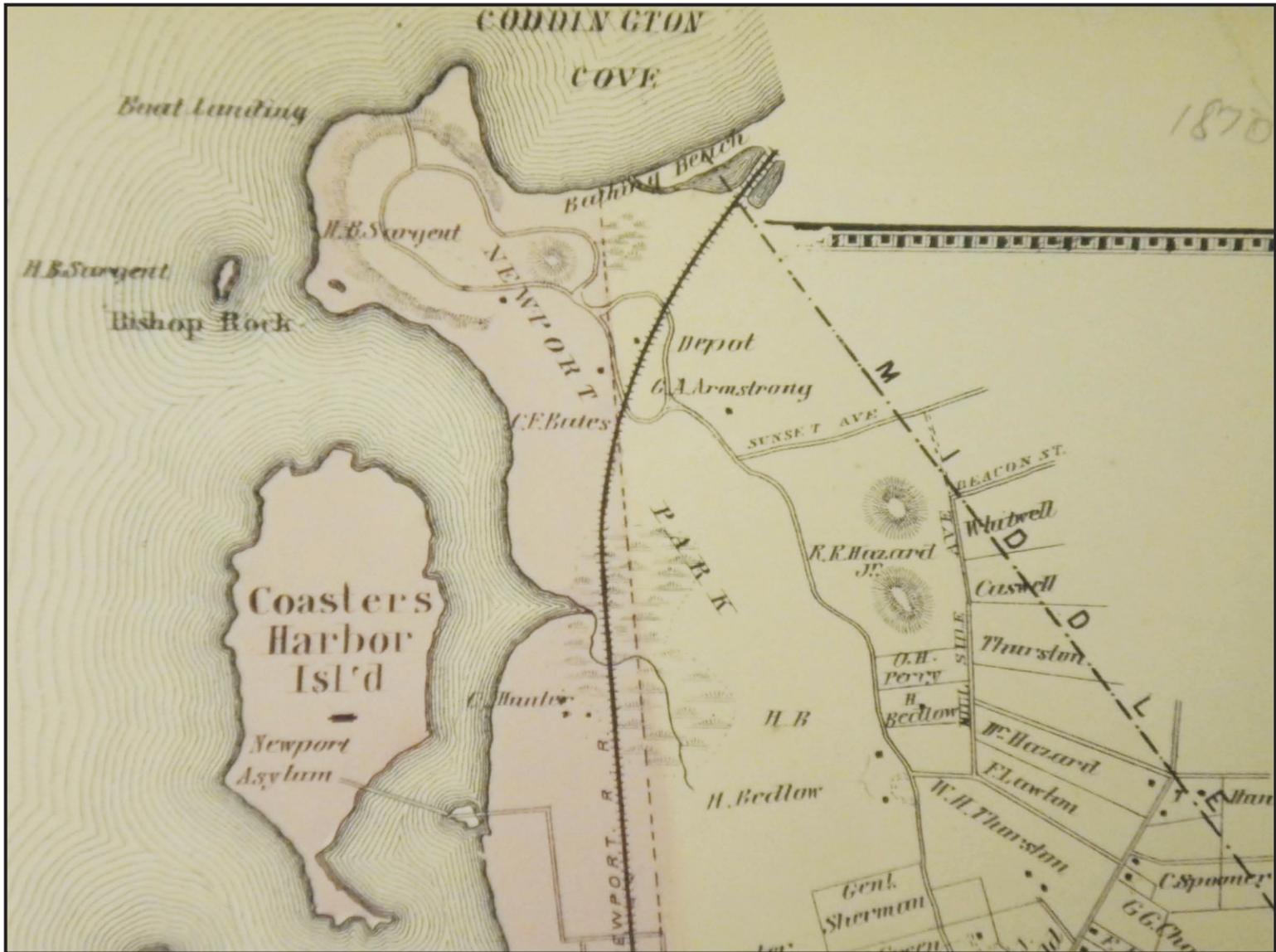
Offshore from Newport is Coaster’s Harbor Island, connected to the northern part of the city via a causeway from Training Station Road (Denison 1879). Native Americans might have visited Coaster’s Harbor Island during their seasonal rounds, and it was known to them as Woonachaset. In 1654, European settlers purchased rights to fish from and graze their cattle on the island and in 1658 John Green and Benedict Arnold (later the colony’s first governor) purchased the island outright (Williams 1937 as cited in Louis Berger & Associates, Inc. 1998:13). Coaster’s Harbor Island was kept primarily in pasturage throughout the eighteenth century although a hospital house was constructed on the island in 1716 and a second building was constructed as a de facto quarantine for people arriving by sea in 1721 (Williams 1937 as cited in Louis Berger & Associates, Inc. 1998:13-14). In 1822, Newporters built a new poor house and farm on the island, depicted in outline by D.G. Beers (1870; Figure 5). Initially called the Newport Asylum for the Poor, the hospital remained in use until 1884, when the building was taken over by the United States Navy. People who died at the asylum were buried on the island, although grave markers from their burials were later placed flat to the ground and seeded over by the Navy (*New York Times* 1886). The Island was donated to the U.S. Navy for their War College in 1882 and by the end of the nineteenth century the complex included officers’ quarters, a guard house, a reservoir, a pumping station, a gymnasium, and a target range (Everts & Richards 1895; Figure 6). The ship U.S.S. Constellation berthed at the southern end of the island, and a causeway provided overland access to Newport. Today the island is home to the Naval War College.

### **3.2.3 Rose Island**

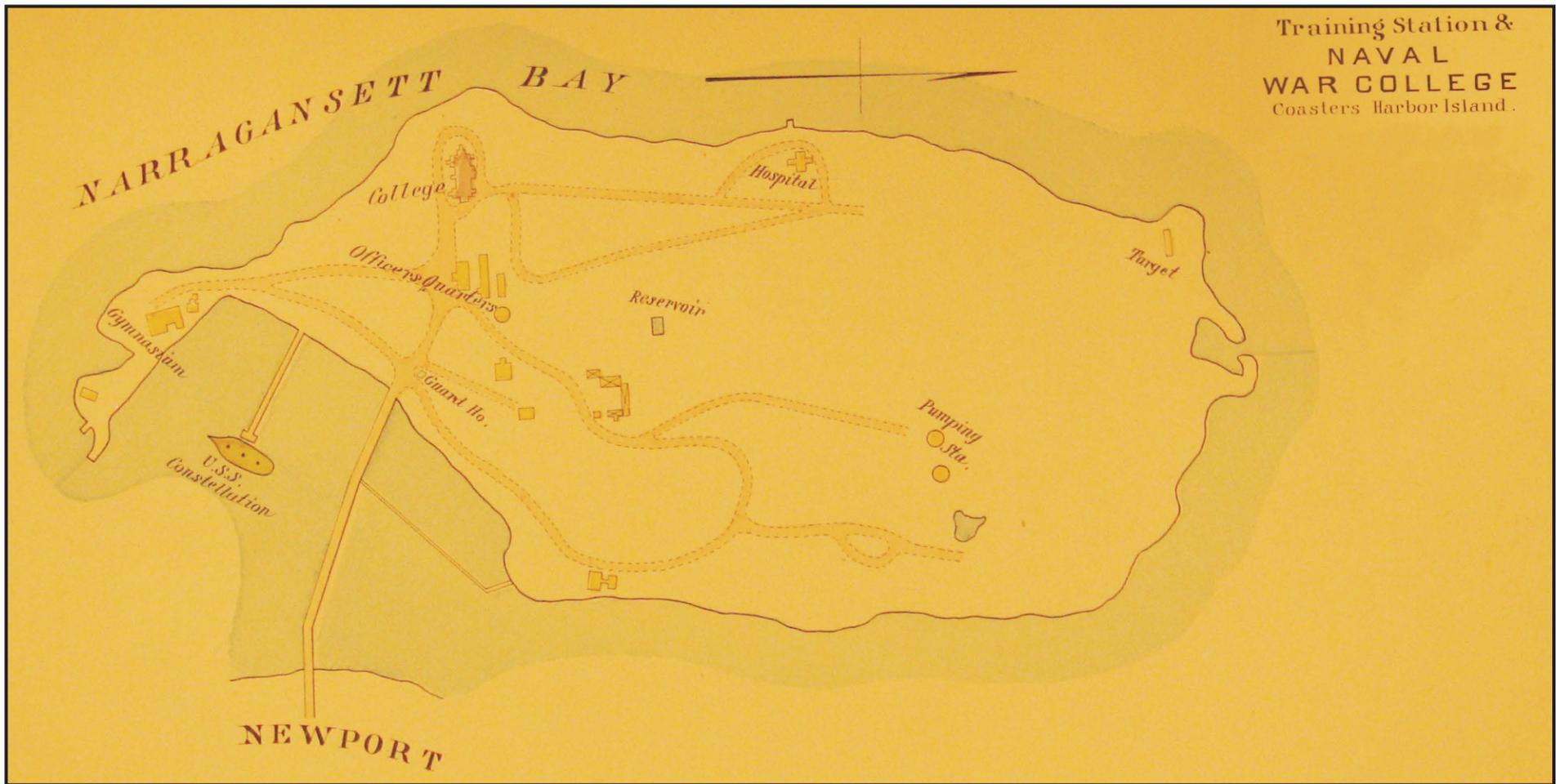
Located less than a mile due west of Newport, Rose Island occupies an area of about 18.5 acres in Narragansett Bay. The British occupied the island during the Revolution and their military battery dates to about 1778 (Rhode Island Department of Environmental Management 2009). The French General Rochambeau designed a more extensive fortification (1780–1781) after the British evacuated Newport in 1779. The newly formed nation built a third defensive structure, Fort Hamilton (1798–1800), as part of the First



D.G. Beers 1870 *Atlas of the State of Rhode Island*, Newport Detail



D.G. Beers 1870 *Atlas of the State of Rhode Island*, Coaster's Harbor Island



Everts & Richards 1895 *New Topographical Atlas of Southern Rhode Island*,  
Coaster's Harbor Island Detail