

ERDC/CERL TR-00-41

Construction Engineering
Research Laboratory



**US Army Corps
of Engineers®**
Engineer Research and
Development Center

Fort Hamilton, New York: Historic Landscape Inventory

by Adam Smith and Suzanne K. Loechl

December 2000



Executive Summary

This report provides historical context for Fort Hamilton at Brooklyn, New York that emphasizes historical changes in its landscape. The goal is to identify the different stages of landscape change as defined by military mission and historical process. This information is valuable because it:

- Enables the establishment of accurate historic district boundaries
- Provides guidance for the development of a historic landscape management plan.

This report also completes a future inventory need stated in the Fort Hamilton Integrated Cultural Resources Management Plan for Historic Landscapes.

Analysis of the information collected about Fort Hamilton resulted in a general outline of the history of the installation that is divided into four parts:

- Early Harbor Defense 1600 to 1807
- Harbor Defense 1807 to 1915
- Embarkation/Separation Center 1915 to 1955
- Post-Bridge 1955 to present

Through the use of published materials, historical documents, photographs, and maps, this report reconstructs the landscape of Fort Hamilton during these time periods. Through analysis of the historical context, Fort Hamilton has been divided into three landscape areas:

- Historic Fort
- Post Center
- Family Housing

The Historic Fort area is the only significant historic landscape at Fort Hamilton and is potentially eligible for the National Register of Historic Places using Criteria A (Properties that are associated with events that have made a significant contribution to the broad patterns of our history) and C (Properties that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction).

Foreword

This study was conducted for the Fort Hamilton, New York, under Military Interdepartmental Purchase Request MIPR9KCER18901, "Preparation of Historic Landscape Inventory and Landscape Management Plan." The Fort Hamilton technical monitor was Peter Koutroubis, Directorate of Public Works.

The work was performed by the Land and Heritage Conservation Branch (CN-C) of the Installations Division (CN), Construction Engineering Research Laboratory (CERL). The CERL Principal Investigator was Suzanne K. Loechl. The technical editor was Linda L. Wheatley, Information Technology Laboratory. Robert Riggins is Chief, CN-C, and Dr. John T. Bandy is Chief, CN. The associated Technical Director was Dr. William D. Severinghaus, CVT. The Acting Director of CERL is William D. Goran.

CERL is an element of the U.S. Army Engineer Research and Development Center (ERDC), U.S. Army Corps of Engineers. The Director of ERDC is Dr. James R. Houston and the Commander is COL James S. Weller.

DISCLAIMER

The contents of this report are not to be used for advertising, publication, or promotional purposes. Citation of trade names does not constitute an official endorsement or approval of the use of such commercial products. All product names and trademarks cited are the property of their respective owners.

The findings of this report are not to be construed as an official Department of the Army position unless so designated by other authorized documents.

DESTROY THIS REPORT WHEN IT IS NO LONGER NEEDED. DO NOT RETURN IT TO THE ORIGINATOR.

Contents

Executive Summary	3
Foreword	5
List of Figures and Table.....	9
1 Introduction	11
Background.....	11
Objectives	11
Approach.....	12
<i>Archival Research.....</i>	<i>12</i>
<i>Site Visit.....</i>	<i>13</i>
<i>Analysis</i>	<i>13</i>
<i>Integrating Results.....</i>	<i>14</i>
<i>Evaluation</i>	<i>14</i>
<i>Special Circumstances</i>	<i>14</i>
Units of Weight and Measure.....	14
2 Historic Landscape Inventory	15
Geographic Context	15
Natural Environment	15
<i>Physiography</i>	<i>16</i>
<i>Soils.....</i>	<i>17</i>
<i>Climate.....</i>	<i>18</i>
<i>Vegetation.....</i>	<i>18</i>
Historic Context.....	19
<i>Early Harbor Defense 1600 to 1807.....</i>	<i>19</i>
<i>Harbor Defense 1807 to 1915.....</i>	<i>21</i>
<i>Embarkation/Separation Center 1915 to 1955.....</i>	<i>29</i>
<i>Post-Bridge 1955 to Present.....</i>	<i>30</i>
3 Historic Landscape Evaluation	33
Overview	33
Cultural Resources.....	33
Cultural Landscape Atlas	34
1820.....	35

1856.....	36
1861.....	37
1899.....	38
1921.....	40
1943.....	42
1954.....	44
1990.....	46
1999.....	48
Future	48
Landscape Analysis	49
<i>Historic Fort</i>	50
<i>Images of Contributing Elements to the Historic Fort District</i>	52
<i>Images of Noncontributing Elements to the Historic Fort District</i>	54
<i>NRHP Evaluation of the Historic Fort Area</i>	56
<i>The Original Casemate Fort Area</i>	58
<i>The Old Parade Ground Area</i>	59
References	62
Appendix: Trees at Fort Hamilton	65
CERL Distribution	67
Report Documentation Page	68

List of Figures and Table

Figures

1	Map of the Verrazano Narrows.....	16
2	View of Fort Hamilton from the south tower of the Verrazano Narrows Bridge.....	16
3	Map of Kings County, New York (Dillard 1945)	20
4	The Narrows, 1856	22
5	Position of the Works at New Utrecht Point, 1820	24
6	View of Fort Hamilton from the Narrows	25
7	Detail of the sally port	25
8	1956 aerial view of the old parade ground looking towards the Narrows. NCO Quarters are in the foreground, and Fort Lafayette is on the island in the background.....	31
9	Plans for casemate fort and redoubt from 1820.....	35
10	This 1856 map shows the fort, redoubt, and landscape, but no other structures	36
11	1860 map of Fort Hamilton showing landowner's homes and fortification locations.....	37
12	Map of fully garrisoned installation in 1899	39
13	Map of 1921 Fort Hamilton after construction of mortar batteries.....	41
14	Fort Hamilton at peak build-out in 1943	43
15	Map of Fort Hamilton in 1954	45
16	Map of Fort Hamilton in 1990 after construction of the Verrazano Narrows Bridge	47
17	Fort Hamilton in 1999 after the new Commissary was constructed.....	48
18	Map of the three landscape areas at Fort Hamilton	50
19	View up to the old casemate from the Shore Parkway.....	52
20	View towards the old casemate and the bridge from the parapet	52
21	Jefferson House (110) facing the old parade ground	53
22	Officers Quarters (201) with bridge beyond	53
23	View of old parade ground with the back of Bldg 117 to the left and the bridge straight ahead.....	53
24	View of landscape area between Bldg 110 and Schum Avenue	54
25	The front of the Lee House (Bldg 117)	54
26	Parking around the casemate fort	54

27	Row of arborvitae along the counterscarp and below the parapet of the casemate	55
28	Chain link fence gate in front of sally port	55
29	Dumpsters, service area, and storage buildings below the escarpment.....	55
30	Map depicting subareas of the proposed Fort Hamilton Historic District	58
31	1988 map depicting placement and type of trees	60

Table

1	Fort Hamilton batteries	28
---	-------------------------------	----

1 Introduction

Background

The location of Fort Hamilton on the Long Island side of the Verrazano Narrows holds a central place in the defenses of New York Harbor. The site is associated with important historical events of the New York region including: one of the first salvos in the American Revolution on July 4, 1776; the protection of New York Harbor from the British in the War of 1812 and from the Confederates in the Civil War; soldiers from the garrison helped to quell the New York City Draft Riots of July 1863; during World Wars I and II, the fort served as a major embarkation and separation center. Today, it is the military's only installation in the New York metropolitan area and provides administrative, intelligence, operational, financial, managerial, legal, security and logistical support for all assigned and attached units. The installation also provides administrative, logistical and medical support to retirees and their dependents; reserve centers and National Guard units; and active duty personnel (including tenant and satellite units) in New York City and the surrounding counties. The installation provides housing for military, key and essential civilian personnel working on-post and in the New York City Metropolitan area.

Fort Hamilton is in the Bay Ridge section of Brooklyn, NY. It formed one half of the historic defenses of New York Harbor, with Fort Wadsworth on Staten Island forming the other half. Fort Hamilton is an irregularly shaped installation that encompasses the area between Fort Hamilton Parkway and Dyker Beach Park. The installation today is roughly two-thirds of its greatest extent during World War II, with grants to the Veterans Administration for a hospital in the northeast section and the Metropolitan Transportation Authority (MTA) for the approaches to the Verrazano Narrows Bridge in the west, and to the MTA on the south for the Shore Parkway.

Objectives

The National Historic Preservation Act of 1966 (NHPA), as amended, provides requirements for consideration of historic properties by Federal agencies. Section 106 of the NHPA requires Federal agencies to take into account the effects of

their undertakings on historic properties and consult with preservation agencies regarding these effects and possible mitigating actions before spending Federal funds on the undertaking. Historic properties are those properties that are either listed in, or are eligible for listing in, the National Register of Historic Places (NRHP). Section 110 of the NHPA requires installations and commands to develop and implement plans for the identification, management, and nomination of cultural resources.

Approach

The methodology used in this study is based on *Guidelines for Documenting and Evaluating Historic Military Landscapes: An Integrated Landscape Approach* (Army Environmental Center [AEC] 1996). These guidelines set forth an integrated archival and field research approach.

The goal of the archival tasks is to develop a statement of historic context based upon the installation's missions, primary activities, historical associations, and periods of development. The historic context is used as a guide for determining the historically significant and landscape characteristics on an installation.

The goal of the field research is to identify, document, and evaluate the characteristics of the installation landscape. The results of the archival and field research are integrated in order to make connections between the history of the installation and the evolution of its landscape.

The final step in the process involves evaluating the historic landscape to determine NRHP eligibility of the study area as a district or site. Currently, Fort Hamilton has determined eligibility status for all of the buildings on post. In the future, as buildings reach over 50 years of age, there may be more potentially eligible buildings for the NRHP.

Archival Research

Archival research involves several tasks. The first task is the initial literature review. The second is to identify and locate primary research materials.

Literature review.

The research team used secondary literature to determine the general history of the installation and the region, its natural history, and its geographical position. This involved reading published material on the history of Brooklyn, the

defenses of New York Harbor, the natural history of Long Island, and the Fort Hamilton Integrated Cultural Resources Management Plan (ICRMP).

Research material.

The research team then located primary research materials and additional secondary materials to establish a strategy to best utilize these resources. This report is based on the collections of numerous archival resources including literature, photograph collections, and maps found in the National Archives, the Library of Congress, Brooklyn Historical Society, Humanities Collection at the New York Public Library, and the Fortification Collection at the United States Military Academy. Other very important resources were at Fort Hamilton, including the Public Works Office and the Harbor Defense Museum.

Site Visit

The research team conducted site visits to become familiar with the installation and its landscape. During the site visits, researchers collected archival information from the installation and made preliminary identification of historical landscape areas. Researchers conducted site reconnaissance on foot using photography, sketches, and note taking to help determine the relationships among landscape components and landscape areas. The research team also met with points of contact at various installation offices in order to understand the installation development, land use changes, and landscape history.

Analysis

After the initial research was complete, the team analyzed the gathered information. Researchers outlined the historical context for the installation, identified changes in military mission over time, identified important chronological periods, established a geographical context, and identified historical themes. The analysis resulted in an outline of the installation divided into four significant periods:

1. Early Harbor Defense 1600 to 1807
2. Harbor Defense 1807 to 1915
3. Embarkation/Separation Center 1915 to 1955
4. Post-Bridge 1955 to present.

Integrating Results

Archival and field information was integrated throughout the course of the research. As information was gleaned from archival sources, the research team discovered relevant historical information. As the field research identified specific landscape characteristics or relationships, the research team refined the questions and looked further in the archival records for answers. The integration of archival and field methods necessitated an integration of visual, written, and oral sources in the final report. This inventory relied on maps and photographs to illustrate findings and provide evidence of the characteristics of the historical landscape areas.

Evaluation

The evaluation of the historic landscape for Fort Hamilton follows the guidelines for evaluating historic districts and sites for the NRHP as described in the *Guidelines* (AEC 1996). The three structures of the old casemate fort are already on the NRHP, and two other buildings are eligible for the NRHP.

Special Circumstances

Fort Hamilton is not a typical Army installation. There are no training areas or historic parade grounds surrounded by officer's quarters. As an urban installation, it is surrounded on three sides by one of most densely populated cities in the United States, and on the fourth by water. Because of the inevitable urban development, much of the historic fabric has been lost.

A thorough historical study of the physical development of Fort Hamilton has never been done, and much of the archival material relevant to this study was not available. Records in the Army section of the National Archives lacked correspondence necessary to explain the decision-making process regarding modifications to the landscape.

Units of Weight and Measure

U.S. standard units of measure are used in this report. Conversion factors for the relevant Standard International (SI) units are provided below.

SI conversion factors	
1 ft	= 0.305 m
°F	= (°C x 1.8) + 32

2 Historic Landscape Inventory

The geographic context, natural environment, and historic context of Fort Hamilton, and Brooklyn in general, can be characterized in terms of complex interrelationships of biophysical variables including land, climate, water, and vegetation. This section provides a regional overview of these conditions to better understand the setting of the landscape of Fort Hamilton.

Geographic Context

Fort Hamilton is at the westernmost point of Long Island. Unlike the rest of the south shore of Long Island, this stretch of the island does not have low-level barrier islands. The site of the fort sits about 50 ft above sea level and forms one part of the Narrows that divide New York Bay into upper and lower bays (see Figure 1). Fort Hamilton looks out upon the Lower Bay, the Narrows, and the coast of New Jersey in the distance. The fort is in Kings County, NY, which is also the Brooklyn Borough of New York City. Figure 2 shows Fort Hamilton from across the Verrazano Narrows.

Natural Environment

An understanding of the natural history of a region helps explain the physical character of its landscape, which in turn contributes to the understanding of the process of human interaction with the landscape. For example, the physiography of the region of Fort Hamilton helps explain how the original fortification was sited. The soils and climate of the region help explain the vegetation and land use decisions.*

* The natural environment section was taken from the Fort Hamilton ICRMP (prepared for the U.S. Army Corps of Engineers (USACE), New York District by Panamerican Consultants, Inc.) July 1998, pp 3-1-7.

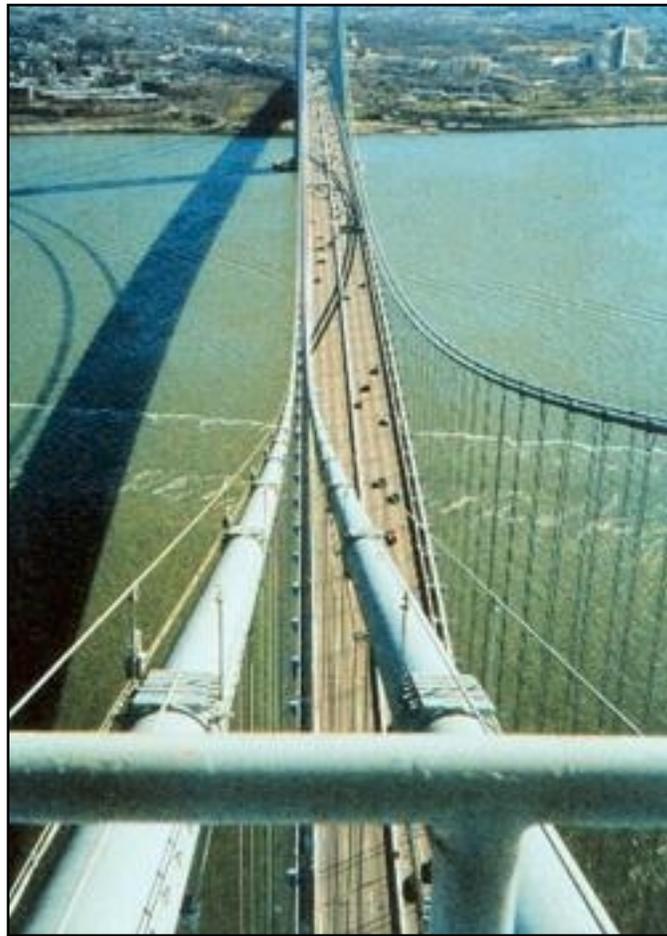


Figure 1. Map of the Verrazano Narrows (upper left).

Figure 2. View of Fort Hamilton from the south tower of the Verrazano Narrows Bridge (right).
(From http://www.discovery.com/stories/technology/buildings/brdg_exp6.html).

Physiography

With level to gently sloping topography, the elevations within Fort Hamilton range from sea level to 50 ft above sea level, with an average elevation of about 30 ft above sea level. The fort is within the coastal plain on the main moraine ridge that extends to the east across Long Island (Facility Engineers Office 1991, Historic Preservation Office 1996, Cressey 1977). The variable topography of the terminal moraine has been altered in the Fort Hamilton area due to historic cut and fill operations related to changes in the fort's mission. In general, land surfaces within the fort and the surrounding area have been modified by extensive civilian and military excavations and construction activities during the last 160 years, including construction of housing units and other structures at the installation, and the construction of the adjacent transportation routes, including the Shore Parkway and the approaches to the Verrazano Narrows Bridge (Facility Engineers Office 1991).

Situated in the Coastal Plain physiographic province of the Atlantic Coast Lowland, Fort Hamilton is positioned on the southern part of the western portion of the Ronkonkoma and Harbor Hill ridges of the terminal moraine of the Wisconsin glaciation (occurring between 14,000 and 16,000 years ago). In New York State, the Atlantic Coast Lowland only occurs on Long Island and Staten Island. In general, south of the terminal moraine a broad outwash plain slopes toward the ocean (Historic Preservation Office 1996).

Kings County is generally underlain by bedrock composed of Fordham gneiss, Hudson schist, and “an array of the early Paleozoic and Pre-Cambrian metamorphic and igneous rock” at a depth ranging from 160 to 220 ft below mean sea level (Facility Engineers Office 1991). These types of rock predominate at the installation. Above the bedrock, the general stratigraphy consists of levels of thick clay and thick sand formations. These sedimentary strata are intermixed with clay and a glacial outwash that includes cobbles that tend to increase in both size and frequency closer to the surface. “In some places, modern estuarine deposits of clay, peat and sand may be found near the shoreline or buried under historic fill (sometimes as thick as 40 feet)” (Facility Engineers Office 1991). The next level in the stratigraphy tends to be deposits of buried mudflats, sand beaches, and glacial debris.

West of the facility, the Narrows channel reaches depths in excess of 100 ft. The submerged slope is quite steep, and fairly close to the fort. From west to east along the shore, the slope away from the installation becomes less severe entering Gravesend Bay, which reaches a depth of 20 to 35 ft. However, land alteration activities (e.g., excavation and construction of earthworks for the fort, the erection of housing and other structures, and the creation of adjacent highways) have modified the general landforms underlying the reservation (Facility Engineers Office 1991). “No significant mineral resources are found at Fort Hamilton” (Facility Engineers Office 1991).

Soils

Surface deposits within the Fort Hamilton reservation are largely fill, which cover a sequence of buried mud flats, sand beaches, and glacial debris. Also found are thick deposits of sand and clay, and bedrock composed of schists, gneisses, and granites (Klein et al. 1986; Facility Engineers Office 1991). Modern estuarine deposits of clay, peat and sand may be found near the shoreline or buried under historic fill, which can range in thickness from 3 to 40 ft (Facility Engineers Office 1991). The results of previous archeological excavations suggest that the soils within the reservation comprise a layer of dark brown sandy loam (which may be fill) over strata of reddish brown sandy silt, with the size

and frequency of cobbles increasing with depth, or mottled brown silt and coarse sand (Klein et al. 1986).

Historically, an extensive wetlands area was situated in the eastern portion of the installation (see Figure 13), but was filled with hydraulic and dry fill during the 20th century. In addition, the marshy areas along the shore received similar fill to an elevation of 10 ft or more to support the Shore Parkway (Beers 1873; Robinson 1889; Facility Engineers Office 1991).

Climate

Although lying within the province of a maritime climate, Kings County has weather patterns more closely resembling a continental variety, since fronts and storms that affect the area generally arise from the interior of the United States and Canada. However, these weather patterns can be modified or displaced by systems from the tropics, as evidenced by the incidence of “Nor’easters” during the winter and the occasional tropical storm in the late summer. During the winter, cold air masses from Canada prevail, affecting the area to a greater extent than during the summer. While winter temperatures average 33 °F, low temperatures can dip into the teens for extended periods, with January and February the coldest months. Average seasonal snowfall amounts hover around 30 in., although single snowstorm amounts can reach double digits on occasion (Klein et al. 1986).

During the hot, humid summer, the area’s average temperature is 69 °F, although summer temperatures can reach over 100 °F for extended periods, especially in late July and August. While Kings County suffers from strong late afternoon thunderstorms during the summer, the fort’s proximity to open water allows good wind circulation. Annual precipitation averages about 41 in., with a fairly even distribution of moisture throughout the year (Klein et al. 1986).

Vegetation

The plant and animal species characteristic of the Fort Hamilton area are dramatically different today than when Europeans first encountered Native Americans nearly 500 years ago. Located in “a densely developed urban environment,” Fort Hamilton, according to the Facility Engineers Office, has undergone “extensive development” which has left the installation with “no areas . . . in their natural state.” (Facility Engineers Office 1991). Furthermore, the facility neither includes valuable vegetation or wildlife areas nor offers “shelter or forage for wildlife.” (Facility Engineers Office 1991).

While the installation has tree groves and tree-lined streets, as well as broad lawn areas, most of these planted “trees generally date from the later parts of the 1800s and the early parts of the 1900s with lesser numbers in the last 30 years.” (Facility Engineers Office 1991).

Historic Context

This section synthesizes the historic context of Fort Hamilton. It begins with the early harbor defense for the area, the construction of the actual casemate fort, the change to an infantry post, and the switch to its current mission.

Early Harbor Defense 1600 to 1807

The first development in the vicinity of Fort Hamilton occurred in 1657, when Jacques Cortelyou planned the town of New Utrecht in the New Netherlands colony. A blockhouse was constructed at Denyse’s Point for protection against smugglers and pirates accessing the new town via the Narrows. In 1663, John Scott seized this blockhouse, fired one of its guns, and proclaimed Charles II as the sovereign over New Utrecht. One year later, in August 1664, an English soldier named Richard Nicolls sailed his warship into the deep water off the western Long Island shoreline (supposedly near Denyse’s Point), dropped anchor, and ordered the Dutch to leave their small community on Manhattan Island. A map of British western Long Island (Figure 3) details the location of the towns of Flatbush, Flatlands, Gravesend, and New Utrecht. Denyse’s Point is at the west-center of the map (Thompson 1918). The English must have recognized the importance of Denyse’s Point on Long Island and Signal Hill on Staten Island for the protection of their new colony of New York; however, there is no evidence that the British took advantage of Denyse’s Point for the location of a fort (although the British did take over a Dutch blockhouse on the Staten Island side of the Narrows) (Steinmeyer 1949). At the start of the Revolution, four houses were in the vicinity of Denyse’s Point: the Bennett House (95th and Shore Road), the Denyse House (above the wharf), and two Cortelyou residences (one directly south of the wharf and one on the other side of the marsh).*

* Dillard, images #38 and #41. The Denyse House and the first Cortelyou residence are depicted on the 1820 map (Figure 9).

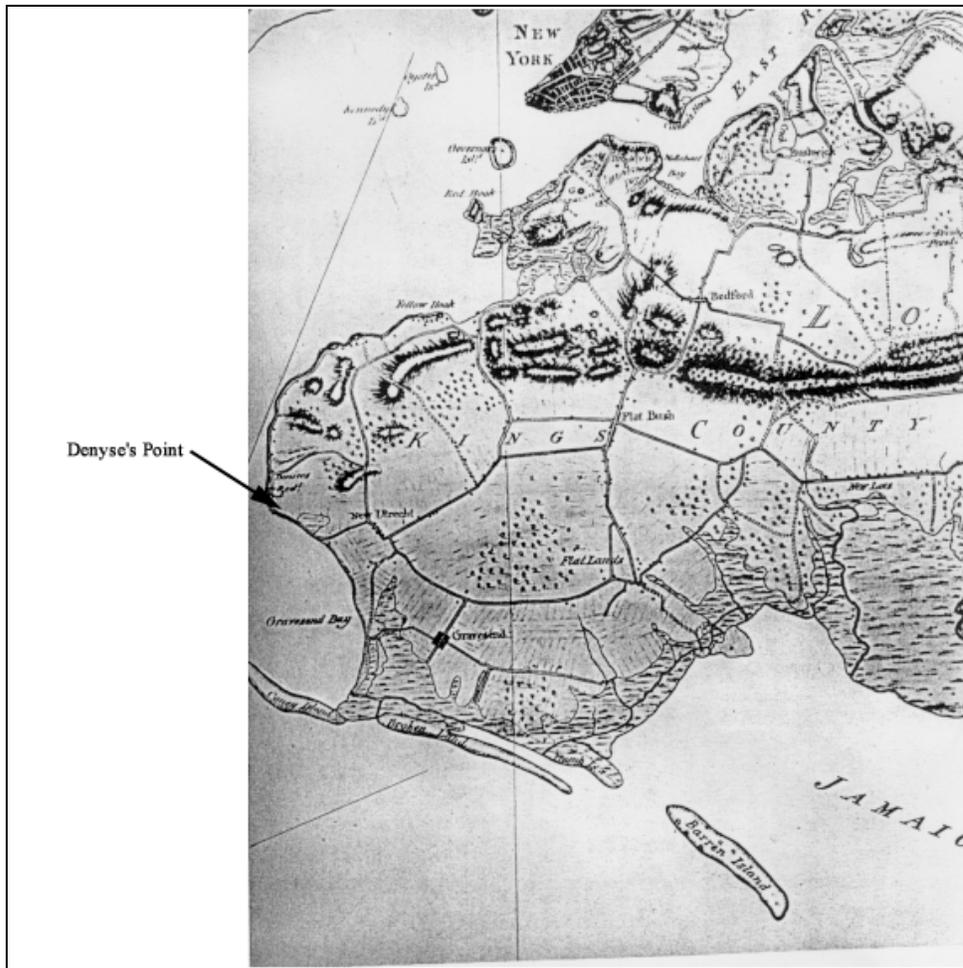


Figure 3. Map of Kings County, New York (Dillard 1945).

At the end of June 1776, British General William Howe arrived off Staten Island, in Lower New York Bay, with a large fleet. Patriot Henry Knox entered the New York area through Long Island with heavy cannons and mortars from Boston. On June 30 the first of General Howe's troops disembarked to Staten Island. In early July a patriot battery located on Denyse's Point fired on more of the invading British fleet. The battery was quickly silenced by the HMS Asia. Vice Admiral Richard Howe arrived off Staten Island on July 12 with 150 transports of reinforcements, raising the total strength of British forces to 32,000. On August 22 General Howe moved 20,000 troops across the Narrows, through Denyse's Wharf, up the bluff, and through the low-lying marsh area* to the east of the Wharf (Brooks 1900), all in preparation for the meeting with General George Washington's troops in Brooklyn. The Battle of Long Island ensued and, with his

* After World War I this marsh was filled for the World War II temporary barracks area.

troops outnumbered, Washington retreated to Manhattan on August 29, leaving Brooklyn and the site of Fort Hamilton under British control for the remainder of the American Revolution (Thompson 1918).

There is no documentation of the British fortifying Denyse's Point further during the American Revolution, although they did keep a garrison of soldiers there to protect New York Bay from raids. There is also no documentation for what occurred to the battery at Denyse's Point at the end of the American Revolution. It is known that the fortifications on Signal Hill, Staten Island on the opposite shore of the Narrows were abandoned in 1783, and it could be assumed that whatever the British left at Denyse's Point was abandoned as well (Steinmeyer 1949).

Harbor Defense 1807 to 1915

It was not until 1807 that the United States paid attention to militarily protecting the Narrows. During the first decade of the 18th century, there was increasing hostility between the United States and the British over control of the seas. In 1807 Colonel Jonathan Williams, Chief Engineer, recommended that a battery be constructed at Hendrick's Reef (the location of Fort Diamond, renamed Fort Lafayette) off the Long Island-side of the Narrows with 72 guns to protect the entrance to New York Bay. In that same year at Signal Hill on Staten Island, New York State started construction on Fort Tompkins, which was later taken over by the U.S. Army. Fort Tompkins was finished in 1812 and Fort Diamond in 1818. Fort Tompkins would later be augmented by the construction of Forts Morton, Hudson, and Richmond as proposed by Captain Robert E. Lee in the early 1840s (see Figure 4). The United States acquired 90.81 acres of land and water rights for construction of Fort Lewis, a blockhouse and earthwork on the bluff above Denyse's Wharf that augmented Fort Diamond in 1812.

After the War of 1812, a program for the construction of permanent coastal defenses (named the Third System) was initiated (Fort Diamond and Fort Lewis were the Second System). Along with this program, the states ceded to the U.S. government land for this purpose of coastal fortification. With the land grant from the State of New York, plans were crafted for a large-scale granite fortification to protect the entrance to New York Harbor. The new Fort Lewis was to be constructed out of granite in a quadrangular form with the long side of the fort facing the Narrows. The granite wall protected the casements where the guns fired out upon the water, and was surmounted by a parapet, which served as a shield for the guns mounted on the ramparts above the casements. This wall grows directly out of the bluff above Denyse's Wharf, overlooking Fort Diamond,

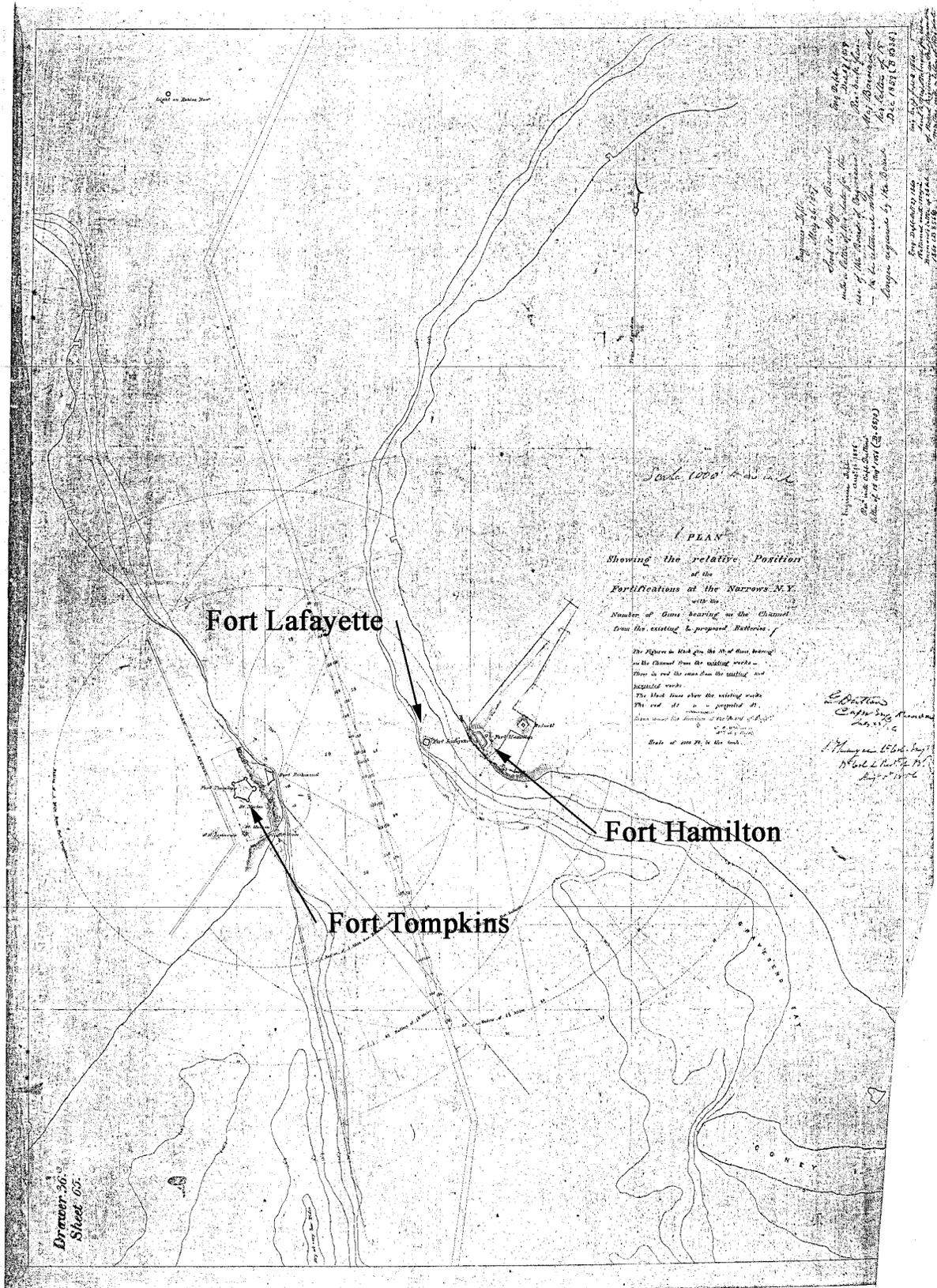


Figure 4. The Narrows, 1856.

providing good protection of the Narrows. The location also provides good sight lines out into the Lower Bay. A dry ditch surrounded the other three sides, and on top of the outer wall of the ditch was another rampart several feet below the level of the glacis. In the center of the landward side of the fort was a caponier to protect and defend the sally port from attacks. About 300 yd from the landward sally port, a redoubt protected the highest point of land on the reservation. The redoubt was connected to the main fort via a tunnel and by path. The fort was designed to mount 70 guns and would require a peacetime garrison of 100 soldiers, increasing to 1,000 soldiers during wartime (Harwell 1961).

The plans for the new Fort Lewis were approved on August 25, 1824. The necessary surveys for the plans and the augmentation of Denyse's Wharf for receiving construction materials were finished at the end of that year. Ground was broken for the fort on April 26, 1825, with the cornerstone laid on June 11. In 1826, an additional 17.42 acres was acquired, giving the fort a total 108.33 acres of land and water, of which 72.28 acres was land. On July 10, 1831 the fort was finished. Battery F of the Fourth Artillery, a subunit of Fort Columbus (presently Fort Jay) on Governors Island, garrisoned the new fort.

No records were found to show when the new fort was christened Fort Hamilton, thus there is no proof that it was named for Alexander Hamilton. It is known that in 1791 a frontier fort in Ohio was constructed and named for him (Miller 1904). That Fort Hamilton was abandoned at the close of the War of 1812. Hamilton did serve in the New York area during the Battle of Long Island in August 1776, but it is unclear whether he was among the patriots who fired upon Howe in July 1776. The 1820 map (see Figure 5) that details the construction of the new fort is titled "Position of the Works on New Utrecht Point at the Narrows," and no mention of "Hamilton" was made in the comments. In 1836 a railway company was formed with the name Brooklyn, Fort Hamilton, and Bath (Thompson 1918). The 1856 map does label the structure "Fort Hamilton." It stands to reason that, with the abandonment of the Fort Hamilton in Ohio, a new fort would be named after Alexander Hamilton, especially one located in the area of the Battle of Long Island, where he played such a pivotal role in the American Revolution.

When the fort was completed in 1831, the nearest churches were in downtown Brooklyn. The Denyse family donated land for a church, and the garrison soldiers performed the labor for the construction of it on Smith Road (now Fort Hamilton Parkway) and Church Street (99th Street) (Thompson 1918). On July 16, 1835, the Episcopal bishop of New York consecrated St. John's Episcopal

Church*, with the entire garrison of Fort Hamilton in attendance (www.thehistorynet.com/AmericasCivilWar/articles/03965_text.htm).

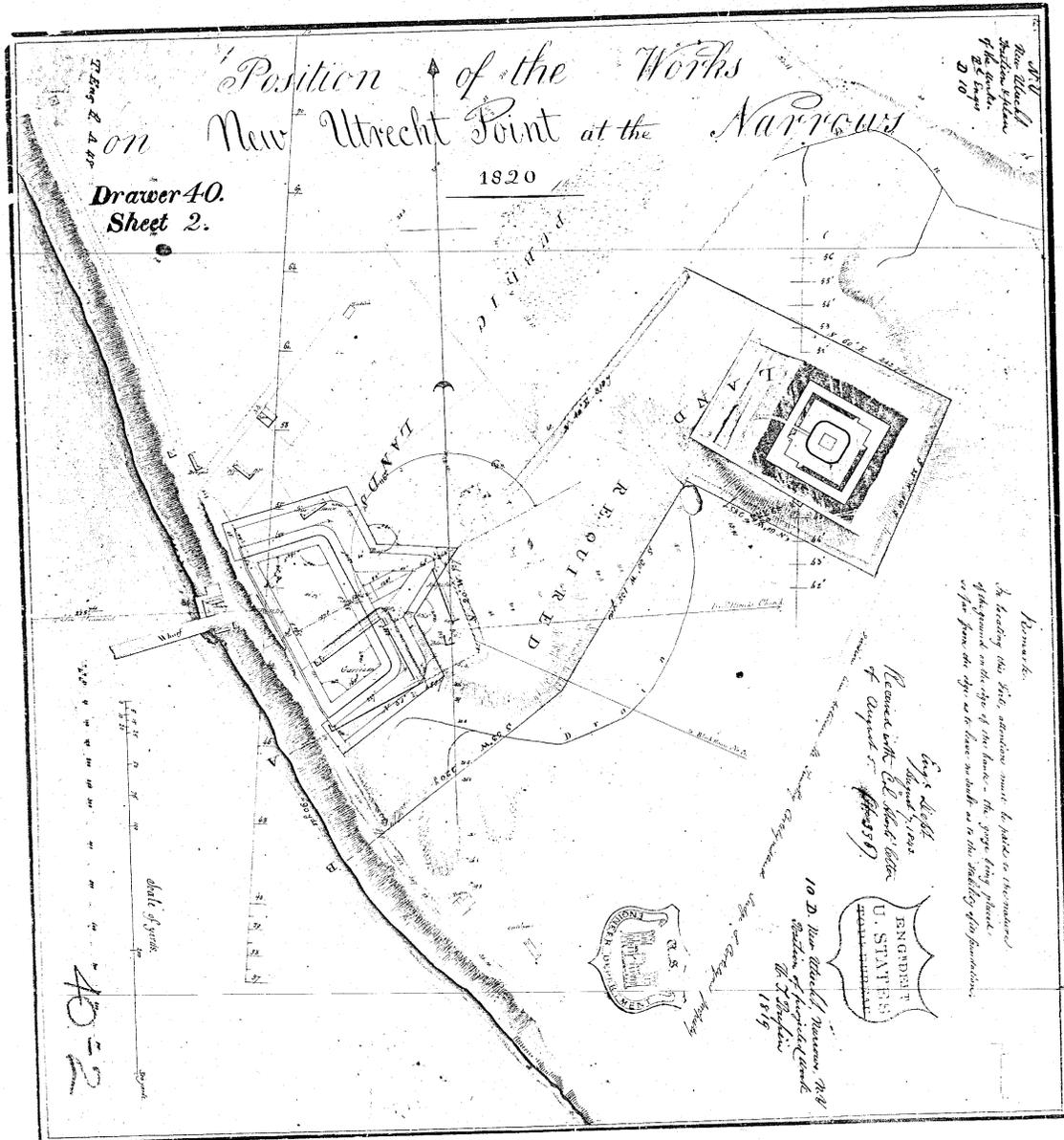


Figure 5. Position of the Works at New Utrecht Point, 1820.†

* St. John's nickname is the Church of the Generals.

† From Fort Hamilton DPW.

The granite wall of the quadrangular fort is shown in a sketch from 1840 (see Figure 6), with its casements and parapet. In the center of the wall is the large sally port flanked by two columns each and topped by a pediment. A Civil War daguerreotype details the sally port; however, the embrasures are bricked over (see Figure 7).*



Figure 6. View of Fort Hamilton from the Narrows.

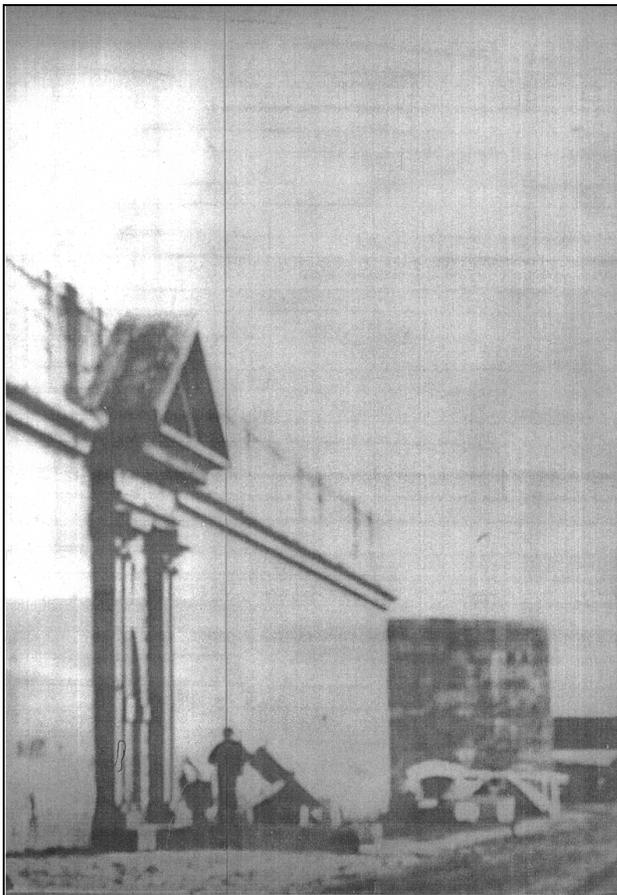


Figure 7. Detail of the sally port.

* This was designed and constructed under Robert E. Lee in 1842.

In 1841, Captain Robert E. Lee was assigned to Fort Hamilton as an engineer to improve the fort's defenses, waterproof it, and upgrade its batteries. During Captain Lee's tenure, the fort became a substantial emplacement with fourteen 42 pounders, eighteen 32 pounders, eight Howitzers, and various mortars. Lee also reformed the redoubt with granite walls (Long 1992). Tradition at Fort Hamilton had Lee and his family residing in a frame house (Bldg 117) on the path between the fort and the redoubt. Research, however, by "Klein et al. (1986) and Mariani & Associates (1988) asserted that the structure was built circa 1858, which would preclude an association with Robert E. Lee, who left the fort prior to 1848. Panamerican Consultants Incorporated conducted a thorough examination of existing documents and cartographic information as well as an archaeological investigation at Building 117 (Schieppati et al. 1998). PCI's results concur with the previous evaluations" of Bldg 117 (Fort Hamilton ICRMP 2000). In addition to this evidence, letters between Lee's family and other family members give the impression that the family resided in a house the government acquired with the original grant of land for the construction of Fort Hamilton (Harwell 1961). While he was stationed at Fort Hamilton, Lee was a vestryman at St. John's Episcopal Church from 1842 to 1844. Lee left Fort Hamilton in 1846.

The next historical figure at Fort Hamilton was Lieutenant Thomas (Stonewall) Jackson, an artillery officer serving at the fort after returning from the Mexican War in 1848. Jackson was baptized at St. John's Episcopal Church on April 29, 1849; his sponsors were the Fort Lafayette Commanding Officer Justin Dimick and the Fort Hamilton Post Commander Francis Taylor (www.thehistorynet.com/AmericasCivilWar/articles/03965_text.htm). Jackson spent most of his time at Fort Hamilton serving on court-martials there and at other installations in the region. He left Fort Hamilton in 1850, and was replaced by Lieutenant Abner Doubleday who was stationed at Fort Columbus after the Mexican War. Doubleday mentions several times meeting Jackson at Fort Columbus and Fort Hamilton (Chance 1998). During Doubleday's first tenure at Fort Hamilton in 1852, the U.S. Army exchanged 11.91 acres north of the current 92nd Street for 11.91 acres north of the redoubt.

During the Civil War, the Fort Hamilton garrison expanded many-fold and Fort Lafayette became an important Federal prison for captured Confederates, including Lee's son, General William F. Lee. The Union used Fort Hamilton to train volunteer regiments and to defend the harbor, placing barrier chains and floats across the Narrows and installing the biggest muzzle-loading cannon ever cast in the United States (www.dcmilitary.com/baseguides/mdw/hamilton.html).

The post commander during the first months of war was Abner Doubleday, stationed at the fort for a second time after the fall of Fort Sumter in April 1861. It is probable that the soldiers of Fort Hamilton helped to quell the New York City Draft Riots of July 1863; however, in the research on the riots there is no direct link between the riots and Fort Hamilton.*

The fort expanded its structural environment to the north and to the east of the glacis prior to and during the Civil War. Generally, it seems that officer quarters were built to the north, while service buildings were built to the east. Jackson mentions the burning of stables outside of the fort in a letter to his sister on April 1, 1850 (Arnold 1916). In 1862, 21.66 acres was added south of the redoubt. The installation now contained 130 total acres, including 93.94 acres of useable land. The Post Hospital was built in 1869, along with the surgeon quarters to the north of it. South of the hospital, but north of the new batteries, other service buildings were arranged such as the blacksmiths, storehouses, and stables. In the late 1880s, a row of Officers Quarters were constructed to relieve overcrowding of quarters in the casemate fort. These quarters faced out upon the future Fort Hamilton Parkway[†] and not inward to the installation. In the 1880s another 68.89 acres of were land added to the installation for a total of 200 acres, including 162.84 acres of useable land.

The Endicott Board (presided over by Secretary of War William Endicott) was a joint Army and Navy investigation into developing new defenses. Its 1886 report detailed and recommended that a new line of batteries be built at 29 locations. In 1888 Congress created the Board of Ordnance and Fortification to test weapons and implement the new program. The failure of the Third System forts under intense artillery barrage during the Civil War led to designs for widely separated concrete emplacements, having underground magazines and earthen and concrete parapets. In 1898 the outbreak of the Spanish-American War renewed the coastal defenses across the country, which included Fort Hamilton. Batteries were spread south of the old fort along the bluffs, and the Narrows were filled with mines. Table 1 lists these batteries in order of first year of construction.

* There is mention of Fort Columbus and, since Fort Hamilton was part of the Fort Columbus command structure, it is probable for Fort Hamilton to have been part of action to quell the riots.

† Fort Hamilton Parkway has had several different names: Smith, Franklin, and United States.

Table 1. Fort Hamilton batteries.

Battery	Artillery	Years in Use
Griffin	Two 4.7" British Armstrong guns	1899-1913
	Two 3" masking pedestal mount	1902-1920
	Two 3" pedestal mount	1903-1946
Gillmore	Four 10" disappearing carriage	1899-1942
Spear	Three 10" disappearing carriage	1898-1917
Doubleday	Two 12" disappearing carriage	1900-1943
Neary	Two 12" barbette carriage	1900-1937
Piper	Eight 12" mortar carriage	1901-1942
Brown	Two 12" disappearing carriage	1902
Johnston	Two 6" pedestal mount	1902-1943
Burke	Two 6" pedestal mount	1903-1917 (guns to Fort Tilden)
Livingston	Two 6" disappearing carriage	1905-1948 (two guns to West Point)
Mendenhall	Four 6" disappearing carriage	1905-1917*

* Adapted from Mark A. Berhow, *Modern American Seacoast Defenses: A List Of Military Reservations and Concrete Gun Batteries, 1890-1950* (Mark A. Berhow, 2000), p 9.

In 1905, President Theodore Roosevelt convened another board, this one under his secretary of war William N. Taft, to update and review the progress on the Endicott Board's program. The Taft program fortifications differed slightly in battery construction and had fewer numbers of guns at a given location than those of the Endicott program. During the 10 yr prior to World War I, new naval guns could bypass any coastal fort, and many of the guns of Fort Hamilton were removed and placed for service on ships or overseas. Fort Hamilton was reduced to an enlistment and training center at the beginning of World War I.

With the construction of the new Endicott batteries, it was found that Fort Hamilton did not have enough suitable barracks for the staffing of the batteries. On November 28, 1899, Captain S.E. Allen, Quartermaster, Fifth Artillery wrote, "the barrack buildings are almost the most remote ones of all those at the post from the guns and works which the troops are to care for and serve in drill and war." And on November 29, 1899, Colonel J.I. Rogers, Fifth Artillery, Commanding Post wrote, "the present buildings are an odd lot, located without plan, and the grounds have never been properly graded or drained...the whole condition is discreditable and calls for the reconstruction of the post on some definite and well-digested plan" (Clayton 1900). Major W.L. Marshall, Corps of Engineers, redesigned the installation with a full parade ground surrounded by the 1880s officers quarters on the west, new brick officers quarters on the south, and brick barracks on the north and east (Clayton 1900).

Embarkation/Separation Center 1915 to 1955

During preparation for World War I, Fort Hamilton ceased to consist of individual companies of the Coastal Artillery Corps (CAC), and Forts Wadsworth and Hamilton were organized and designated as the defenses of southern New York. Fort Hamilton, with more open land than Fort Wadsworth, became the leading embarkation and training center for new soldiers in the New York metropolitan area. The center joined the already existing Animal Transportation School and Bakers and Cooks School. The western portion of the installation was entirely built out with structures and the large parade ground; however, the eastern portion was still a marsh. During World War I, the CAC was involved with manning the anti-ship guns located on the various batteries of the fort. The two schools, CAC, and the embarkation center kept the installation busy. As the war wound down, the returning soldiers received their separation orders through Fort Hamilton as well (Overseas Discharge and Replacement Depot), before heading off into and beyond metropolitan New York (Sullivan 1926).

The soldiers of the Infantry Battalion were housed in the brick barracks surrounding the parade ground, while the soldiers of the Overseas Discharge and Replacement Depot were housed in temporary frame barracks south of the old redoubt. The officers of the Fort Hamilton command, including the Post Commander, were housed west of the parade ground in large frame buildings constructed in the 1870s. Warrant Officers were quartered in the townhouses south of the parade ground, and non-commissioned officers (NCOs) in frame houses north of the barracks.

Between World War I and World War II, the batteries at Fort Hamilton were being abandoned for coastal artillery installed farther away from the city, and the defense of the Narrows from Fort Hamilton became relatively unimportant. Of the 11 Endicott/Taft batteries, 7 were abandoned during or right after the end of World War I. The rest of the batteries were abandoned (although not destroyed) during World War II.* Fort Hamilton became an infantry installation.

In 1940, the U.S. Army ceded 9.70 acres of water rights in the middle of the Narrows to the State of New York, and the marshy area to the east of the main installation was filled in and leveled off. This area was the key land for the temporary barracks needed for the Embarkation and Separation Center prior, during,

* www.cdsg.org

and after World War II. It was also this flat area in the northeast corner of the installation that was ceded to the Veterans Administration for a hospital in 1945. The rest of the installation, except for the construction of temporary buildings, remained relatively intact. At the end of World War II, Fort Hamilton had 173.2 total acres, including 145.74 acres of land.

Fort Hamilton was a staging area for soldiers going to fight on the Korean peninsula. Its command was under First U.S. Army, headquartered at Fort Jay on Governors Island.

Post-Bridge 1955 to Present

The New York State Legislature authorized construction of the Narrows Bridge between Fort Hamilton in Brooklyn and Fort Wadsworth on Staten Island in 1948. The narrowest part of the Narrows was the logical place to construct the coastal defenses in the early 19th century, which also made that spot the most logical place for a bridge. The Army, however, was reluctant to relinquish any part of Forts Hamilton or Wadsworth. Over the next several years, Robert Moses, head of the Triborough Bridge and Tunnel Authority (TBTA),* gained concessions from the Army as well as paying the U.S. Army \$26 million for the land and new building construction costs at both forts. In 1949, the Army Corps of Engineers granted approval when it found that the bridge's 228-ft clearance would pose no obstacle for navigation. Construction started in 1959, and the bridge was completed in 1964.

The Narrows Bridge sliced through the western portion of the installation from 92nd Street to the Shore Parkway (see Figure 8). The connectors between the bridge and parkway curve around what was left of the old casemate fort (see Figure 16 in Chapter 3). Every building within this area was demolished; in addition, Fort Lafayette was destroyed for the construction of the Brooklyn tower. The U.S. Army used the money from the TBTA to design and construct a brand new installation east of the bridge. This construction included a new administration building, recreation and service buildings, and new housing.

* The TBTA successor is the MTA.



Figure 8. 1956 aerial view of the old parade ground looking towards the Narrows. NCO Quarters are in the foreground, and Fort Lafayette is on the island in the background.

Five apartment buildings were built in the early 1950s under the Wherry Housing Program. This program was in response to the scarcity of quality housing at military installations after World War II. “The military would assure that the installations would be designated permanent bases with an expected operation length of thirty years; and developers would construct the homes, own them, maintain them, and give rent priority to military families.” (AEC 1999). The old redoubt was destroyed and the hill that it sat on leveled, for the construction of four of the five apartment buildings (Hamilton Manor). The fifth building was at the corner of 92nd Street and Fort Hamilton Parkway (Dayton Manor).

The destruction of the old parade ground necessitated that a location for a new one be found in the eastern portion of the installation. The filled marsh was the most logical choice; however, it was ceded to the Veterans Administration. The only other location was Battery Piper and the World War II temporary buildings to the south of it. The sites of the other fortifications were needed for new officers quarters, since the existing ones on the old parade ground were to be destroyed for the bridge. These new quarters were built under the Capehart Housing Program (AEC 1999) in long linear rows with no relationship to the new parade ground on the site of Battery Piper (compare Figures 15 and 16). This demolition completed the destruction of all coastal fortifications, some in place since the 1890s. Generally, the new recreation buildings were built to the east of the new parade ground, while the new service buildings were built to its north

and west. General Lee Avenue was extended north of the new parade ground to connect with McArthur Road.*

In 1959 three acres were added to the installation along the coast, and another 10.82 acres were added in 1961 for the construction of new barracks. Both of these additions were needed as a result of the razing of the buildings for the construction of the Narrows Bridge. Another 8.48 acres was ceded in 1964 to the State of New York. Currently Fort Hamilton has 178.54 total acres, including 151.08 acres of land. Part of Battery Avenue and all of Poly Place are used by Fort Hamilton and are within the fenced boundary but are not officially part of the installation.

In the early 1970s, the command structure of the Army underwent another major reorganization, resulting in the creation of the New York Area Command (NYAC) in 1975. Although headquartered at Fort Hamilton, the installation was subordinate to Command of Fort Dix, N.J.

Fort Hamilton is currently a part of the Military District of Washington (MDW). Fort Hamilton provides administrative, intelligence, operational, financial, managerial, legal, security and logistical support for all assigned and attached units. The installation also provides administrative, logistical, and medical support to retirees and their dependents, reserve units, National Guard units, and active duty personnel, including tenant and satellite units, in New York City and the surrounding counties (Fort Hamilton ICRMP [draft] 2000).

Today, Fort Hamilton is the home of a U.S. Army recruiting battalion, and the Military Entrance Processing Station for New York City. The fort also supports over 300 Reserve and National Guard units.

* McArthur was renamed Lee, and a new McArthur Road was built on the east side of the new parade ground.

3 Historic Landscape Evaluation

Overview

It appears that only three overall landscape design schemes have ever been done for Fort Hamilton. The first one was done in 1900 by the Quartermaster's Office at Fort Hamilton, which transformed the installation from a conglomeration of buildings and streets with no overall scheme (see Figure 12) into a cohesive installation surrounding a parade ground (see Figure 13). The Construction Engineering Research Laboratory (CERL) performed the second overall look at Fort Hamilton in September 1997. This landscape design scheme involved the two main streets of the post: General Lee Avenue and Wainwright Drive, plus a Fort Hamilton sign below the fortification viewed from the Shore Parkway. Parsons Harland Bartholomew & Associates (Parsons HBA) conducted the third overall design scheme in November 1998 in their *Fort Hamilton, New York, Installation Design Guide*. They updated the Guide in their *Fort Hamilton Long Range Component* of 1999. At the time of this Historic Landscape Inventory, Fort Hamilton is updating their Master Plan and ICRMP.

Cultural Resources

Three buildings are listed on the NRHP (construction dates are in *italics*):

- 207 (The fortification of Fort Hamilton) *1831*
- 220 (A guardhouse in the northwest part of the fortification)
- 230 (The caponier protecting the north sally port) *1831*

These buildings are eligible for inclusion on the NRHP (construction dates are in *italics*):

- 113 (Old YMCA) *1925*
- 201 (Officer Quarters) *1911*

These buildings are not eligible for inclusion on the NRHP, but form a cohesive residue and reminder of the pre-World War II Fort Hamilton that was demolished for the construction of the Verrazano Narrows Bridge:

- 109 (Billeting) *1908*
- 110 (BEQ) *1910*
- 111 (Post HQ) *1938*
- 117 (Lee House) *1858*
- 206 (DOIM) *1900*

Cultural Landscape Atlas

A series of same-scaled maps were created using base maps found in the Directorate of Public Works and the National Archives. These individual maps were scanned into the computer. Each map was first cleared of extraneous material surrounding the image of the installation. The base maps needed to be modified due to the extent and breadth of extraneous material depicted on every map of the installation (e.g., the demarcation of individual parking spaces, sidewalks, and building numbers were cleared). The outlines of buildings were blocked in. Finally, each map was scaled to the same size using the original casemate and caponier as a guide for the correct scale.

These nine same-scaled maps (Figures 9 through 17) exemplify the changes in the landscape of the entire installation of Fort Hamilton from its beginnings in the 1820s until the present day.

1820

The Figure 9 map depicts the original plans for the casemate fort at New Utrecht Point (Denyse's Point), the caponier protecting the landward sally port, and the redoubt on the heights. Denyse's Wharf and three houses (along the future Fort Hamilton Parkway) were obtained along with the land for the U.S. Military Reservation. The house closest to the casemate fort is marked for the Commanding Officer. The casemate fort was placed directly on the bluff overlooking the Narrows, with Denyse's Wharf accessed from the old Shore Road. The house at the intersection of the Shore Road and the future parkway was the Denyse home.

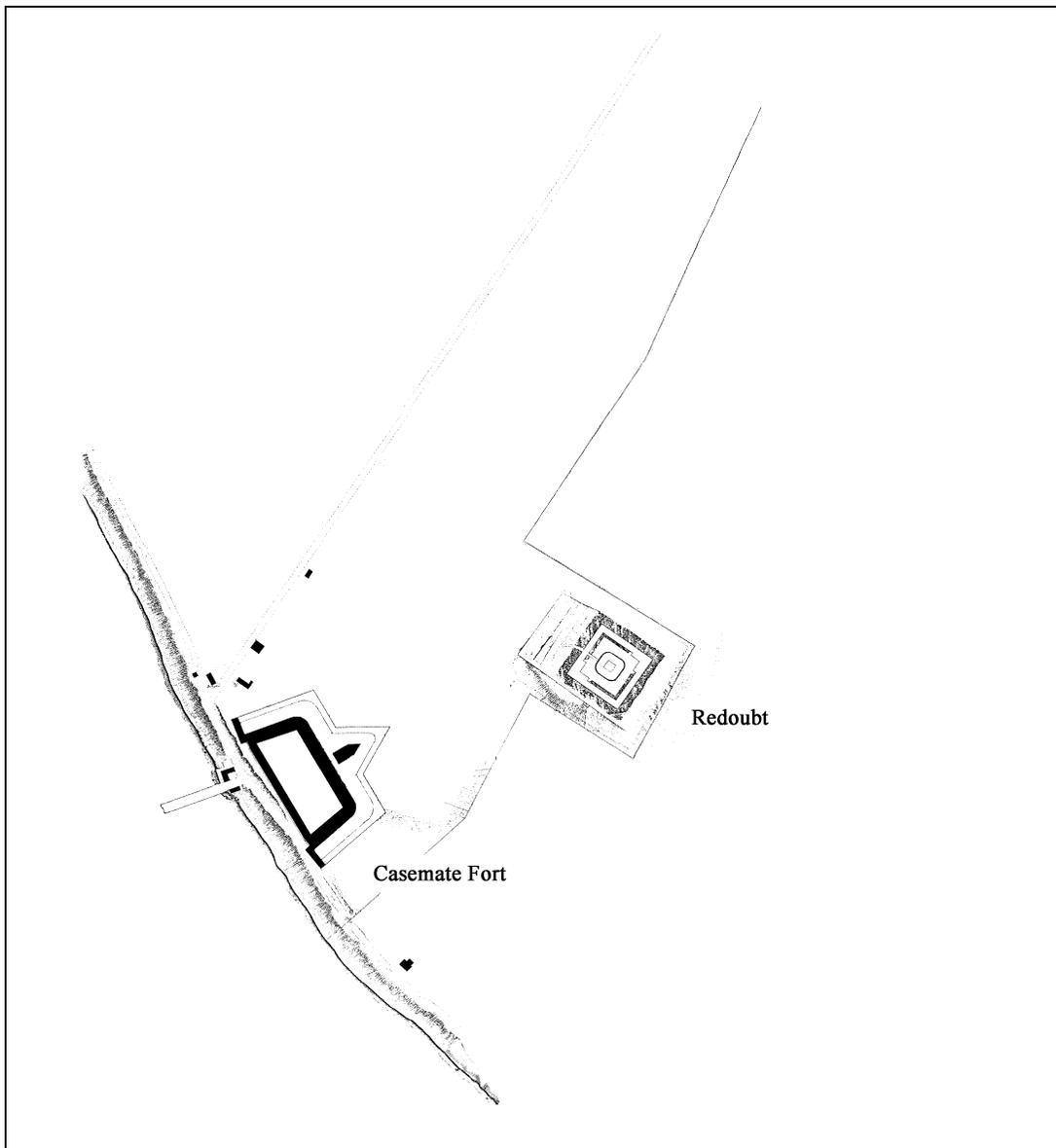


Figure 9. Plans for casemate fort and redoubt from 1820.

1856

This map depicts the casemate fort, caponier, glacis, redoubt, boundaries of the reservation, and the bluffs overlooking the Narrows. No buildings are shown within the entire reservation.

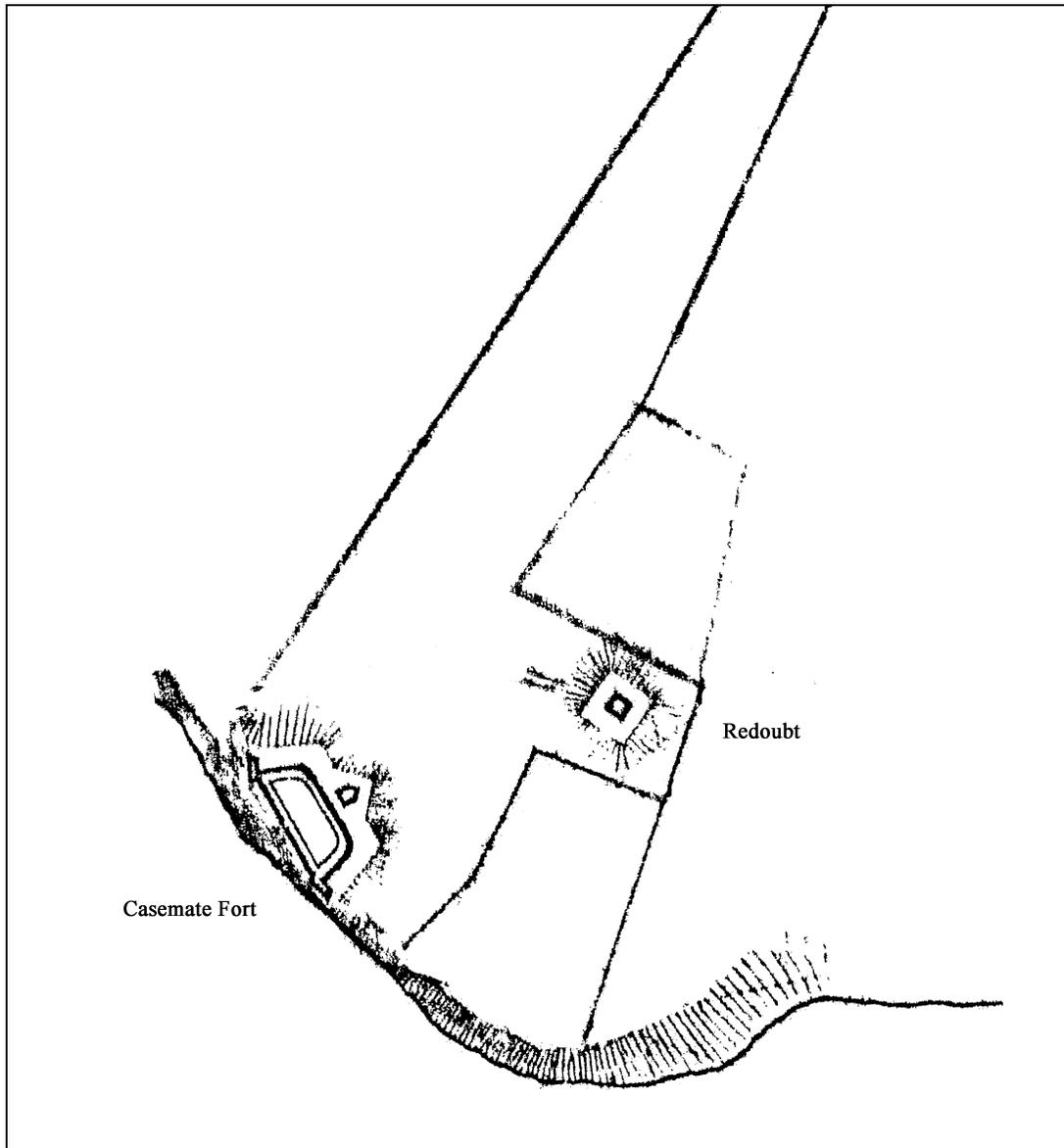


Figure 10. This 1856 map shows the fort, redoubt, and landscape, but no other structures.

1861

This map depicts the U.S. Military Reservation and the ownership of the surrounding land. The casemate fort, the redoubt, and Denyse's Wharf are shown in outline form, while the locations of the homes of the landowners are pictorial based.



Figure 11. An 1860 map of Fort Hamilton showing landowner's homes and fortification locations.

1899

This map shows a fully garrisoned installation (Figure 12). The casemate fort has not been changed, although new batteries (Battery Griffin) have been built to the southeast and below the fort.

A parade ground is shown with officers quarters (including the commanding officers') on the northwest side, the Quartermaster Headquarters (HQ), a chapel/school, commissary HQ, a company officer quarters (Bldg 117) on the southwest; and barracks on the southeast and northeast. The old Post Hospital, Hospital Steward Quarters, old carpenter shop, old blacksmith, old stables, and old storehouse are to the southeast of the casemate fort; whereas the new buildings for these facilities are in the northeast section of the fort, past the barracks.

In the northwest section of the fort, along the future Fort Hamilton Parkway, are the new Post Hospital and the Pavilion Wards of the Hospital. In the northeast section is the beginning of the NCO Quarters area. The main gate of the fort is at 99th Street and Fort Hamilton opposite St. John's Episcopal Church.

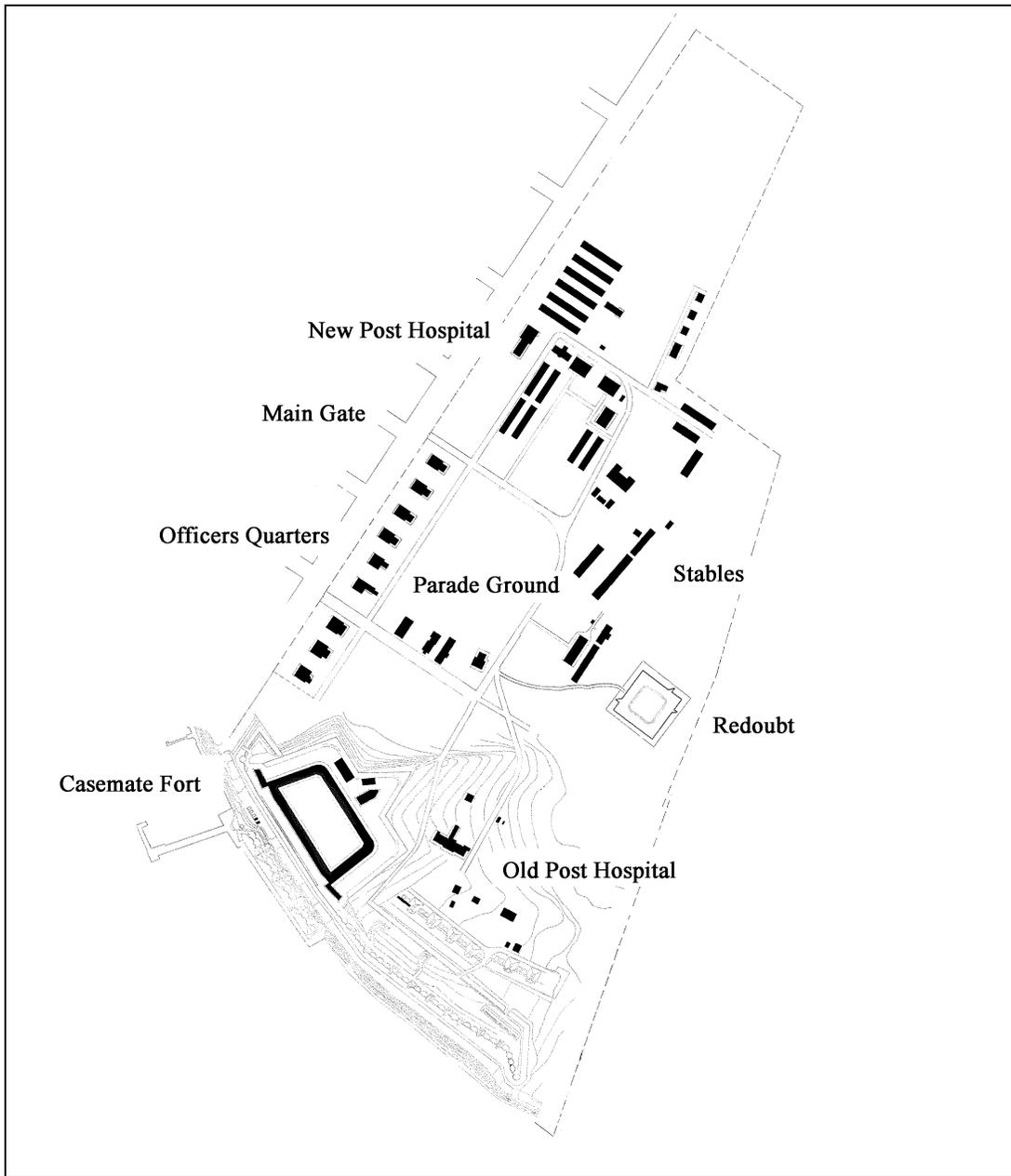


Figure 12. Map of fully garrisoned installation in 1899.

1921

The map in Figure 13 depicts significant changes between 1899 and 1921. The original casemate fort has been cut in half by the construction of a new mortar battery on the Narrows side of the Quadrangle (Batteries Burke, Johnston, and Brown). The rest of the original casemate fort is intact, including the caponier, and redoubt; however, temporary World War I NCO Quarters have encroached on the glacis. New mortar batteries extend the length of the bluff overlooking the Lower Bay (Batteries Gillmore, Spear, Neary, Doubleday, Livingston, and Mendenhall).

The parade ground is now much larger than in 1899 and has well-defined boundaries at General Lee Avenue on the southwest, Schum Avenue on the southeast, Walke Avenue on the northeast, and Hatch Avenue on the northwest. The parade ground is still divided by an extension of 99th Street. Seven of the nine officers quarters depicted in the 1899 map still line Hatch Avenue, and the one in the southeast part of the parade ground still exists (Bldg 117). The Quartermasters HQ has been transformed into the Administration Building, while the chapel/school and commissary have been torn down. Two townhouse-style brick officers quarters and a wooden officers quarters now line the area between General Lee Avenue and the old casemate fort. Two new brick barracks for the Infantry Battalion have been built along the southeast side of the parade ground. These have replaced the original barracks and stables from 1899. The temporary barracks on the northeast side have been torn down, but the permanent brick barracks have been expanded, and a Post Exchange built at the northeast corner of the parade ground.

The Post Hospital from 1899 is still there, with new hospital wards and a mess hall replacing the ones from 1899. Temporary World War I barracks and Quartermaster storage buildings complete the northwest section of the fort.

The permanent NCO Quarters area along Allen Avenue has been expanded with eight quarters, with the Hospital Steward Quarters still at the corner of Walke and Allen.

The area to the west of the old redoubt has been transformed with a new street and the stables and barracks depicted in 1899 have been torn down. The installation has expanded greatly in area to the east; however, the only constructions of note are the aforementioned batteries along the shore and the new inland Battery Piper. Between Battery Piper and Batteries Spear and Neary, the Discharge and Casual Depot utilized temporary World War I barracks. The northeast corner of the installation is marshland.

The main gate of the fort is still at 99th Street and Fort Hamilton opposite St. John's Episcopal Church.

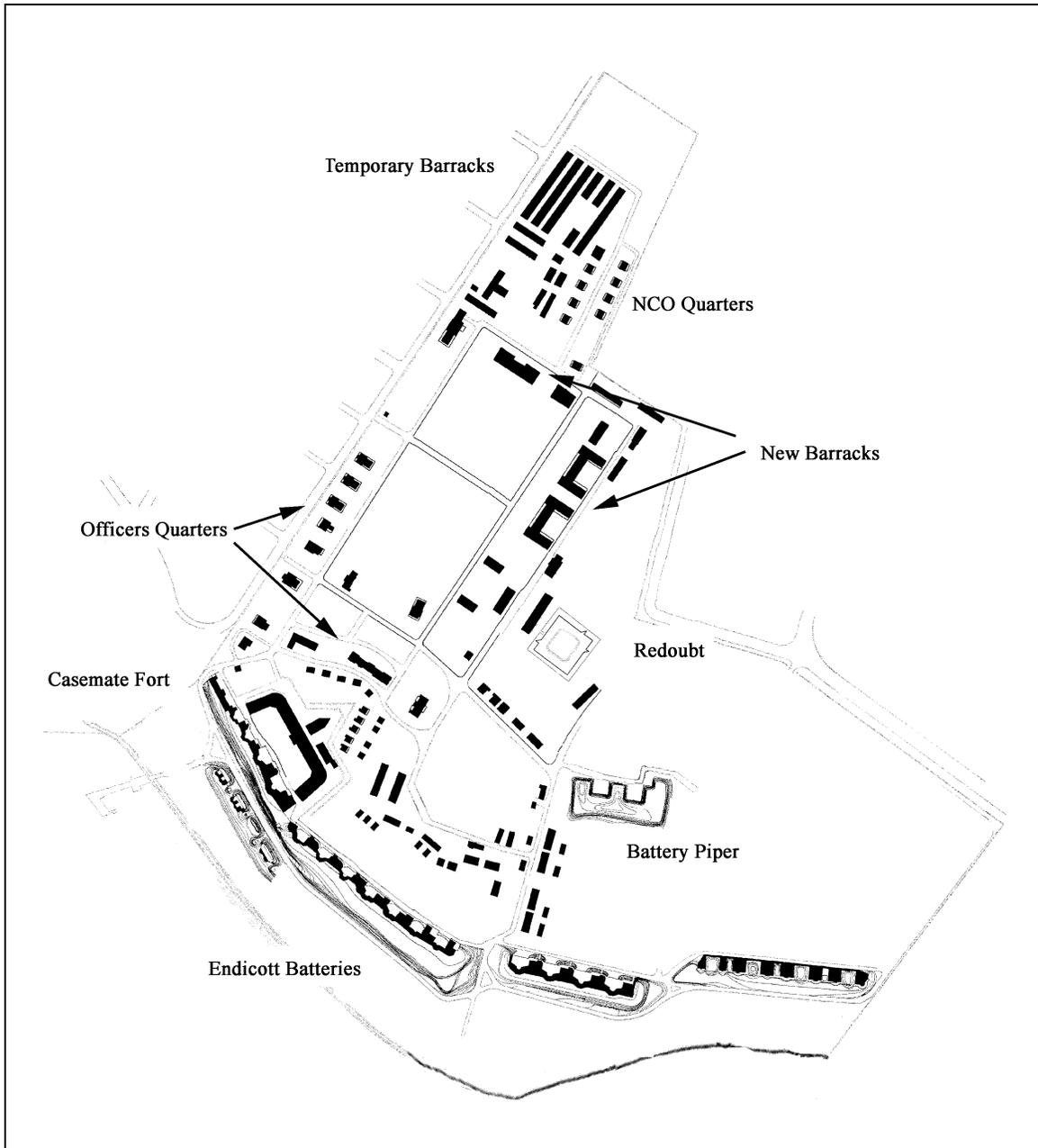


Figure 13. Map of 1921 Fort Hamilton after construction of mortar batteries.

1943

The Figure 14 map depicts the installation at its peak during World War II with the entire installation built-out. Since 1921, an Officers Club constructed on the northwest portion of the old casemate fort and temporary garages and barracks upon the glacis, has further encroached upon the old casemate fort. However, most of the temporary NCO Quarters have been torn down.

The parade ground is much the same as in 1921, but the extension of 99th Street that divided the parade ground has been removed. Three World War II temporary structures line Hatch Avenue. The Administration Building has been expanded. The streets between the brick Officers Quarters south of the parade ground have been removed. A YMCA has been built next to the two brick barracks on Schum Avenue. The area between White Avenue and the old redoubt has been fully built out. A new brick barracks is now north of the redoubt. The permanent brick barracks and the Post Exchange still complete the Walke Avenue side of the parade ground.

The Post Hospital from 1899 is still there, with new Pavilion Wards replacing the hospital wards and mess hall from 1921. Temporary World War II barracks complete the northern section of the fort.

The NCO Quarters along Ludlow is now expanded with 14 buildings. These structures are all two-story frame double houses.

The area south of the old redoubt and Battery Piper are temporary wooden barracks built for the Discharge and Casual Depot. The northeast section of the installation, previously a marsh, has been filled, and World War II temporary barracks are built upon it. The shoreline beyond Batteries Neary, Doubleday, Livingston, and Mendenhall has been filled, and the Shore Parkway built by the TBTA.

The main gate of the fort has been moved to the Shore Parkway above Denyse Wharf and below the Batteries Burke, Johnston, and Brown. A secondary entrance is off of Seventh Avenue. The historic gate and link to St. John's is fenced closed, and in its place is a new pedestrian gate one block north at Marine Avenue and Fort Hamilton Parkway.

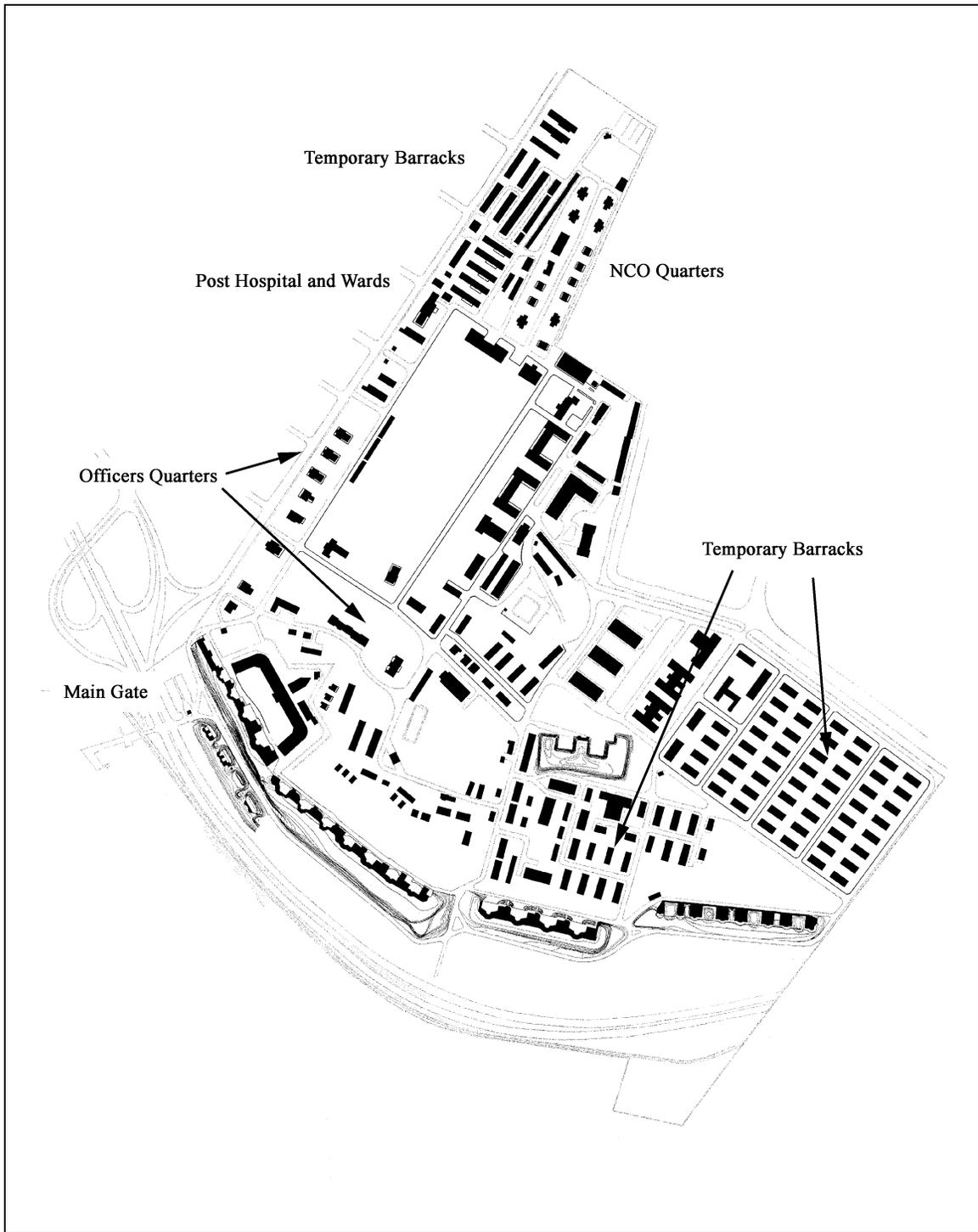


Figure 14. Fort Hamilton at peak build-out in 1943.

1954

The Figure 15 map shows major changes to the landscape of Fort Hamilton since the 1943 map. The casemate fort still exists as it did in 1943, with the Officers Club constructed on top of the northwest portion of the old casemate and temporary garages and barracks upon the glacis. All temporary NCO Quarters have been torn down. The batteries that extended along the shoreline and Battery Piper in the center of the installation are in the process of being demolished.

The area surrounding the parade ground remains largely intact from 1943 with the exception of the brick barracks and the Post Exchange along Walke Avenue that were cut off from the parade ground by the construction of U.S. Grant Avenue. Two of the World War II temporary buildings have been removed. The redoubt was destroyed and the ground leveled for the construction of Hamilton Manor, built under the Wherry Family Housing Program. Hamilton Manor consists of four six-story apartment buildings surrounding a cul-de-sac; the location of the old redoubt corresponds to the cul-de-sac.

The Post Hospital from 1899 still exists, with the Pavilion Wards and mess hall now connected via enclosed walkways. The Temporary World War II barracks and other structures are extant in the northern section of the fort. Another Wherry Family Housing Program structure, Dayton Manor, has been constructed at the corner of Fort Hamilton Parkway and 92nd Street, in the same mode as Hamilton Manor. The NCO Quarters area remains the same as in 1943.

The area south of Battery Piper still contains the wooden barracks built for the Discharge and Casual Depot. Fort Hamilton ceded the World War II temporary barracks in the northeast section over to the Veterans Administration for a hospital. In between the Shore Parkway and the batteries along Sterling Drive, four Capehart Family Housing Program buildings have been constructed; all batteries southeast of the casemate fort are slated for demolition for family housing construction.

The main gate off of Shore Parkway is closed, and the pedestrian gate at Marine Avenue and Fort Hamilton Parkway is rebuilt into the main access point for the installation, the historic link to St. John's forever lost. A secondary entrance is off of Seventh Avenue.

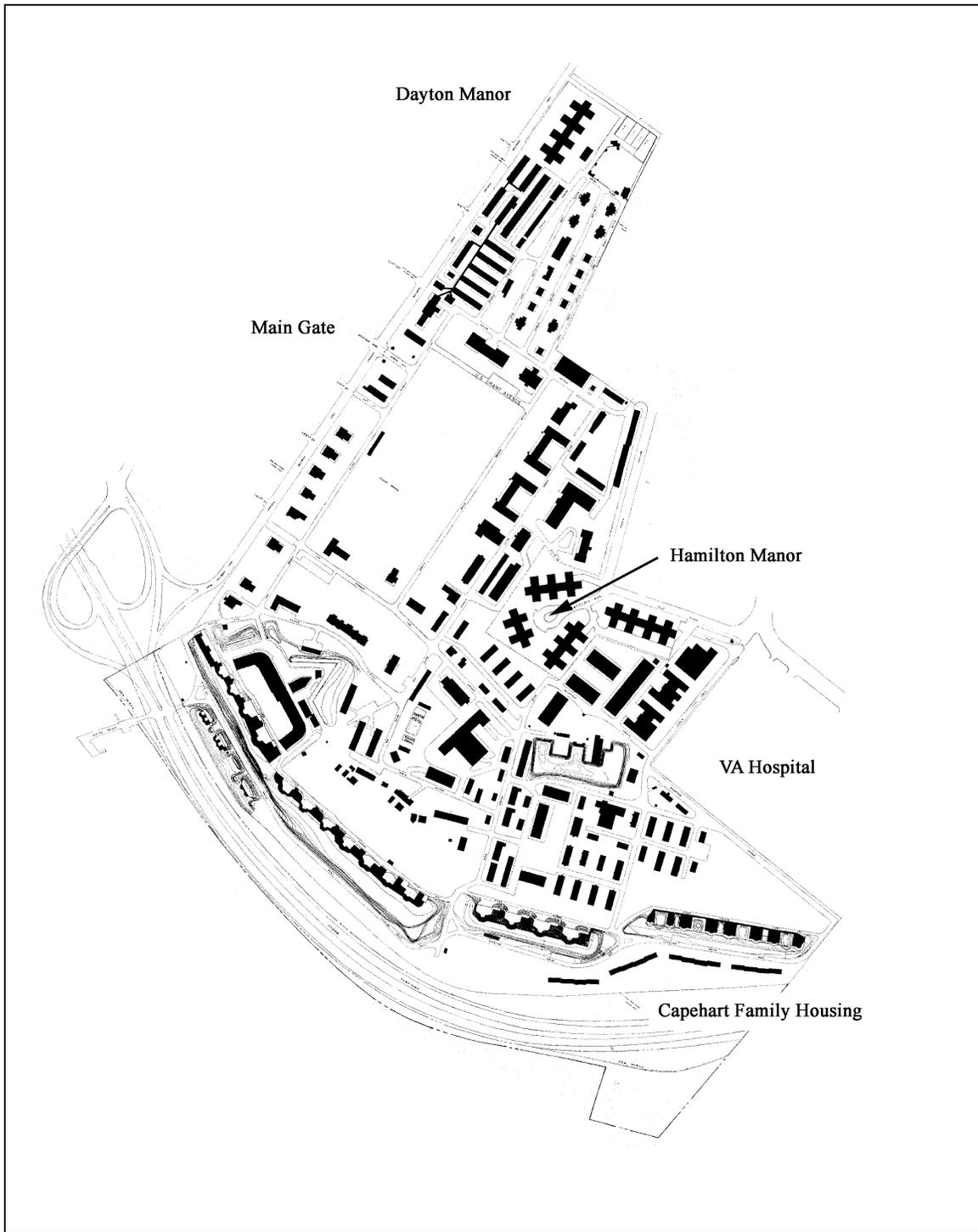


Figure 15. Map of Fort Hamilton in 1954.

1990

The Figure 16 map depicts the greatest changes to the Fort Hamilton installation. The Verrazano Narrows Bridge was constructed between 1958 and 1964. The Brooklyn-side bridge abutments and approaches slice right through the historic heart of Fort Hamilton. The curving connector between the Shore Parkway and the bridge destroyed the last battery, below the old casemate fort. A swimming pool has been built in the old Quadrangle as an addition to the Officers Club. Two bachelor officers quarters (BOQs) abut the glacis of the old fort.

The officers quarters along Hatch Avenue, the officers quarters at the corner of Hatch and Pence, the Administration Building, the brick barracks and Post Exchange on Walke Avenue, the Post Hospital and its wards, the World War II temporary buildings, the NCO housing area along Ludlow Street, and the parade ground all have been destroyed to make way for the bridge. The remaining brick barracks along Schum Avenue now face a 12-story bridge approach instead of the parade ground, and Dayton Manor has been separated from the rest of the installation. A gas station has been built at the intersection of Schum and General Lee Avenues, surrounded by the remaining officers quarters.

Battery Piper and the area south of it that contained the wooden barracks built for the Discharge and Casual Depot have been completely leveled for a new parade ground and an extension of General Lee Avenue. On the north side of the parade ground, two two-story office buildings have been built, and to the east a new gymnasium, cinema, library, and mess hall. To the south and west of the new parade ground the 12 new Capehart family housing buildings are added to the 4 already built. Between the old YMCA and Hamilton Manor, a third Post Hospital has been constructed, and south of Hamilton Manor a new Post Exchange (PX)/Commissary. Adjacent to Hamilton Manor on the east are new buildings for DPW, the Military Police, and the Motor Pool. An addition to the main area of the fort is on the extreme east from Dyker Beach Park. This added two large brick barracks and more recreation space between the barracks and the Shore Parkway.

The main entrance has moved to where General Lee Avenue intersects with Fort Hamilton Parkway and 101st Street underneath the approach to the bridge. A secondary entrance is off of 7th Avenue.

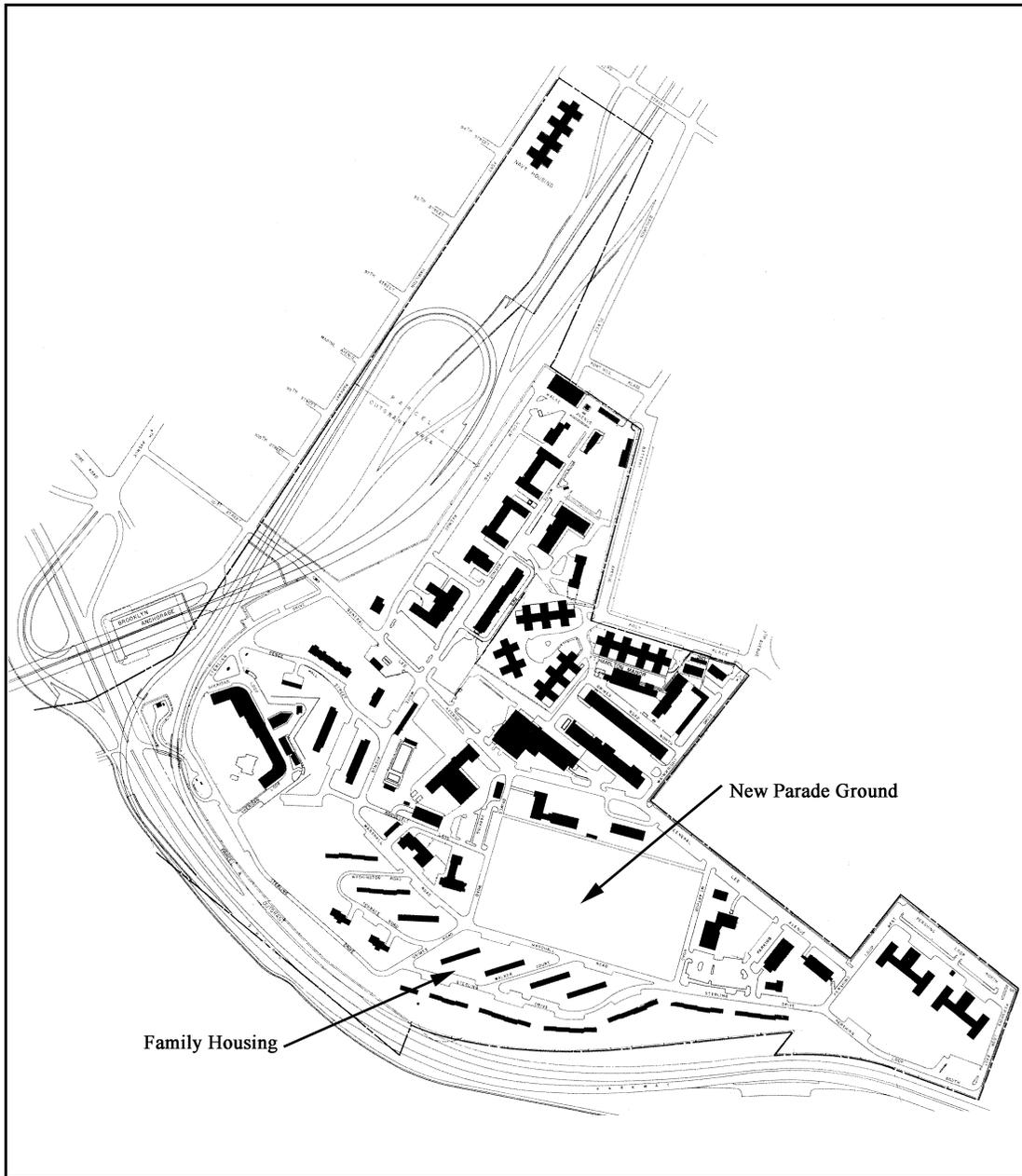


Figure 16. Map of Fort Hamilton in 1990 after construction of the Verrazano Narrows Bridge.

1999

This map shows a major change between 1990 and 1999. Behind Building 109 a new commissary has been constructed with a large parking lot between the Commissary, Building 111, the Post Hospital, and Buildings 109 and 110. Six of the remaining buildings from the World War II era fort were destroyed for the Commissary's construction. Dayton Manor, separated from the installation by the Verrazano Narrows Bridge approaches, was exscessed. The land underneath the bridge approaches has been outgranted to the MTA-Bridges and Tunnels, technically the Federal Government remains the owner of the land.

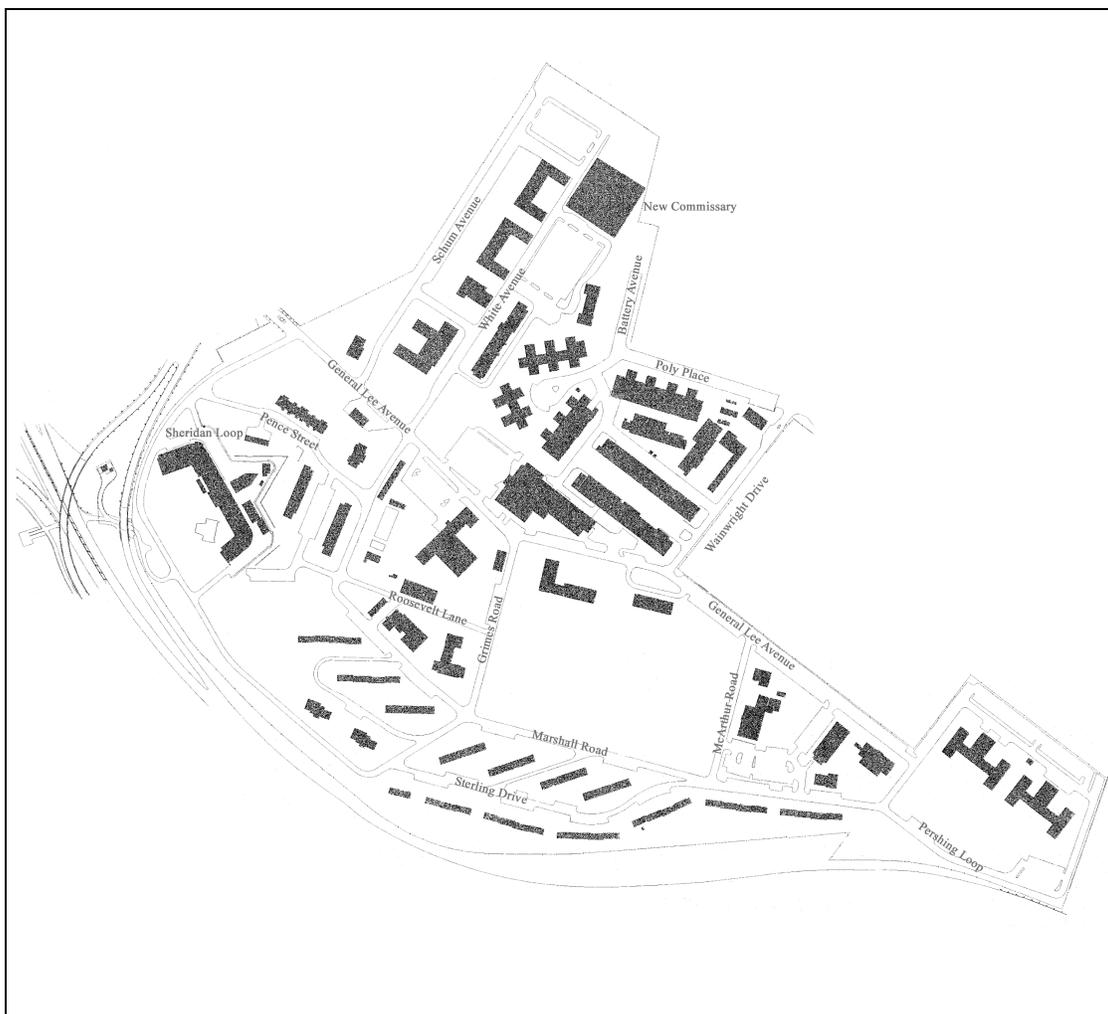


Figure 17. Fort Hamilton in 1999 after the new Commissary was constructed.

Future

The Master Plan for Fort Hamilton includes significant changes for the installation. Buildings 109 and 110 (two of the remaining brick quarters from the Infantry Battalion) will either be completely demolished to make way for a privately

run guest house, or will be partially demolished and renovated to provide modern guest housing operated by the in-house staff. The PX is consolidating its operation by expanding into the space vacated by the Commissary when it moved to a new facility. Building 202, an old four family housing unit, has been demolished. Buildings 209 and 210 will be renovated and will be retained as single soldier quarters. All civilian personnel and vacancies will be consolidated into Building 135, the largest structure in Hamilton Manor. If the housing occupancy post-wide cannot be brought up to acceptable levels, then Building 135 will be removed from the housing inventory. If reuse of Building 135 for another purpose is not feasible at the time, demolition is the option of choice. The Oceanview Housing will be revitalized either through a privatization initiative or a Whole Neighborhood Revitalization Project. Under utility privatization, most of the utility lines on the installation will be replaced. The post is also planning reuse of some of the space below the Verrazano approach way to be used for storage and new facilities. Various morale, welfare, and recreation projects will result in an expanded Community Club, a new Community Club Pool, a renovated gym, a new indoor pool, and many other family service facility improvements.

The Master Plan for Fort Hamilton, if approved and funded by the Military District of Washington, will change the face of Fort Hamilton. The fort has been the target of base closure for the last twenty-five years. Due to this fact, no major improvements had been made to its facilities or to its infrastructure. However, with the closing of most of the Army bases in the northeast, Fort Hamilton has gained prominence by default. This, coupled with coming under the auspices of the Military District of Washington, has provided the impetus for developing its aggressive Master Plan.

Landscape Analysis

Fort Hamilton has been divided into three landscape areas:^{*} Historic Fort, Post Center, and Family Housing.

Of these three landscapes, only the Historic Fort is eligible as a Historic District.

^{*} These three district titles come from the *Fort Hamilton, New York Installation Design Guide* by Parsons HBA, Richmond, VA, November 1998.

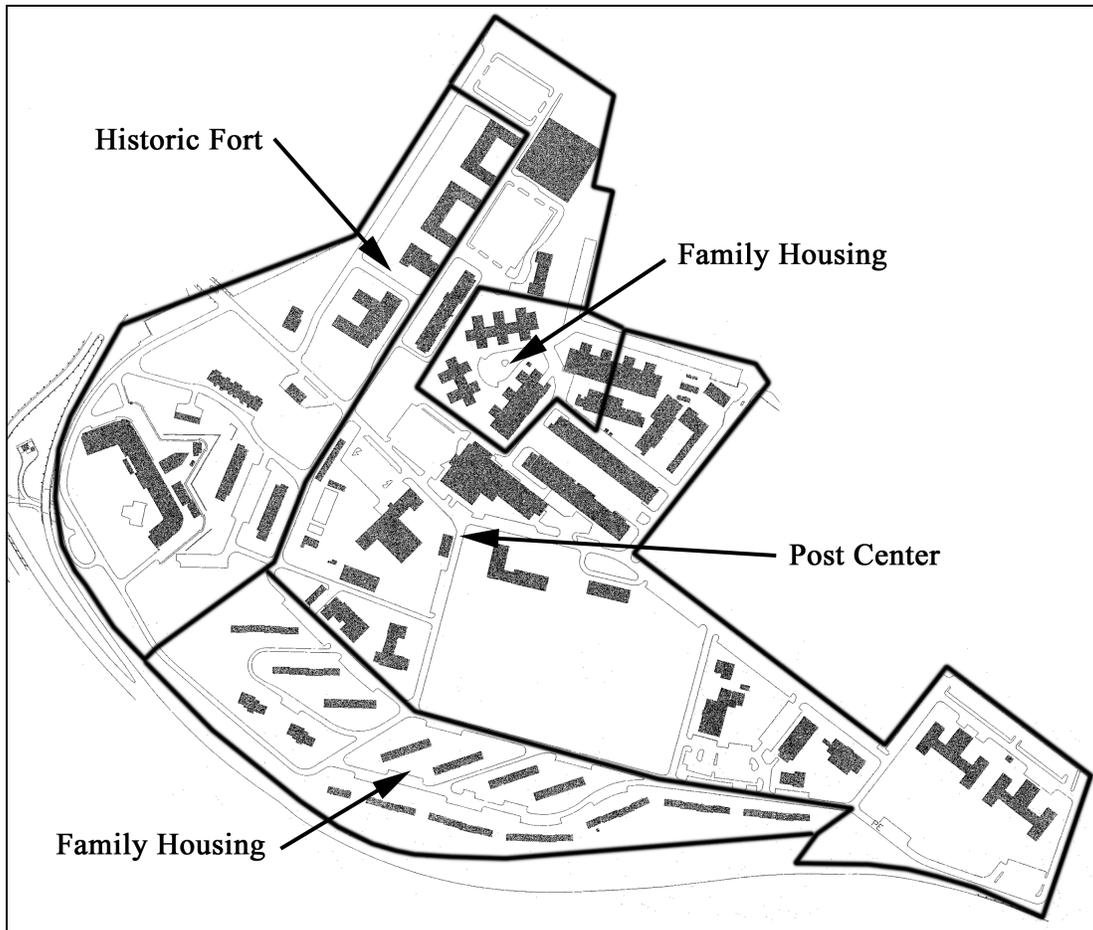


Figure 18. Map of the three landscape areas at Fort Hamilton.

Historic Fort

The Historic Fort area is the oldest portion of the installation that still exists after the construction of the Verrazano Narrows Bridge. It consists of buildings that are not eligible, eligible, and listed on the NRHP. The Historic Fort district forms a cohesive remainder and reminder of the pre-World War II Fort Hamilton. The boundaries for the Historic Fort area are the Verrazano Narrows Bridge on the west, Bldg 109 on the north, White Street on the east, and Sterling Drive on the south.

These buildings, landscapes, and structures are contributing elements to the Historic Fort district (construction dates are in *italics*):

- 207 (The fortification of Fort Hamilton) *1831*
- 220 (A guardhouse in the northwest part of the fortification) *1841*
- 230 (The caponier protecting the north sally port) *1831*

- 113 (Old YMCA) *1925*
- 201 (Officer Quarters) *1911*
- 109 (Billeting) *1908*
- 110 (Bachelor Enlisted Quarters [BEQ]) *1910*
- 111 (Old WACS building) *1938*
- 117 (Lee House) *1858*
- 206 (Directorate of Information Management [DOIM]) *1900*
- General Lee Avenue
- Rows of trees along General Lee Avenue
- Schum Avenue
- Rows of trees along Schum Avenue
- White Avenue
- Landscape space between Bldgs 109, 110, 111 and Schum Avenue
- Landscape space between Bldg 201 and General Lee Avenue

These buildings, landscapes, and structures are noncontributing elements to the Historic Fort district:

- 200 (Gas Station)
- T-203 (Garages for Bldg 201)
- 208
- 209 (Unaccompanied Personnel Housing)
- 210 (Unaccompanied Personnel Housing)
- Storage buildings northeast of the caponier
- Rows of arbor-vitae along the escarpment below the parapet
- Community Club swimming pool

- Chain link gate in front of sally port
- Parking in and around the old fort
- Parking lots for Bldgs 209 and 210

Images of Contributing Elements to the Historic Fort District



Figure 19. View up to the old casemate from the Shore Parkway.



Figure 20. View towards the old casemate and the bridge from the parapet.



Figure 21. Jefferson House (110) facing the old parade ground.



Figure 22. Officers Quarters (201) with bridge beyond.

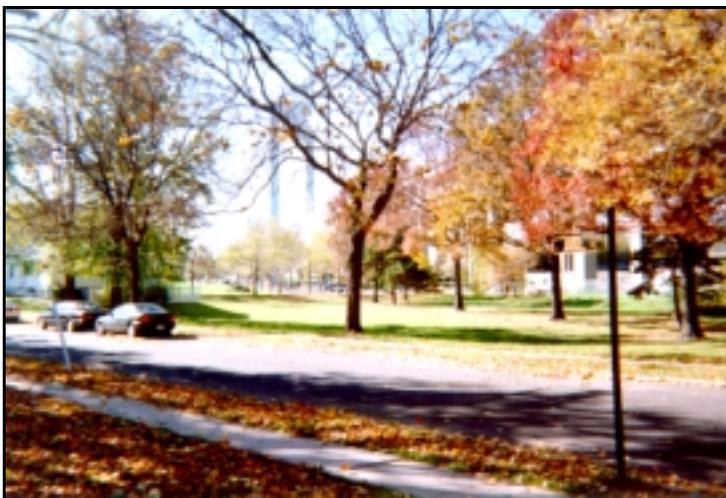


Figure 23. View of old parade ground with the back of Bldg 117 to the left and the bridge straight ahead.



Figure 24. View of landscape area between Bldg 110 and Schum Avenue.



Figure 25. The front of the Lee House (Bldg 117).

Images of Noncontributing Elements to the Historic Fort District



Figure 26. Parking around the casemate fort.



Figure 27. Row of arborvitae along the counterscarp and below the parapet of the casemate.

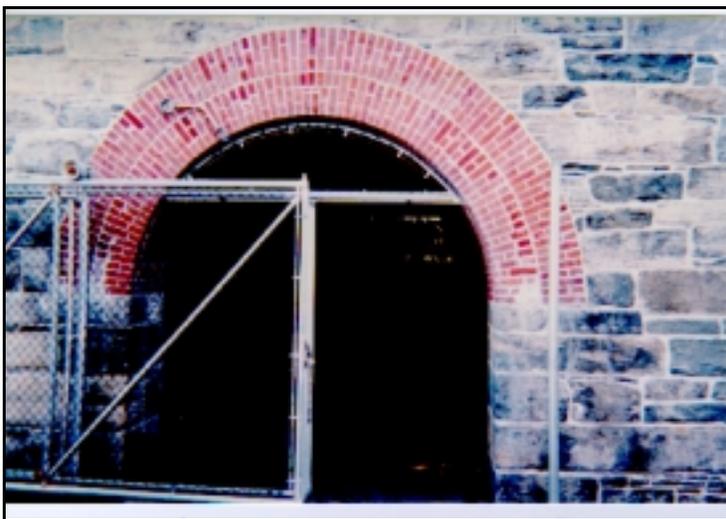


Figure 28. Chain link fence gate in front of sally port.



Figure 29. Dumpsters, service area, and storage buildings below the escarpment.

NRHP Evaluation of the Historic Fort Area

Fort Hamilton is not significant for any one period or building, but rather a series of historic periods and the buildings and landscapes that relate to these periods. Its significance also lies in its evolution and adaptation to shifting national trends and military missions. The landscapes and landscape features of Fort Hamilton have also evolved and adapted to change throughout these historic periods. Anyone assessing these landscapes must resist the temptation to categorize landscapes and features exactly as they may have existed or appeared at one particular time. The landscape can possess integrity through the retention of features that appeared during the historic periods as well as those that have been added since.

No significant landscapes or landscape features at Fort Hamilton are individually eligible for the NRHP; however, there are certain landscapes and landscape features that contribute to the proposed Fort Hamilton Historic District (FHHD). Most landscape features are relatively unstable and are subject to periodic instances of repair, maintenance, replacement, and technological updating of materials, which has occurred at Fort Hamilton. Dirt roads and paths from the 1899 plan were replaced with macadam by 1921, which was replaced by concrete sidewalks and concrete and asphalt roads by World War II. The assemblage of landscape features from historic periods as well as later additions can still retain the historic character of the district.

Determination of significance and integrity of landscape features within a military installation is a complex process, and without an established methodology, results may be subjective in nature and open to interpretation. National Register Bulletin #18 states, "landscapes have unique attributes that often complicate the evaluation of integrity, but the degree to which the overall landscape and its significant features are present today must be evaluated." (Keller 1992). The one thing that must be kept in mind when assessing the significance of military landscape components is the critical relationship between the changing mission of the installation and subsequent and ongoing change in the landscape. To survive, a post cannot remain static: as with its landscape, it must continually evolve and adapt to current demands; therefore, the installation landscape will exhibit a layering of patterns and components representative of construction and landscape projects that were outgrowths of national programs, mission directives, and the whims of commanding officers. This is the case with the proposed FHHD. From the placement of the Third System fort, through the 1899 plan for the old garrison to support the Endicott batteries, to the urban transportation developments of the 1940s and 1950s with the Verrazano Narrow Bridge, the

FHHD assumed a very distinct form with an accumulation of landscape components.

The proposed FHHD is eligible for the NRHP under:

Criterion A: (Event) Properties that are associated with events that have made a significant contribution to the broad patterns of history.

Fort Hamilton, as one of the main coastal defenses of New York Harbor from 1831 to 1861 and the primary embarkation/separation center for metropolitan New York from the 1890s to World War II, qualifies as a pattern of events that made a significant contribution to the development of New York City, New York State, and the defenses of the United States. (National Park Service 1995).

Criterion C: (Design/Construction) Properties that embody the distinctive characteristics of a type, period, or method of construction.

Fort Hamilton, an example of the Third System of coastal defense with a casemate fort, ditch, counterscarp, and glacis; and its 1899 parade ground is an example of early twentieth century U.S. Army design practices for parade grounds and housing in the northern United States, qualifies for historic adaptation of the original property not only for the way it was originally constructed, but also for the way it illustrates changing tastes, attitudes and uses of the U.S. Army over a period of time. (National Park Service 1995).

To evaluate the NRHP eligibility of the landscape at Fort Hamilton, it is helpful to break down the FHHD into two landscape subareas (see Figure 30). The two extant historic landscape subareas are:

1. The original casemate fort and its surrounding area including the caponier, counterscarp, and glacis, bounded by Sterling Drive, Pence Street, White Avenue, and White Avenue extended.
2. The old parade ground area designed in 1899, bounded by Pence Street, Sterling Drive, Verrazano Narrows Bridge approach, and White Avenue.

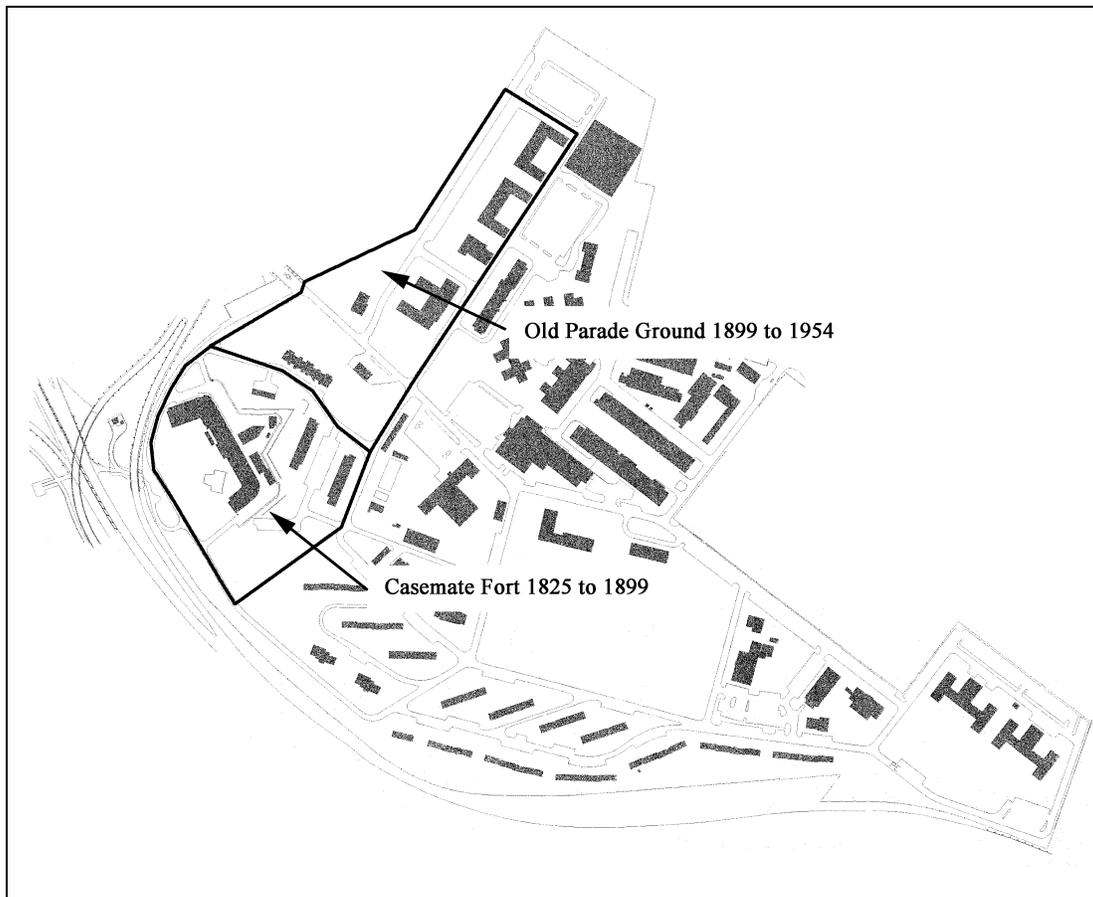


Figure 30. Map depicting subareas of the proposed Fort Hamilton Historic District.

The Original Casemate Fort Area

Description and time period: The original casemate fort, constructed beginning in 1825 and completed in 1831, is defined by Sterling Drive, Pence Street, White Avenue, and an imaginary line connecting the intersection of White Avenue and Roosevelt Lane to Sterling Drive. The time period is the Early Republic and the Antebellum Era, 1790s to 1860s.

Defining features: The defining features of the original casemate fort area are the masonry fort (207), the Whiting Quadrangle, the caponier (220), ditch, counterscarp, glacis, and guard house (230). Buildings 207, 220, and 230 are individually listed on the NRHP. The counterscarp, ditch, and glacis have not been evaluated for the NRHP. It is not known what type of landscaping was in place when the fort was completed in 1831. Traditionally, these Third System forts on the landward side would have grass only and no other vegetation; this was to allow clear lines of sight for any attack coming toward the fort from the land. The Whiting Quadrangle on the inside of the casemate fort was the original parade

ground for the post, and thus would have been landscaped with dirt or grass only.

Importance: Third System coastal defense systems were built in the early part of the 19th century to protect the harbors of the relatively new country of the United States. The entire system of the casemate fort was important for the defense of the Long Island side of the Narrows entering New York Harbor. The Whiting Quadrangle, ditch, counterscarp, and glacis are very important elements in understanding the way the casemate fort system worked.

Integrity: Although the seaward side of the casemate fort was demolished for the construction of the Endicott batteries at the beginning of the 20th century, the rest of the Endicott coastal defense system is intact. The entire area still retains integrity of location, design, setting, materials, workmanship, feeling, and association.

The Old Parade Ground Area

Description and time period: The old parade ground area, constructed 1900 to 1910, is defined by Pence Street, Sterling Drive, the Verrazano Narrows Bridge approach, and White Avenue. The time period is the Progressive Era 1880s to 1920s.

Defining features: The defining features of the old parade ground area are the Colonial Revival brick buildings surrounding the parade ground. During this era, the U.S. Army adopted this style of architecture for buildings that surrounded paraded grounds in its northern forts. The brick barracks (Bldgs 109 and 110); old YMCA (Bldg 113), and the row of officers quarters (Bldg 201) are in this style. Buildings 113 and 201 are both eligible for the NRHP. It is not known what type of landscaping was in place when the old parade ground area was completed in 1910. Traditionally, the parade grounds that were designed or re-designed in this era were an unobstructed plain of grass or dirt with lines of trees on the surrounding streets. It is evident in aerial photographs (see Figure 8) that this was the case for the old parade ground at Fort Hamilton. It is also evident from the tree location map (see Figure 31) that Schum and General Lee Avenues are still lined with trees. The appendix lists the species of trees found at Fort Hamilton.

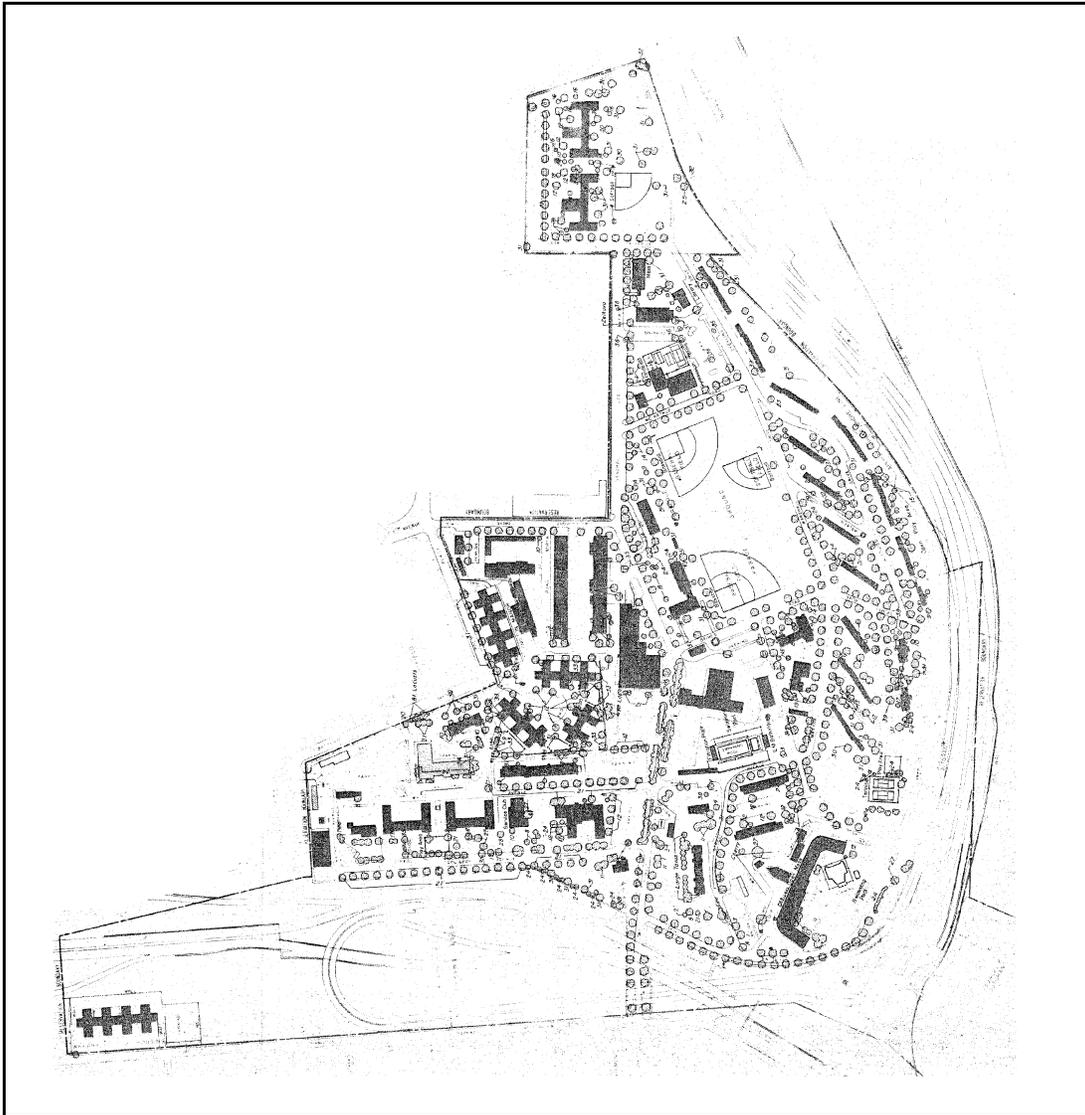


Figure 31. 1988 map depicting placement and type of trees.

Importance: Parade grounds, such as the old one at Fort Hamilton, were the traditional focal point of U.S. Army posts. The old parade ground was a landscape feature associated with the development of Fort Hamilton from a small coastal defense post to a major coastal artillery post and the Embarkation and Separation Center for metropolitan New York. The pre-1899 dirt roads of the post were set into their present configurations during this era. Once this parade ground and its surrounding streets were established, all subsequent Fort Hamilton development revolved around it until 1955.

Integrity: Although the pre-1899 western side of old parade ground was demolished for the construction of the Verrazano Narrows Bridge, the portion of the parade ground and its surrounding Colonial Revival buildings designed in 1899 along General Lee and Shum Avenues is intact. The entire area still retains integrity of location, design, setting, materials, workmanship, feeling, and association.

References

Army Environmental Center (AEC), *Guidelines for Documenting and Evaluating Historic Military Landscapes: An Integrated Landscape Approach* (Prepared by the Construction Engineering Research Laboratory (CERL); Suzanne Loechl, Samuel Batzli, and Susan Ensore; 1996), www.aec.army.mil (conservation documents).

AEC, *For Want of a Home: A Historic Context for Wherry and Capehart Military Family Housing* (Aberdeen Proving Ground, MD: AEC, 1999).

Arnold, Thomas, *Early Life and Letters of General Thomas J. Jackson* (New York: Fleming, 1916).

Beers, Frederick W., *Atlas of Long Island, New York* (New York: Beers, Comstock and Cline, 1873).

Berhow, Mark A., *Modern American Seacoast Defenses: A List Of Military Reservations and Concrete Gun Batteries, 1890-1950* (Mark A. Berhow, 2000).

Brooks, Noah, *Henry Knox* (New York: Putnam, 1900).

Chance, Joseph, *My Life in the Old Army* (Fort Worth, TX: Texas Christian University Press, 1998).

Clayton, B.T., Speech about Fort Hamilton to the House of Representatives, Washington, DC, March 26, 1900.

Cragg, Dan, *The Guide to Military Installations* (Harrisburg, PA: Stackpole Books, 1983).

Cressey, George B., "Land Forms" in *Geography of New York State*, edited by John H. Thompson, pp 19-53 (Syracuse: Syracuse University Press, 1977).

Dillard, Maud, *Old Dutch Houses of Brooklyn* (New York: Richard Smith, 1945).

Environmental Office, Fort Hamilton. *Fort Hamilton, New York Installation Design Guide* (Richmond, VA: Parsons HBA, 1998).

Facility Engineers Office, Fort Hamilton, Future Development Plans: Master Plan Narrative, Fort Hamilton, Brooklyn, New York. (Facility Engineers Office, Fort Hamilton, Brooklyn, New York, with collaboration of: The Office of P. DeBellis, White Plains, NY. On File, Planner's Office, Fort Hamilton, NY, 1991).

Farwell, Byron, *Stonewall* (New York: Norton, 1992).

Fort Hamilton ICRMP (draft) (Fort Hamilton, NY, January 2000).

- Harwell, Richard, *Lee* (New York: Scribner, 1961).
- Historic Preservation Office, Fort Hamilton, *Phase I (Identification Level) Archaeological Investigation, High Sensitivity Zones, Fort Hamilton, Kings County, New York*. Task Order No. 1 Archaeological Inventory. (Directorate of Public Works, Environmental Division, Historic Preservation Office, Fort Hamilton Military Installation, Brooklyn, NY, 1996).
- Keller, J. Timothy and Genevieve P. Keller. National Register Bulletin 18, *How to Evaluate and Nominate Designed Historic Landscapes* (National Park Service, Interagency Resources Division, 1992).
- Klein, Terry H., Amy Friedlander, and Martha Bowers, *A Cultural Resource Overview and Management Plan for the U.S. Army Property, Fort Hamilton, Brooklyn, New York, Fort Totten, Queens, New York* (East Orange, New Jersey: The Cultural Resource Group, Louis Berger & Associates, Inc. Prepared for the National Park Service, Mid-Atlantic Region, Philadelphia, 1986).
- Long, A.L., *Robert E. Lee* (London: Sampson, 1886).
- Manbeck, John, *The Neighborhoods of Brooklyn* (New Haven, CT: Yale University Press, 1998).
- Mariani and Associates Architects, *Study/Survey of Historically Significant Army Family Housing Quarters, Installation Report, Fort Hamilton, New York City, New York* (Prepared for the Department of the Army, Washington, DC, 1988).
- Miller, William, "History of Fort Hamilton" in *Ohio Archaeological and Historical Publications* (Columbus, OH: The Ohio State Archaeological and Historical Society, 1904).
- National Park Service, National Register Bulletin 15: *How to Apply the National Register Criteria for Evaluation* (National Park Service, Interagency Resources Division, 1995).
- Panamerican Consultants, Inc., *Fort Hamilton ICRMP* (Depew, NY: Panamerican Consultants, Inc., under contract to New York District, U.S. Army Corps of Engineers, New York, 1998). On file, Environmental Office, Fort Hamilton, NY.
- Robinson, Elisha, *Atlas of Kings County, New York* (New York: Elisha Robinson, 1889).
- Schieppati, Frank J., Kelly Nolte, Michael A. Cinquino, Robert J. Hanley, Mark A. Steinback, Edward V. Curtin, and Kerry L. Nelson, *Cultural Resources Investigations Including National Register Eligibility Assessment of Selected Buildings at Fort Hamilton, Brooklyn, Kings County, New York* (Depew, NY: Panamerican Consultants, Inc., Prepared for Barry A. Vittor & Associates, Inc., Mobile, AL, under contract to New York District, USACE, 1998).
- Steinmeyer, Henry, *Staten Island Under British Rule* (Staten Island, NY: Staten Island Historical Society, 1949).
- Sullivan, Charles, *Army Posts* (Burlington: Free Press, 1926).
- Thompson, Benjamin, *History of Long Island* (New York: Robert Dodd, 1918).

www.cdsg.org

www.dcmilitary.com/baseguides/mdw/hamilton.html

www.discovery.com/stories/technology/buildings/brdg_exp6.html

www.thehistorynet.com/AmericasCivilWar/articles/03965_text.htm

Appendix: Trees at Fort Hamilton

1	<i>Acer platanoides</i>	Norway Maple
2	<i>Acer saccharinum</i>	Silver Maple
3	<i>Ailanthus altissima</i>	Tree of Heaven
4	<i>Betula alba</i>	European White Birch
5	<i>Betula alba pendula</i>	Weeping Birch
6	<i>Catalpa speciosa</i>	Catalpa
7	<i>Cedrus atlantica</i>	Atlas Cedar
8	<i>Cornus florida</i>	Flowering Dogwood
9	<i>Crataegus crusgalli</i>	Cockspur Thorn
10	<i>Crataegus oxyacantha pauli</i>	Pauls Scarlet Thorn
11	<i>Ginkgo biloba</i>	Ginkgo
12	<i>Gleditsia triacanthos</i>	Honey Locust
13	<i>Malus arnoldiano</i>	Arnold Crab
14	<i>Malus atrosanguinea</i>	Carmine Crab
15	<i>Malus eleyi</i>	Eley Crab
16	<i>Malus floribunda</i>	Japanese Flowering Crab
17	<i>Malus hopa</i>	Hopa Crab
18	<i>Malus halliana parkmani</i>	Parman Crab

19	<i>Malus scheideckeri</i>	Scheidecker Crab
20	<i>Morus rubra</i>	Red Mulberry
21	<i>Picea abies</i>	Norway Spruce
22	<i>Pinus nigra</i>	Austrian Pine
23	<i>Pinus sylvestris</i>	Scotch Pine
24	<i>Pinus thunbergi</i>	Japanese Black Pine
25	<i>Platanus acerifolia</i>	London Plane
26	<i>Populus canescens</i>	Gray Poplar
27	<i>Populus deltoides</i>	Cottonwood
28	<i>Pseudotsua douglasi</i>	Douglas Fir
29	<i>Quercus alba</i>	White Oak
30	<i>Quercus borealis</i>	Red Oak
31	<i>Quercus palustris</i>	Pin Oak
32	<i>Quercus phellos</i>	Willow Oak
33	<i>Ulmus americana</i>	American Elm
34	<i>Acer rubrum</i>	Red Maple
35	<i>Picea pungens</i>	Colorado Spruce
36	<i>Tilia cordata</i>	Linden
37	<i>Pseudotsuga taxifolia</i>	Douglas Fir
38	<i>Pinus strobus</i>	White Pine
39	<i>Salix</i>	Willow

CERL Distribution

Chief of Engineers

ATTN: CEHEC-IM-LH (2)
ATTN: HECSA Mailroom (2)
ATTN: CECC-R

Commander, Fort Hamilton 11252

ATTN: DPW (10)

Engineer Research and Development Center (Libraries)

ATTN: ERDC, Vicksburg, MS
ATTN: Cold Regions Research, Hanover, NH
ATTN: Topographic Engineering Center, Alexandria, VA

Defense Tech Info Center 22304

ATTN: DTIC-O

19

12/00

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE (DD-MM-YYYY) 12-2000		2. REPORT TYPE Final		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE Fort Hamilton, New York: Historic Landscape Inventory				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Adam Smith and Suzanne K. Loechl				5d. PROJECT NUMBER MIPR	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER MIPR9KCER18901	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Engineer Research and Development Center (ERDC) Construction Engineering Research Laboratory (CERL) P.O. Box 9005 Champaign, IL 61826-9005				8. PERFORMING ORGANIZATION REPORT NUMBER ERDC/CERL TR-00-41	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Commander, Fort Hamilton Directorate of Public Works Bldg. 129 Brooklyn, NY 11252				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.					
13. SUPPLEMENTARY NOTES Copies are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.					
14. ABSTRACT <p>This report provides historical context for Fort Hamilton at Brooklyn, New York that emphasizes historical changes in its landscape. The goal was to identify the different stages of landscape change as defined by military mission and historical process. This enabled the establishment of accurate historic district boundaries and provided guidance for the development of a historic landscape management plan.</p> <p>The site is associated with important historical events of the region. Today, it is the military's only installation in the New York metropolitan area. As an urban installation, it is surrounded on three sides by one of the most densely populated cities in the United States, and on the fourth by water. Because of the inevitable urban development, much of the historic fabric has been lost.</p> <p>The Historic Fort area was identified as the only significant historic landscape at Fort Hamilton and is potentially eligible for the National Register of Historic Places.</p> <p>This report also completes a future inventory need stated in the Fort Hamilton Integrated Cultural Resources Management Plan for Historic Landscapes. Through the use of published materials, historical documents, photographs, and maps, this report reconstructs the landscape of Fort Hamilton.</p>					
15. SUBJECT TERMS Fort Hamilton, NY, historic preservation, National Historic Preservation Act (NHPA), cultural resources management, historic landscape, military installations, National Register of Historic Places (NRHP)					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT SAR	18. NUMBER OF PAGES 68	19a. NAME OF RESPONSIBLE PERSON Suzanne K. Loechl
a. REPORT Unclassified	b. ABSTRACT Unclassified	c. THIS PAGE Unclassified			19b. TELEPHONE NUMBER (include area code) (217)352-6511 x7397