

Charlestown Navy Yard Historic Resource Study

by

Stephen P. Carlson

Produced by the Division of Cultural Resources
Boston National Historical Park
National Park Service

U.S. Department of the Interior
Boston, MA

2010

Statement Of Significance

Charlestown Navy Yard

The Charlestown Navy Yard is significant for its role in the construction, repair, and servicing of vessels of the United States Navy for the entire period of its existence from 1800 to 1974. It is also significant as the site of one of the first two naval dry docks in the United States, the location of the Navy's only ropewalk, and for technical innovations such as die-lock chain. The yard evolved throughout its history to meet changing needs and naval technologies, and the current site contains resources from all periods of its existence. The yard also contains two of the landing sites for British forces involved in the Battle of Bunker Hill. Although much of the current acreage of the yard is filled land, there is a potential that portions of the yard may contain archeological resources related to Native American and colonial use of the area prior to its purchase by the federal government as well as those related to its use by the Navy. The yard is also associated with several historically significant naval officers, as well as with a number of individuals who are significant in the fields of architecture, civil engineering, and technology.

Contents

Volume 1 of 3

Statement Of Significance, Charlestown Navy Yard	iii
Contents	v
Figures & Tables	vi
Galleries & Sidebars	vii
Illustrations & Style	ix
Acknowledgments	xi
Chapter 1 – Management Summary	1
Chapter 2 – Historical Overview	9
Chapter 3 – South Boston Annex	279
Chapter 4 – Overview And Assessment	359

Volume 2 of 3

Chapter 5 – Resource Inventory	395
--------------------------------------	-----

Volume 3 of 3

Appendix A – Chronology	1077
Appendix B – Ships Built By The Navy Yard	1159
Appendix C – Navy Yard Collections	1175
Appendix D – Glossary	1193
Appendix E – Bibliography	1227
Appendix F – Existing Conditions Drawings	1239
Index	1245

Chapter 1

Management Summary

THIS HISTORIC RESOURCE STUDY of the Charlestown Navy Yard has been undertaken to fulfill a need for baseline information on the Charlestown Navy Yard unit of Boston National Historical Park. Because that unit includes only a portion of the historic Boston Naval Shipyard, which is a National Historic Landmark (NHL), this study addresses the entire shipyard property, albeit with special emphasis on the portion included within the national park.

National Park Service Director's Order 28 (DO-28) defines the historic resource study as follows:

A historic resource study (HRS) provides a historical overview of a park or region and identifies and evaluates a park's cultural resources within historic contexts. It synthesizes all available cultural resource information from all disciplines in a narrative designed to serve managers, planners, interpreters, cultural resource specialists, and interested public as a reference for the history of the region and the resources within a park. Entailing both documentary research and field investigations to determine and describe the integrity, authenticity, associative values, and significance of resources, the HRS supplies data for resource management and interpretation. It includes the preparation of National Register nominations for all qualifying resources and is a principal tool for completing the Cultural Landscapes Inventory and the List of Classified Structures. The HRS identifies needs for special studies, cultural landscape reports, and other detailed studies and may make recommendations for resource management and interpretation.

HRSs will vary in scope depending on management needs. Relevant information readily available in other sources need not be included except by reference. Additional HRSs are appropriate to address themes, resource types, and other subject matter not originally covered. Although the HRS is interdisciplinary in character, the principal investigator is usually a historian.¹

While a full administrative history of the creation of Boston National Historical Park has yet to be prepared, the Scope of Work for this study is probably correct in its assertion that "the Charlestown Navy Yard appears to have been an add-on to legislation that was really focused on Boston's role in the American Revolution." The Scope of Work goes on to define the specific purposes and needs that this study is intended to fulfill:

Without a strong lead from the legislative mandate, park planning and research efforts focused on technological, architectural, and operational history. Draft historic structures reports were produced on many individual buildings, but nothing ever looked at the existing architecture in a comprehensive way. Several massive volumes were written on the "history" of the site, but these again focused on operations and ships built at the yard and never addressed the surviving resources, their treatment, and significance. Moreover, these reports examined individual

shops, generally disregarding the connections and relationships between buildings and operations. This approach was probably necessary to get the Park up and running. However, the result is a lack of scholarly information relating to the cultural resources themselves. There is no comprehensive document for the site. Most of the reports prepared before 1985 are out of date.

The park's General Management Plan for the Charlestown Navy Yard (revised 1987) states that all surface areas and structures within the National Historical Park will be included in a "historic zone." The primary preservation goal in this area is to maintain the "20th century industrial character of the Navy Yard as it existed in 1973 prior to transfer to the National Park Service." And yet, the yard today bears only marginal resemblance to the industrial facility run by the United States Navy. In fact, since the Navy's departure 25 years ago, whole buildings, along with stairs, covered walks, and ephemeral additions, have been removed, roadways inserted, landscape features altered, and contextual fencing and barriers eliminated. The park is no longer preserving the "industrial character" present in 1973, but a cleaned-up version of what the yard once was. Moreover, the general experience for visitors is not cohesive or easily understandable. For example, Pier One is perceived as a large parking area devoid of shade and seating for the public—not as an access corridor or staging ground for ship repair and servicing. The National Register Nomination and Landmark documentation must be revised to reflect the actual status of preservation at the site. Once significance is assessed and revised, it will serve as a jumping off point for the impending revision of the General Management Plan for the Charlestown Navy Yard. There is general recognition that the Navy Yard is nationally significant and deserves recognition. This document will help the park understand that significance better and provide needed information for future resource management decisions.

A new level of scholarship is needed to assess site architecture, the cultural landscape, collections, and the redevelopment areas. Over the past few years, there has been an effort to shift site interpretation (in the NPS managed areas of the yard) towards telling the story of the working Navy Yard. The technical innovations that happened in Boston are highlighted for those visitors that actually take a Navy Yard walking tour (a very low percentage of visitors) and several new waysides highlight specific features of the area. However, most visitors get off a bus and snap a picture of USS *Constitution*. Perhaps they take a tour of the ship and maybe even board USS *Cassin Young*. Very few see the park's exhibit about the Navy Yard and even fewer venture outside of the iron gates to the parts of the yard where the Ropewalk and Chain Forge facilities are located. There are, of course, buildings throughout the yard that are being altered, redeveloped, and even razed without discussion of the impact on the historic yard as a whole. The documentation does not exist in a form that can provide in-depth analysis. Simply put, it is not clear exactly what the resources are, and as a result, it is impossible to place them in context or judge their significance.

¹ National Park Service, *Cultural Resource Management Guideline*, Release No. 5 (1997), p. 25-26.

... The study must document and assess the cultural resources of the Charlestown Navy Yard. There are several operational histories of the Navy Yard, which cover the period from 1800, when the yard was first created, to the yard's closure. Existing material needs to be reviewed and synthesized, and additional research is required to record and analyze significant changes that have occurred since the yard's closure. Research efforts will focus on the industrial, ceremonial, and residential resources located within the park's boundaries, but may include facilities not currently part of the park. The industrial resources appear to be the least understood and the most at risk. The museum collection associated with the yard will also be evaluated.

Synthesizing all the documentation, the HRS will evaluate the integrity and significance of the property, placing the yard within its broader historical and material culture contexts. As appropriate, this analysis will be used to revise the National Register Nomination form to include additional descriptive information, new contexts, and an expanded Statement of Significance.²

The scope of work included no archeological overview. A *Cultural Resources Inventory: Potential Archeological Resources, Charlestown Navy Yard, Boston National Historical Park* was prepared by Audrey R. Marie in March 1980.³ This document covered only those portions of the Navy Yard included within the boundaries of the national park. A somewhat similar report covering the Buy Parcel Area was prepared by Michael S. Raber and Matthew W. Roth for the Boston Redevelopment Authority in February 1981.⁴ Neither of these documents address two of the most significant portions of the yard, the Historic Monument and Public Park areas. Nor do they address more recent field experience with both Navy Yard resources and resources in Charlestown outside of the yard boundaries. A key recommendation of this study is that a comprehensive archeological overview and assessment meeting the standards of DO-28 be undertaken, and a project statement for that study has been entered into the NPS Project Management Information System (PMIS).

Chapter 2, *Historical Overview*, and Chapter 3, *South Boston Annex*, provide a history of the yard in support of the various historic contexts identified in Chapter 4, making use of the park's extensive photographic archives to illustrate that history. In addition, Chapter 2 provides a brief overview of the historic development of naval shipyards. Because of the nature of an HRS, it concentrates on the physical development of the facility rather than its administrative history, a topic covered by other studies.⁵

As a part of HRS project, the staff of the NPS Olmsted Center for Landscape Preservation (OCLP) prepared a draft Cultural Landscape Overview chapter. Since the preparation of the draft,

OCLP has undertaken the preparation of a Cultural Landscape Report (CLR) for the national park portion of the Navy Yard.⁶ Because this supersedes the HRS draft, the park decided to omit the landscape overview from this document. Information from that draft, however, has been incorporated into both Chapter 2 and Appendix A, *Navy Yard Chronology*.

Chapter 4, *Overview and Assessment*, provides information on the significance and historic context of the yard, especially with regard to the Department of Defense National Military Context; develops historic sub-periods and themes; identifies character-defining features; and makes recommendations for the management of the yard and for additional studies. It incorporates, with revisions, material prepared by Jane Carolan under contract to the NPS relating to both character-defining features and integrity.⁷

Chapter 5, *Resource Inventory*, provides more detailed descriptions of individual buildings, structures, and other features of the yard. It draws in particular from the 1978 draft National Register nomination prepared by Edwin C. Bearss and Peter Snell and the 1995 List of Classified Structures forms prepared by Jack I. Glassman and Patrick B. Guthrie. In addition, the chapter updates information on the relative historical significance of extant structures found on the March 1978 Historical Base Map.

Appendix A, *Navy Yard Chronology*, provides a detailed chronology of the Navy Yard, including information placing the yard into its larger historical context. It draws from separate chronologies prepared as part of the original drafts of the historical and cultural landscape overviews.

Appendix B, *Ships Built by the Navy Yard*, provides an alphabetical listing of ships built, showing key construction dates and their ultimate fate.

Appendix C, *Navy Yard Collections*, provides a brief summary of the scope and contents of the Boston Naval Shipyard Collection held by the park, as well as a brief discussion of Navy Yard records and related material found in the National Archives and elsewhere.

Appendix D, *Glossary*, provides definitions of both specialized maritime and naval terms and the vocabulary of the historic preservation community.

Appendix E, *Bibliography*, provides a guide to both technical reports and secondary sources consulted in the preparation of this document.

Appendix F, *Existing Conditions Maps*, show the current conditions of the Boston Naval Shipyard National Historic Landmark.

Statement Of Significance

The following statement of significance for the Charlestown Navy Yard represents a synthesis of information developed during this study:

The Charlestown Navy Yard is significant for its role in the construction, repair, and servicing of vessels of the United States Navy for the entire period of its existence from 1800 to 1974. It is also significant as the site of one of the first two naval dry

² "Historic Resource Study, Charlestown Navy Yard, Boston National Historical Park, Scope of Work," p. 1-3. Original footnotes omitted.

³ Audrey R. Marie, *Cultural Resources Inventory: Potential Archeological Resources, Charlestown Navy Yard, Boston National Historical Park* (Denver: Denver Service Center, 1980), TIC 457/D1555.

⁴ Michael S. Raber and Matthew W. Roth, *Boston Naval Shipyard: A Plan for Cultural Resource Management in the Buy Parcel Area* (New Haven, Ct.: Raber Associates, 1981), TIC 457/D6154.

⁵ Edwin C. Bearss, *Charlestown Navy Yard, 1800-1842*, 2 vols. (Denver: National Park Service, 1984), TIC 457/D26; Frederick R. Black and Edwin C. Bearss, *The Charlestown Navy Yard, 1842-1890* ([Boston: Boston National Historical Park], 1993), TIC 457/D6307; and Frederick R. Black, *Charlestown Navy Yard, 1890-1973*, Cultural Resources Management Study No. 20, 2 vols. (Boston: Boston National Historical Park, 1988), TIC 457/D6162A.

⁶ Christopher Stevens, et al., *Cultural Landscape Report for Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts* (Boston: National Park Service, 2005), TIC 457/D154.

⁷ The work, originally submitted as four separate chapters (4 to 7), was prepared by Ms. Carolan as subcontractor to Heritage Partners. See Task Order 105, Sept. 9, 1999, NPS Contract No. 1443-CX4520-96-008. The revised National Register forms specified in the original task order were deleted by the NPS.

docks in the United States, the location of the Navy's only ropewalk, and for technical innovations such as die-lock chain. The yard evolved throughout its history to meet changing needs and naval technologies, and the current site contains resources from all periods of its existence. The yard also contains two of the landing sites for British forces involved in the Battle of Bunker Hill. Although much of the current acreage of the yard is filled land, there is a potential that portions of the yard may contain archeological resources related to Native American and colonial use of the area prior to its purchase by the federal government as well as those related to its use by the Navy. The yard is also associated with several historically significant naval officers, as well as with a number of individuals who are significant in the fields of architecture, civil engineering, and technology.

It should be noted that neither of the two National Historic Landmark naval vessels berthed at the Charlestown Navy Yard are referenced in this statement. Although USS *Constitution* has had a long historical association with the Navy Yard (and her presence was a key impetus for the preservation of a portion of the yard as a national park), the significance of the yard stands independent of the ship. Similarly, USS *Cassin Young* (DD-793) is but an example of the numerous ships which the yard built and serviced in its last half century as an active naval shipyard.

Period Of Significance

The Charlestown Navy Yard served as a naval shipyard from August 1800 to July 1974. Within that period of significance, there are several sub-periods which reflect not only the history of the facility but the broader history of naval shipyards. The following periods represent the historical development of the yard:

Establishment (1800-1828)

From the establishment of the Navy Yard, through the War of 1812 and the start of shipbuilding, up until the issuance of the 1828 master plan.

Early Nineteenth-Century Growth (1828-1853)

From the 1828 master plan up until the appointment of Joseph Billings as the yard's first permanent Civil Engineer. Includes the construction of Dry Dock 1 and the Ropewalk Complex.

Development in the Age of Steam (1853-1869)

From the appointment of Joseph Billings as Civil Engineer through the modernization of the yard to handle steam-powered vessels and the Civil War up to the 1869 master plan.

The Post Civil War Period (1869-1890)

From the 1869 master plan through the proposed conversion of the yard to a manufacturing facility to the resurrection of the yard to handle steel war-ships.

The Yard Resurrected (1890-1919)

From the start of plant modernization and the Spanish-American War through the major modernization campaign of the early 20th century and the start of steel shipbuilding up to the end of World War I.

The Stagnant 1920s (1920-1931)

From the end of the World War I programs up until the first orders for destroyer construction.

The Yard Revitalized (1931-1939)

From the start of destroyer construction through the WPA modernization of yard facilities up to the outbreak of World War II.

World War II (1939-1945)

From the declaration of national emergency in 1939 through the end of World War II and the yard's redesignation as Boston Naval Shipyard.

The Cold War Era (1945-1974)

From the end of World War II through the Korean War, Cold War, and Vietnam War until the yard's closure.

The precise definition of particular periods is somewhat arbitrary, being keyed to significant events, and there is an overlap between most of them. In addition, the periods could be further broken down. For example, while the Civil War could have been considered as a separate period, it has been included within the larger period from 1853 to 1869 since it represented more of an acceleration of developments already in progress than new directions for the yard.

Although the post-1974 period may achieve significance in its own right under the themes of historic preservation and the conversion of military facilities to other uses, these developments are still too new to allow the development of appropriate historic contexts. Thus, while post-1974 structures and features are included in this study, none are recommended as contributing resources at this time.

Historical Themes

The statement of significance recognizes that the yard encompasses a variety of historical themes. In 1978, four primary themes were used to evaluate all extant buildings and features of the yard. These themes were:

1. History of the American Navy
2. History of Technology
3. History of Social and Worker Movements
4. History of American Architectural Design and Planning

These general themes remain valid. While it is possible to subdivide these themes into more specific subjects, such a division was not within the scope of this resource study. The general assessment in Chapter 4 and the individual building and feature descriptions included in Chapter 5, however, address major sub-themes as appropriate. They also rank the relative importance of each of the themes to the individual Navy Yard resources.

National Register Status

The Boston Naval Shipyard was designated as a National Historic Landmark in 1966, resulting in its automatic listing on the National Register of Historic Places and the Massachusetts State Register of Historic Places. While the designation included the "entire" shipyard, only the Charlestown facility is considered to have been covered by it. As this study points out, the South Boston Annex was an integral part of the shipyard. Thus, this study recommends that a new National Register nomination for the entire Boston Naval Shipyard be prepared.

While the integrity of individual resources in the Navy Yard varies, as a whole the yard retains its basic integrity, especially with

respect to the National Historic Landmark criteria regarding its association with “events that have made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of United States history and from which an understanding and appreciation of those patterns may be gained.”⁸

The Navy Yard meets all four major criteria for listing on the National Register of Historic Places:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. 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; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history⁹

Perhaps the least documented of these criteria is Criteria B, relating to significant figures associated with the Navy Yard. In addition to its association with naval officers who were major figures in the history of the Navy, particularly in the period prior to the Civil War,¹⁰ the yard is associated with a number of significant individuals in the fields of architecture, engineering, technology, and even the fine arts. These include, for example, Loammi Baldwin, Alexander Parris, and Allan Rohan Crite. Full assessments of the significance of 20th-century yard employees who were involved with—and hold patents for—technological innovations in the area of chain and ropemaking have yet to be done.

It is not recommended at this time that any specific studies of individuals be conducted. However, future studies of technological aspects of the yard should include focus on individuals such as David Himmelfarb and Carlton G. Lutts as well as on the processes and products they were involved with.

Historical Context Study

In the mid-1990s the Department of Defense undertook a contextual study focusing on the physical resources of all military installations for the period through World War II.¹¹ This National Military Context (NMC) forms one basis for evaluation of the Navy Yard. However, because the yard was also an industrial plant and a community unlike traditional military posts, it also has contexts outside of the National Military Context. Thus, the NMC is not a sub-

stitute for thematic contextual studies which take a more specialized approach to a subset of military facilities. Nor does it take into account post-1945 developments.

Thus, it is a primary recommendation of this report that the National Park Service, in conjunction with the Navy and others, contract for the preparation of a specific context study for naval shipyards, past and present. Such a study will allow a better understanding of the significance of the Navy Yard with respect to both National Register and National Historic Landmark criteria.

The resultant study should provide a consistent, national base for making assessments of the significance of both individual structures and features and entire shipyards under Sections 106 and 110 of the National Historic Preservation Act. One of the major results of a contextual study will be revisions to existing and additional National Register nominations, as well as revised or additional National Historic Landmark designations. It would also be a vehicle for finalizing various informal determinations of eligibility made during the various base closure programs of the 1980s and 1990s.

Character-Defining Features

Character-defining features are defined as prominent or distinctive aspects, qualities, or characteristics of a property that contribute significantly to its physical character and which must be retained in order to preserve that character. Character-defining features of the Charlestown Navy Yard include those of a maritime industrial facility, as well as a military installation in general and a naval installation in particular. The specific features which are identified in Chapters 4 and 5 as important in defining the yard include:

1. Navy Yard Boundary Wall and Fence surrounding the yard and separating it from Charlestown; pedestrian and vehicular gates.
2. Grid circulation pattern, with predominately rectangular buildings arranged parallel to the grid; paving materials: asphalt, brick, granite, and wood block.
3. Division of the yard into ceremonial/residential; working waterfront; and production and manufacturing areas.
4. Marine Barracks and Parade Ground.
5. Landscaped and open spaces, including laydown yards.
6. Large scale industrial buildings and smaller scale residential structures; building materials: brick, granite, concrete, and wood.
7. Industrial facilities representing the yard’s manufacturing activities: Ropewalk Complex (Building 58 and 60) and Forge Shop (Building 105), including in-situ equipment.
8. Dry docks and piers.
9. Railroad and crane tracks.
10. Large scale structures such as cranes; grit hoppers; floodlights; aboveground utility lines; and the remains of Shipways 1 and 2 and the Marine Railway.
11. Small scale features such as trash receptacles, monuments and memorials, and identification and safety signage; use of historically-accurate colors for crosswalks, dry dock railings, hydrants, bollards, etc.

Maintaining the integrity of the character-defining features of a facility as complex as the Charlestown Navy Yard is a task that must balance the needs of current uses of the facility with an understanding of how changes to accommodate such needs impact those fea-

⁸ U.S. National Park Service, *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, rev. ed. (Washington: National Register, History and Education, Cultural Resources, National Park Service, 1997), p. 50.

⁹ *Ibid.*, p. 2.

¹⁰ A full list of such individuals has not been compiled, but it would include all yard commandants who have been regarded as significant enough by the Navy to have been honored by having naval vessels named for them. It should also include staff officers such as George Dewey and Alfred Thayer Mahan.

¹¹ R. Christopher Goodwin & Associates, *National Historic Context for Department of Defense Installations, 1790-1940: Final Report*, 4 vols. (Baltimore: Baltimore District, U.S. Army Corps of Engineers, 1995); R. Christopher Goodwin & Associates, *Historic Context for Department of Defense Facilities: World War II Permanent Construction* (Frederick, Md.: Goodwin, 1997).

tures. While “freezing” the yard’s appearance to the end of its period of significance is as impractical as restoring it to any past period, changes should respect the essential character-defining features and be as sympathetic as possible in their treatment of historic fabric. In particular, efforts should be made to retain the industrial overlay of pipes, conduits, etc., rather than to restore a pristine appearance that a structure probably never had.

Recommended Approach To The Yard¹²

While changes since 1974, particularly in the non-National Park Service portion of the Navy Yard, have severely reduced the integrity of the industrial facility the yard once was, much still exists, albeit in smaller pockets. The desire to “clean up” areas such as the laydown space around the Grit Hoppers needs to balance the need not to accumulate inappropriate materials with a recognition that a working shipyard—and the Navy Yard remains a working shipyard—requires places for materials and equipment to be stored. Such laydown spaces should be managed, not eliminated.

With a few exceptions, this study recommends that the general approach to the Navy Yard should be that identified in the Secretary of the Interior’s Standards for the Treatment of Historic Properties as rehabilitation. Unlike preservation, restoration, or reconstruction treatments, rehabilitation “includes an opportunity to make possible an efficient contemporary use through alterations and additions” while protecting and maintaining a property’s character-defining features.¹³

Because so much of the industrial yard has disappeared, wayside and other exhibits become important in helping to convey this theme to visitors, most of whom come to the yard only because of USS *Constitution*. The relocation of the primary Navy Yard exhibit to the new Navy Yard Visitor Center in Building 5 exposes greater numbers of visitors to the history and significance of the yard. Although large numbers of visitors will not go beyond the immediate area of Pier 1, the National Park Service and the Boston Redevelopment Authority (BRA) should actively pursue the development of interpretive waysides throughout the Navy Yard for the benefit of those who do, as well as for the thousands of workers and residents in the yard who have little awareness of its historic significance. In particular, Dry Dock 2 and the Pump House (Building 123) should be interpreted for the commuters and tourists who pass these structures each day.

The National Park Service and the Boston Redevelopment Authority should work together to ensure that actions by either agency within the Navy Yard take into consideration the historic character of the area. In particular, the BRA should take steps to ensure that its lessees conform to the preservation guidelines, especially with regard to the retention and maintenance of historic signage. While

¹² Because the NPS has no preservation responsibilities, either directly or through oversight, for the South Boston Annex, this discussion is limited to the Charlestown Navy Yard portion of the Boston Naval Shipyard NHL.

It should be noted that most of the recommendations herein referencing the Boston Redevelopment Authority reflect either BRA obligations under the deed of transfer or proposals which appear in various planning documents prepared by that agency.

¹³ Charles A. Birnbaum with Christine Capella Peters, eds., *The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (Washington: Historic Landscape Initiative, Heritage Preservation Services, Cultural Resource Stewardship and Partnerships, National Park Service, 1996), p. 50.

regrettable, past deviations from guidelines, especially those relating to the groundplane, cannot be easily corrected. However, the BRA and the NPS need to emphasize to tenants and to other agencies of the City of Boston that the Navy Yard buildings and streets are not simply urban buildings and streets but contributing features of a nationally-significant historical resource. Deviations from standard practices which do not compromise vehicular or pedestrian safety to maintain the yard’s historic industrial character should not be rejected simply because they “do not meet code” or are not aesthetically pleasing. Many such actions, such as the use of historically-accurate colors for dry dock railings and crosswalks, have no cost impact.

From the outside, it would appear that the fact that two different National Park Service offices interface with the Boston Redevelopment Authority is counterproductive. While this could be simplified by the delegation of the responsibility for the oversight of the deeds of transfer, now vested in the Northeast Regional Office in Philadelphia, to the Superintendent of Boston National Historical Park, such a transfer may create a tension between the park, as a regulator, and an agency with which it needs to work cooperatively to promote and interpret the Navy Yard to the American people. Therefore, this study recommends that the lines of communication between the various NPS offices and both the BRA and the wider historic preservation community be improved and that the preservation guidelines be reviewed and updated comprehensively to take into account both a better understanding of the history and significance of yard features and the evolution of historic preservation philosophy and practices over the three decades since they were put into place.

The National Park Service, the Boston Redevelopment Authority, and other interested parties should work together to produce a master plan for the development of the Navy Yard as a whole which reflects a rehabilitation treatment for the yard. Where economically feasible, the BRA and other stakeholders should be encouraged to utilize historic precedents and treatments rather than standard, off-the-shelf contemporary approaches. While it is totally impossible to create a seamless yard, every effort should be made to reinforce the fact that, while now used for differing purposes, all areas of the yard share a nationally-significant historic heritage.

As a part of this master plan effort, the NPS and the BRA should review the boundaries of the park in the vicinity of Buildings 58, 60, 105, and 107. For example, it may be desirable from both a maintenance and law enforcement perspective to include the area between the Ropewalk and Chelsea Street within park boundaries. Any changes recommended in the master plan could be handled under existing NPS legal authority to make minor boundary changes without requiring specific Congressional action.

Recommendations For Physical Treatment

The following is a summary of the recommendations for the physical treatment of the Navy Yard. These recommendations should help inform the comprehensive management plan for the yard discussed above which recognizes the yard’s historic nature while allowing for future development for other uses.

These recommendations highlight major actions needed to maintain the character-defining features of the Navy Yard. They do not include most projects to stabilize, preserve, or rehabilitate indi-

vidual structures or other elements within the national park currently identified in the NPS Project Management Information System (PMIS) or the specific treatment recommendations contained in the Cultural Landscape Report which should, with minor exceptions such as the preservation rather than removal of the Building 198 foundation, be implemented. Where existing PMIS projects are closely related to the recommendations, they are shown in parentheses. The individual project statements should be consulted for further detail, as well as for cost information.

(1) Maintain the Historic Grid Circulation Pattern of the Yard and Associated Viewsheds. The grid pattern established by the 1828 Baldwin master plan, while compromised in a few areas, remains largely intact. Since this grid governed the growth of the yard, it should be maintained. In particular, new development should be inserted within the existing grid pattern. Views along both First and Second Avenues, the primary yard thoroughfares, should be preserved. Views along the north-south streets extending to the harbor should be preserved.

(2) Maintain the Navy Yard Boundary Wall and Fence (PMIS 73612). The Navy Yard Boundary Wall and Fence are character-defining features of the yard as a military installation. The NPS should repoint the Boundary Wall, while the BRA should repair the Boundary Fence parallel to the Ropewalk.

(3) Maintain the Boston HarborWalk through the Navy Yard. The Boston HarborWalk is an effort to provide public access along Boston's inner harbor, an area historically inaccessible to the general public. Portions of the HarborWalk have already been constructed within the Public Park and New Development Areas. While security considerations mean that the HarborWalk through the national park cannot follow the western edge of Pier 1, an alternative routing along First Ave. and 3rd St. to the south end of Pier 1 is possible. The NPS and the BRA should work to create a safe pedestrian route across the caisson for Dry Dock 1, the site of the Marine Railway, and Dry Dock 2 to connect the HarborWalk on Pier 1 to the remainder of the HarborWalk in the yard.

(4) Retain Dry Dock 1 as a Working Dry Dock (PMIS 152558, 75135). Dry Dock 1 is the most important historic structure in the Navy Yard since it not only is one of the first two dry docks in the United States but also the most characteristic of the industrial nature of a naval shipyard. Dry Dock 1 should be rehabilitated in accordance with the recommendations of the recent historic structure report, and should be used for the drydocking of appropriate historic ships. Use of the dock by non-federal vessels should be allowed only with sufficient guarantees that such use will not encumber the dock in the same manner as occurred with SS *Nobska*.

(5) Retain Portal Cranes. Portal cranes are a character-defining feature of a shipyard. The three existing portal cranes should be retained and repositioned in ways which enhance their interpretive value while minimizing restrictions on active ship repair activities. The NPS should pursue the formal transfer of Portal Crane 30 from the Navy and restore its original number as Portal Crane 63.

(6) Restore Remaining Navy Yard Piers (PMIS 151177). The NPS and the BRA should move ahead to complete the restoration of Piers 2 and 3. The BRA should ensure that development at the eastern end of the yard does not preclude the future use of Pier 11 for berthing of visiting ships.

(7) Dredge Piers 1, 2, 3, 4, and 11 for Visiting Ships (PMIS 2099). Visiting ships reinforce the maritime nature of the Navy Yard

and attract visitors to the yard. Both the NPS and the BRA have been active in promoting scheduled harbor ferry and harbor tour boat service between the yard and downtown Boston. Such vessels, however, do not require the same depths of water as do larger visiting ships. The NPS and the BRA should, in association with the Army Corps of Engineers, Massport, and other partners, dredge the berths at Piers 1, 2, 3, 4, and 11 to provide sufficient draft to accommodate visiting ships, especially American and foreign naval vessels and tall ships.

(8) Stabilize and Interpret the Marine Railway (PMIS 88432). The NPS should stabilize the remaining portions of the Marine Railway and interpret the facility, including the machinery room in Building 24, to the public as a part of the HarborWalk.

(9) Preserve Small-Scale Features (PMIS 12892, 88437, 116758, 124804). The NPS should ensure the preservation of the remaining industrial features of the yard such as the Grit Hoppers and Light Towers, as well as the smaller-scale buildings such as Buildings 110 and 124. The remaining Light Towers on Piers 4 and 6 should be retained by the BRA.

(10) Complete Restoration of the Muster House (Building 31). The Muster House (Building 31) was restored to appearance at the conclusion of the construction of the third floor in 1871. However, the brick walls are currently bare brick. During the entire period prior to the demolition of the building's canopy around 1929, it was painted (or otherwise coated). The walls should be painted with historically accurate colors.

(11) Review Existing Preservation Guidelines and Amend as Appropriate. The NPS and the BRA should review the existing preservation guidelines to ensure that they have been complied with or to amend them to reflect better information on the history of the structure being treated. The NPS should work with the BRA to enforce guideline provisions which are being ignored by tenants (such as maintenance of historic building signage). New groundplane guidelines for the entire yard should be developed in accordance with the Cultural Landscape Report for the non-NPS portion of the yard.

(12) Rehabilitate and Interpret the Ropewalk and Tarring House (PMIS 71089). The Ropewalk and Tarring House are two of the most significant buildings in the yard yet to be redeveloped. The NPS and the BRA should move forward to amend the current guidelines to reflect a more modest exhibit component in any future development. The physical treatment of the building, including interpretive exhibits, should be in accordance with the guidelines or amendments made in response to specific programmatic needs.

(13) Rehabilitate and Interpret the Chain Forge (PMIS 16850, 19802, 70250). The Chain Forge should be rehabilitated following the completion of hazardous material abatement. This should include conservation of in situ equipment and development of interpretive exhibits. The NPS and the BRA should review and amend the current guidelines to balance the preservation of the yard's only intact industrial shop with the spatial needs for successful rehabilitation. The World War II additions to the structure should be maintained and restored.

(14) Rehabilitate and Interpret the Dry Dock Pumphouse (Building 123). The BRA should be encouraged to rehabilitate the Dry Dock Pumphouse in a manner which allows public viewing of in situ pumping equipment.

(15) Maintain Historic Signage (PMIS 16704). Existing his-

toric signage in the yard, including building numbers and identification signs, street signs, safety signage, etc., should be maintained in accordance with NPS policies and the transfer guidelines. The NPS and the BRA should consider replacement of the Safety Shoe Sign in its historic location at the west end of Building 36. Within the national park, minor signage such as utility location stencils should be maintained (and updated where appropriate).

(16) Treat Streetscape Features in Accordance with Historic Precedents. Streetscape features, including crosswalks, fire hydrants, and dry dock safety railings should be painted in historic colors in accordance with 1973 photographic evidence and the provisions of the Navy's manual on *Color for Naval Shore Facilities*.¹⁴ The BRA and other property managers within the non-national park portions of the yard should be encouraged to utilize trash receptacles which duplicate historic Navy Yard trash receptacles.

(17) Develop Comprehensive Interpretive Waysides. The NPS and the BRA should work together to develop a comprehensive system of interpretive waysides, especially along the route of the HarborWalk. These waysides should be of a uniform design so as to reinforce the concept that the yard was historically a single property. While the NPS standard waysides can form the basis for the new waysides, the NPS should not refuse to consider variant designs simply because of policy.

(18) Manage Laydown Spaces. Because the NPS portion of the yard remains an active shipyard, laydown spaces are essential. The NPS should work with the Navy to ensure that defined laydown spaces do not spill over into other areas of the yard and do not become dumping grounds for obsolete equipment and materials.

Recommendations For Further Studies

The following is a summary of the recommendations for further study or other actions as a result of this report. Most of these projects have been included in the National Park Service's Project Management Information System (PMIS). The individual project statements should be consulted for further detail, as well as for cost information.

(1) Prepare Contextual Study of Naval Shipyards (PMIS 81068)

— The evaluation of the significance of the Charlestown Navy Yard in its larger contexts of both naval shipbuilding and technology has been difficult because of the lack of a comprehensive study of naval shipbuilding policies and practices. It is recommended that this study, as discussed above, be undertaken in partnership with the Navy. The study should be coordinated with the appropriate State Historic Preservation Officers so that it can inform the completion of National Register nominations for both shipyard properties already identified as eligible and those so identified during the study. While it is probably still too early to evaluate the reuse of shipyard properties,¹⁵ reuse plans should be examined to the extent that they im-

pacted decisions made as part of the closure process.

(2) Revise National Register Documentation (PMIS 16784)

— The existing National Register documentation for the Navy Yard consists primarily of a 1978 draft document never officially accepted, although distributed by, the National Register. Because it was drafted before extensive research had been conducted into Navy Yard records, it contains numerous factual errors. This documentation should be updated to both correct those errors and to reflect current conditions, as well as to include the entire Boston Naval Shipyard. The study should also look at the possibility of preparing individual National Register nominations for Dry Dock 1 (which should be combined with the existing NHL designation of Norfolk Dry Dock 1 as a multi-property thematic nomination for the Navy's first two dry docks), Dry Dock 3, and the Ropewalk. (This work could be incorporated into the broader contextual study recommended above.)

The PMIS project is broader than just the Navy Yard, encompassing all sites within Boston National Historical Park. As a part of this larger effort, the existing documentation for USS *Cassin Young* (DD-793) should be reevaluated in terms of the role of the vessel during the Cold War in the 1950s, the period which the physical fabric of the ship represents and the period where it has a close association with the Navy Yard's primary mission of modernizing and overhauling naval vessels.

Since the former Boston Army Base property is not proposed to be within the revised boundaries of the Boston Naval Shipyard NHL, the Boston Landmarks Commission should be encouraged to undertake the necessary work to nominate the Boston Army Base to the National Register. This study should include consideration of proposing the property for nomination as a National Historic Landmark in its own right.

(3) Complete HAER Documentation, Charlestown Navy Yard (PMIS 119094)

— At the time of the closure of the Boston Naval Shipyard in 1974, documentation of the yard to the standards of the Historic American Engineering Record was begun, but that effort has never been finalized. Only limited material has been processed and transferred to the Library of Congress. This project would locate and organize HAER photographs taken in 1973 and 1976 by Eric DeLony and Jack Boucher of the HABS/HAER staff, those taken in 1977 by the Boston Redevelopment Authority (BRA) as mitigation under various deeds of transfer, and subsequent documentation prepared under the auspices of the Army Corps of Engineers and private developers. In addition, it will make copies to HAER archival standards of photographs taken by Navy Yard photographers in 1973 and 1974 intended to document the conditions of the yard at the time of its closure.

(4) Update List of Classified Structures (PMIS 100030)

— The existing entries in the List of Classified Structures (LCS) should be updated to reflect the information developed in this report. The descriptive fields of this document should identify the character-defining features of each structure to the extent that they have been developed in historic structure reports (HSR), and the LCS should be subsequently updated as further HSRs are completed.

As a part of this project, structures outside of the national park boundaries but which are subject to preservation restrictions under the deeds of transfer, which have been created as drafts in the "shadow" LCS database, should be completed and incorporated into the LCS database so that all resources in the Navy Yard can be monitored in the same way.

¹⁴ Naval Facilities Engineering Command, *Color for Naval Shore Facilities*, NAVFAC P-309 (Washington: Naval Facilities Engineering Command, 1971).

¹⁵ To date, studies on the reuse of naval shipyards have dealt only with Boston, Philadelphia, and San Francisco (Hunters Point). See Catherine Alison Hill, *The Political Economy of Military Base Redevelopment: An Evaluation of Four Converted Naval Bases* (Ph.D. dissertation, Rutgers, 1998); Ron Hess, et al., *The Closing and Reuse of the Philadelphia Naval Shipyard*, MR-1364-Navy (Santa Monica, Calif.: National Defense Research Institute, RAND, 2001).

(5) Prepare Archeological Overview and Assessment (PMIS 100018) — The current archeological overview dates to 1980 and represents an assessment based solely on documentary materials. A more detailed overview and assessment, taking into account the findings of archeological work in and adjacent to the yard, should be prepared. Ideally, this project should be done in cooperation with the Boston Redevelopment Authority and include the entire Charlestown Navy Yard within its scope. This project is currently funded for FY 2010 under the regional archeological resources inventory (SAIP) program.

(6) Complete Cultural Landscape Report (PMIS 16796) — The remaining phase of the project for the Navy Yard cultural landscape report, covering non-NPS areas of the yard, should be undertaken. In developing treatment guidelines for this portion of the Navy Yard, the project should engage the park, the Boston Redevelopment Authority, local community groups, and other stakeholders in a visioning process and landscape character study of this portion of the yard as it transitions from predominantly industrial to institutional and residential uses. The result of this study will be used to develop revised groundplane treatment guidelines for the Historic Monument Area.

(7) Complete Draft/Prepare Historic Structure Reports (PMIS 12449, 16786, 74409, 74774, 144744) — The Historic Structure Report (HSR) provides essential information regarding the history of individual structures, identifies their character-defining features, and makes recommendations for their ultimate treatment. Most HSRs completed to date for Navy Yard structures have been done as part of the preliminary planning process for major rehabilitation projects. The most recent of these have been ones on Building 24, Building 125, and Dry Dock 1.

In the earliest years of the park, a number of HSRs were begun but never completed. These draft HSRs in the park's Technical Information Collection should be reviewed, and those which represent sound research should be finalized. Currently, statements exist for finalizing the HSRs on Quarters G (PMIS 16786) and the Chain Forge (PMIS 144744) and undertaking HSRs on Building 22 (PMIS 12449), Building 265 (PMIS 74774), and the Marine Barracks (PMIS 74409). A systematic program for the preparation of additional historic structure reports should be instituted.

(8) Prepare Administrative History (PMIS 12450) — The administrative history of Boston National Historical Park, especially as it relates to the creation of the park and the decision to include the Navy Yard in it, should be undertaken as soon as possible, while it is still possible to interview individuals involved in that process. This project is currently programmed for funding in FY 2014 under the regional cultural resources preservation program. Because this document may be of value in the preparation of the new General Management Plan for the park currently underway, it may be expedi-

tious to explore working with the public history community to encourage graduate students to undertake it as a thesis/dissertation project.

(9) Prepare Labor History Studies — While the administrative, architectural, and technological history of the Navy Yard is fairly well represented in existing studies, special history and other studies are required to provide more information on the yard work force, its relationship to the Charlestown community, and how its composition changed over time, including women and minority workers. Since NPS funding for such studies is unlikely to be obtained in the near future, it is recommended that the park work with the public history community to encourage graduate students to adopt them for thesis/dissertation projects.

(10) Revise/Update Scope of Collections Statement and Collection Management Plan (PMIS 90812) — The current Scope of Collections Statement (SOCS) was prepared in 1985, while the Collection Management Plan (CMP) was approved in 1994. Both documents are outdated and not in compliance with current NPS standards for those documents. A project to produce a new CMP for the park is currently underway. An update of the SOCS is currently scheduled for FY 2011.

(11) Prepare Comprehensive Finding Aid, Boston Naval Shipyard Archival Collections (PMIS 108004) — The current finding aids for the Boston Naval Shipyard Archival Collections are outdated, both in terms of changes to the organization of the collection since the original finding aid was prepared in 1981 and in terms of including all Navy Yard-related collections. This project will provide a comprehensive and consistent finding aid for the Records of the Boston Naval Shipyard, the Boston Naval Shipyard Related Collections, the Boston Naval Shipyard Oral History Project, and the Boston Naval Shipyard Photo Collection.

(12) Digitize Photographs to Provide Access to Collection (PMIS 16841) — The Boston Naval Shipyard Photo Collection and the architectural drawing files in the Records of the Boston Naval Shipyard are among the most-utilized material in the Boston National Historical Park Archival Collection. To facilitate access to this material, it is recommended that portions of these collections be digitized and made available to researchers in electronic form through the Internet. Among the series of items which should be digitized first are general views (including aerial photographs), exterior views of significant structures, selected views of ships (including USS *Cassin Young* and USS *Constitution*) and material from the two ship history files relating to them, and the annual yard site plans. The yard newspaper, *Boston Naval Shipyard News*, has previously been microfilmed. It is recommended that this microfilm be converted to digital format and made available in electronic form as well. As an initial step, pending creation of archival-quality scans, the images digitized for this report should be made available.

Chapter 4

Overview And Assessment

THE BOSTON NAVAL SHIPYARD was designated as a National Historic Landmark (NHL) in November 1966. Because the designation process occurred prior to the implementation of formal National Register of Historic Places nomination and documentation processes, the property is officially considered to be undocumented.¹ This Historic Resource Study (HRS) is intended in part to provide the basis for the completion of the formal documentation.

The analysis of the Navy Yard contained in this chapter, as well as the individual property information presented in Chapter 5, has been based on the inclusion of the entire yard—Charlestown and South Boston—as a part of the National Historic Landmark. Data on the 666 Summer Street (Boston Army Base) property has been included in the discussion of relevant National Register themes and property types to assist in the future nomination of that facility to the National Register in its own right. These structures, however, are not individually discussed in Chapter 5.

Drawing on the historical narratives in Chapters 2 and 3 and the individual resource descriptions found in Chapter 5, as well as the National Military Context and other contextual studies, this chapter will define the Navy Yard's period of significance, historical themes, character-defining features, and integrity. It will also provide guidelines for the management of the portions of the shipyard which the National Park Service (NPS) owns (Charlestown Navy Yard unit of Boston National Historical Park) or for which it possesses preservation restrictions under the deeds transferring portions of the yard to the City of Boston (Historic Monument Area of the Charlestown Navy Yard), as well as the development with the Boston Redevelopment Authority (BRA) of a joint master plan for the entire Charlestown Navy Yard.

The approach of this overview and assessment is holistic rather than dealing solely with architecture since the cultural resource is the Navy Yard, not its individual components taken in isolation. It is not, however, a substitute for more detailed studies to define specific preservation treatments for individual buildings, structures, and features. Rather, the recommendations herein should be used in conjunction with those in the Cultural Landscape Report (CLR)² and individual building Historic Structure Reports to inform the decision-making process in developing plans for such components of the yard.

What Constitutes The Boston Naval Shipyard?

On November 15, 1966, the Secretary of the Interior designated the “entire Boston Naval Shipyard” as a National Historic Landmark (NHL).³ This designation resulted in its automatic listing on the National Register of Historic Places, itself but a month old. At that time, no formal, detailed nomination forms were utilized to document the property being designated.

At the time of its disestablishment on July 1, 1974, Boston Naval Shipyard consisted of three distinct properties—Charlestown Navy Yard; South Boston Annex; and 666 Summer Street, the former Boston Army Base. The last property, which had been a part of the yard for just four years, has a distinct history and should be considered for separate listing on the National Register. The remaining two parts of the yard existed at the time that the “entire Boston Naval Shipyard” was designated as a National Historic Landmark and listed on the National Register.

The National Register, based on a 1972 nomination form prepared administratively by NPS personnel, defined the NHL as the Charlestown property only.⁴ It contains no justification for its exclusion of the South Boston Annex, which had been an integral—if underutilized—portion of the yard since its acquisition in 1920. This form led to the Navy's failure to apply Sections 110 and 106 of the National Historic Preservation Act to the South Boston Annex as a part of its disposal process. (It must be noted that the fifty-year rule—a standard which is all-too-rigidly applied—cannot be used as an excuse for not reviewing South Boston under Section 110 since its most significant feature, Dry Dock 3, was 55 years old in 1974. Similarly, the Boston Army Base was also 55 years old at the time of the yard's closure.) Despite this lack of preservation review, the reuse made of that facility, even with major demolition and new construction, has resulted in its retention of considerable integrity to its historic period.

As the historical narratives in Chapters 2 and 3 of this study document, the two areas were managed as a single property. It is impossible to historically separate them. Thus, this HRS has consistently treated the shipyard as a single entity and recommends that both areas be included within the boundaries of the NHL in the final documentation. However, because the Boston Army Base property, which was part of the shipyard for only the last four years of its existence as a naval facility, has a distinct history and significance of its own, this study recommends that the boundary be that which existed as of the date of the landmark designation rather than that at

¹ Although widely distributed, the 1978 nomination form prepared by the NPS as part of the boundary expansion study for the Charlestown Navy Yard was never officially accepted by the National Register. See Patrick Andrus, Meeting Report, “Boston Naval Shipyard,” Feb. 21, 1980, Boston Support Office Boston Naval Shipyard NHL File [copy], Division of Cultural Resources, BNHP.

² Christopher Stevens, et al., *Cultural Landscape Report for Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts* (Boston: National Park Service, 2005), TIC 457/D154.

³ National Survey of Historic Sites and Buildings, “Boston Naval Shipyard,” Oct. 10, 1966, enclosed in Howard R. Stagner to Paul H. Nitze, Nov. 15, 1966, Records of the Boston Naval Shipyard, RG 1.4, BNHP, NPS Cat. No. BOSTS-13347, Box 25.

⁴ National Register Inventory-Nomination Form, “Boston Naval Shipyard,” Aug. 29, 1972, Boston Support Office Boston Naval Shipyard NHL File [copy], Division of Cultural Resources, BNHP.

the end of the period of significance. It is the primary recommendation of this report that National Register documentation of the Boston Naval Shipyard, including the South Boston Annex, be prepared by the National Park Service.

This study also recommends that the Boston Landmarks Commission pursue the nomination of the Army Base to the National Register, including a study as to whether or not it meets NHL criteria. That latter study could be included in any larger thematic study done under the Department of Defense Legacy Program of Army ports of embarkation and supply depots.⁵

Too often studies of large facilities draw historic district boundaries which are less-encompassing than the formal site limits. These boundaries are often justified on one or both of two grounds. The first, and most defensible ground, is that the boundary is intended to include resources which relate to a lesser theme or period than the overall mission or time span of the facility. The second, and less defensible ground, is that the excluded areas have lost their integrity or are less than fifty years old. As will be discussed in detail later in this chapter, the issue of integrity for a constantly evolving property is not a cut-and-dried formula which automatically excludes properties which are not in their original state.

Much emphasis has been placed on the concept that a property must be at least fifty years old to be considered historic, unless there are exceptional circumstances. While it is not argued that there is a need to allow time to determine what is actually significant, a review of available documentation indicates that the rule has largely been applied to active military bases to exclude newer facilities which may continue to evolve and thus relieve managers from compliance with the requirements of Section 106 of the National Historic Preservation Act of 1966. (This, of course, ignores the need for review because of potential affects on adjacent historic properties.) Unfortunately, preservationists, by emphasizing the retention or replacement-in-kind of "historic fabric," have made the compliance process be seen as something which prevents evolution rather than as a tool which encourages alterations and modifications which are sympathetic to the older fabric to which they are to be applied.

While this study shows that the NHL boundary should include the historic limits of the Navy Yard, it excludes as contributing resources of the NHL two historic naval vessels permanently berthed at the Charlestown Navy Yard. Both USS *Constitution* and USS *Cassin Young* (DD-793) are NHLs in their own right which, while possessing historic connections with the active shipyard, are not integral elements of the shipyard.⁶ The primary significance of both vessels relates to their operational history, with *Constitution* having additional significance as a national icon. This significance is independent of where the vessels are located. In addition, while their presence enhances the shipyard from an interpretive viewpoint and reinforces its integrity, their absence does not alter the significance of the yard. Thus, this analysis does not include either ship in its discussion of the significance of the NHL.⁷

⁵ The existing Massachusetts Historical Commission inventory form for the Boston Army Supply Base [BOS.RT], prepared for the Boston Landmarks Commission in July 1997, is an incomplete mixture of the Army Base and the South Boston Annex and contains numerous errors.

⁶ The inclusion of USS *Constitution* in the definition of the Charlestown Navy Yard in the Boston National Historical Park Act of 1974 is irrelevant to whether or not it is a contributing resource of the yard.

⁷ The current national park boundary includes property outside of the historic Navy Yard limits. Because Hoosac Stores No. 1 & 2 has no historic

Statement Of Significance

The following statement of significance for the Charlestown Navy Yard represents a synthesis of information developed during this study:

The Charlestown Navy Yard is significant for its role in the construction, repair, and servicing of vessels of the United States Navy for the entire period of its existence from 1800 to 1974. It is also significant as the site of one of the first two naval dry docks in the United States, the location of the Navy's only ropewalk, and for technical innovations such as die-lock chain. The yard evolved throughout its history to meet changing needs and naval technologies, and the current site contains resources from all periods of its existence. The yard also contains two of the landing sites for British forces involved in the Battle of Bunker Hill. Although much of the current acreage of the yard is filled land, there is a potential that portions of the yard may contain archeological resources related to Native American and colonial use of the area prior to its purchase by the federal government as well as those related to its use by the Navy. The yard is also associated with several historically significant naval officers, as well as with a number of individuals who are significant in the fields of architecture, civil engineering, and technology.

National Register Criteria

The Boston Naval Shipyard is listed on the National Register of Historic Places. The National Register includes properties which meet the following criteria:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.⁸

As this study has clearly shown, the shipyard includes both the Charlestown and South Boston properties and meets three of the four criteria (A, B, C) for National Register listing with a significance level of national. There are several elements of the yard which independently meet National Register criteria for architecture

association with the yard, it has not been considered in the analysis in this chapter. The building, however, is listed on the National Register in its own right, and thus is managed by the NPS as an historic structure.

⁸ U.S. National Park Service, *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, rev. ed. (Washington: National Register, History and Education, Cultural Resources, National Park Service, 1997), p. 2.

and engineering (C), with at least two—Dry Dock 1 and the Rope-walk Complex—meeting the stricter NHL criteria 2 and 4 as well.

One of the areas which is under-represented in National Register nominations of military facilities is Criteria B, which deals with lives of significant persons. This under-representation “may be partly due to the difficulties inherent in learning about and documenting the association of historically important persons with specific military buildings and structures.”⁹ This difficulty is lessened when one looks at individuals not in connection with a particular building but in connection with the entire facility.

There is a possibility that Charlestown may also meet the fourth National Register criteria (D) in that it may contain unidentified archeological resources relating to the pre-1800 period (both in terms of early colonial occupancy and Native Americans), although the extensive development of the yard limits this possibility to a very limited area at the northwest corner. While there are inventories of potential archeological resources for the national park and Buy (New Development) Parcels,¹⁰ both documents concentrate on post-1800 resources. Neither addresses the Historic Monument Area or the Public Park parcel, nor do they reflect more recent field experience with both Navy Yard resources and resources in Charlestown outside of the yard’s boundaries. It is recommended that a comprehensive archeological overview and assessment be prepared as a part of the National Park Service’s Servicewide Archeological Inventory Program (SAIP). While such a study would concentrate on the NPS area of the yard, it should not be limited exclusively to that parcel.

Because of the determination that the period of significance for the Navy Yard encompasses its entire 174-year span as a naval facility and rejects the idea of selectivity, this study does not address the “exceptional significance” requirements of National Register Criteria Exception G, which covers resources less than fifty years old. In addition, since the last major physical additions to the Navy Yard, the concrete piers, were completed in the mid-1950s, they have now achieved the “magic” threshold for historic status.

NHL Criteria

As a National Historic Landmark, the Boston Naval Shipyard needs to be evaluated in the terms of the criteria for NHLs, which are similar to the general National Register criteria. These criteria are as follows:

The quality of national significance is ascribed to districts, sites, buildings, structures, and objects that possess exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archeology, engineering, and culture and that possess a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association, and:

1. That are associated with events that have made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of

United States history and from which an understanding and appreciation of those patterns may be gained; or

2. That are associated importantly with the lives of persons nationally significant in the history of the United States; or
3. That represent some great idea or ideal of the American people; or
4. That embody the distinguishing characteristics of an architectural type specimen exceptionally valuable for a study of a period, style or method of construction, or that represent a significant, distinctive and exceptional entity whose components may lack individual distinction; or
5. That are composed of integral parts of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively compose an entity of exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of life or culture; or
6. That have yielded or may be likely to yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Such sites are those which have yielded, or which may reasonably be expected to yield, data affecting theories, concepts and ideas to a major degree.¹¹

A site needs only to meet one of the six areas of significance in order to qualify as an NHL. The Navy Yard clearly meets the first criteria for its role as a key naval shipyard from its creation in 1800 to its disestablishment in 1974. It also meets the second criteria in the person of Loammi Baldwin, considered by the American Society of Civil Engineers to have been the “Father of Civil Engineering” in the United States and who was responsible for the development of both the first master plan for the yard and the construction of its first dry dock. While the yard does meet similar National Register criteria B for its association with various naval officers assigned to the yard who have been recognized as significant by both the Navy and naval historians (see Table 4-1), none rise to the more limited NHL criteria since, with the possible exception of Capt. William R. Rush, their service at the yard has not been the reason why the Navy chose to honor such officers by naming ships for them. The yard, as a district containing resources spanning its entire 174 year period of significance, meets the fourth criteria both individually in the form of the works of Alexander Parris, Joseph Billings, and the unknown architects of the early 20th century and as an assemblage of structures which are characteristic of both a military installation and a maritime industrial site.

While both Charlestown and South Boston have undergone significant alterations since the end of the period of significance, both sites retain considerable integrity in terms of layout and character-defining features of both a military installation and a maritime industrial site. Given that the site is not one which can be “frozen in time” to represent its appearance at a particular time in history (as with, for example, the home of a famous person preserved to its appearance at the time that person occupied the home), change from the site’s appearance at the end of the period of significance is inevitable. While some might argue that the NHL boundaries should be drawn to exclude areas which have less integrity than others, this

⁹ Foster Wheeler Environmental Corp., et al., *California Historic Military Buildings and Structures Inventory*, 4 vols. (Sacramento: U.S. Army Corps of Engineers, Sacramento Division, 2000), vol. 1, chap. 3, p. 18.

¹⁰ Audrey R. Marie, *Cultural Resources Inventory: Potential Archeological Resources, Charlestown Navy Yard, Boston National Historical Park* (Denver: Denver Service Center, 1980), TIC 457/D1555; Michael S. Raber and Matthew W. Roth, *Boston Naval Shipyard: A Plan for Cultural Resource Management in the Buy Parcel Area* (New Haven, Ct.: Raber Associates, 1981), TIC 457/D6154.

¹¹ National Register Bulletin 15, p. 50.

Table 4-1
NAVAL VESSELS NAMED FOR COMMANDANTS

Commandant	Years	Ship(s)
Oscar C. Badger	1882-1885	DD-126; DE-1071
William Bainbridge	1812	<i>Bainbridge</i> (Brig)
	1813-1815	DD-1; DD-246; DLGN-25;
	1823-1824	DDG-96
	1832-1833	
DeWitt Coffman	1911-1914	DE-191
William M. Crane	1812-1813 ^a	DD-109
	1825-1827	
Louis R. de Steiguer	1923-1925	AGOR-12
John Downes	1835-1842	DD-45; DD-375
	1849-1852	
Albert Gleaves	1921	DD-423
Francis H. Gregory	1852-1855	DD-82; DD-802
William L. Hudson	1859-1862	DD-475
Isaac Hull	1813	DD-7; DD-330; DD-350;
	1815-1823	DD-945
Lewis A. Kimberly	1885-1887	DD-80; DD-521
John B. Montgomery	1862-1863	DD-121
Charles Morris	1827-1833	TB-14; DD-271; DD-417
Samuel Nicholson	1801-1811	TB-29; DD-52; DD-442
Foxhall A. Parker, Jr.	1876-1878	DD-48
Samuel S. Robison	1919-1921	DDG-12
John Rodgers	1866-1869	DD-574
William R. Rush	1914-1919	DD-714 ¹
William T. Sampson	1899-1901	DD-63; DD-394; DDG-10;
		DDG-102
Thomas O. Selfridge	1890-1893	DD-357
William B. Shubrick	1824-1825 ^a	TB-31; DD-268; DD-639
Silas H. Stringham	1855-1859	TB-19; DD-83
	1863-1866	
Joseph Tattnall	1848-1849 ^a	DD-125; DDG-19
Henry A. Wiley	1921-1923	DD-749

Source: *Dictionary of American Naval Fighting Ships*

This table excludes officers for whom ships have been named such as George Dewey, Stephen B. Luce, and Alfred Thayer Mahan who served in lesser capacities in the yard during their naval careers.

^a Denotes Acting Commandant

¹ Name reassigned from cancelled DE-556; originally assigned to cancelled DE-288.

practice places too much emphasis on the physical appearance rather than the historical associations which are the overarching reasons for the yard's designation as an NHL in the first place. For that reason, this study recommends that the landmark boundary be that of the entire Boston Naval Shipyard as it existed in November 1966.

Related Themes Not Considered

This Historic Resource Study focuses on the themes which are related specifically to the Boston Naval Shipyard as a military-industrial facility. It does not address additional themes which may apply to the yard. These unrelated areas of significance are summarized below and are noted in the statements of significance for individual resources found in Chapter 5 of this study.

The Charlestown Navy Yard contains the sites of the landing of British forces on June 17, 1776, for the assault on colonial positions on Breeds Hill and other locations in Charlestown. This extended battlefield is commemorated by two historical markers located on Buildings 5 and 105. The site, however, retains no integrity to its

appearance at the time of the battle. Other than preservation of these historic markers and mention of the site's role in the battle in interpretive materials, no further consideration of this theme is recommended.

Dry Dock 3 (Commonwealth Dry Dock) at South Boston was constructed by the state as a part of a major development of the South Boston waterfront in the first two decades of the 20th century. Along with Commonwealth Pier No. 5 and Fish Pier No. 6, the Commonwealth Dry Dock would be a contributing resource to a National Register district representing several maritime-related themes, including international trade, the fisheries industry, and the shipbuilding and repair industry. The district also relates to the theme of urban development and planning and contains structures which have architectural significance. Commonwealth Pier may already be individually listed on the National Register.¹² It is recommended that the Boston Landmarks Commission and the Massachusetts Historical Commission address these themes with a view to nominating an Early 20th Century South Boston Waterfront Development district to the National Register.

The former Boston Army Base was a part of the Boston Naval Shipyard only from 1970 to 1974. It has a distinct history and significance of its own, and appears to meet National Register criteria A and C at a national level of significance. The Boston Landmarks Commission and the Massachusetts Historical Commission should proceed to undertake a National Register nomination for the Boston Army Base with a period of significance of 1919-1970. This nomination should take the National Military Context into consideration in its evaluation of the property and address whether the property rises to the level of a National Historic Landmark as a military port of embarkation during World War II.¹³ This may best be done in the context of a national thematic study of other Army supply depots and ports of embarkation undertaken under the auspices of the Department of Defense Legacy Program.

Historic Contexts

The evaluation of historic properties requires that they be placed into their context with regard to their time period, historical themes, and property types. As a site which evolved continually from its establishment in 1800 to its closure 174 years later, the Charlestown Navy Yard has a long and complex history. It is both a military installation and an industrial facility. As a military installation, it changed as the Navy it served underwent both mission and technological change. As an industrial facility, it reflected developments in both shipbuilding and the manufacture of materials including rope and chain. These changes have never been properly evaluated in

¹² The Massachusetts State Register of Historic Places and the MACRIS database [BOS.7179] indicate that Commonwealth Pier Five was individually listed on Oct. 10, 1979. The listing does not, however, appear in the National Register database.

¹³ Although, as discussed in Chapter 3, there were numerous Army ports of embarkation during World War II, only two—Fort Mason in San Francisco and the Brooklyn Army Base (New York Port of Embarkation)—are listed on the National Register. While the Boston Army Base was not addressed in the NPS theme study of the homefront during World War II, the site meets the same criteria that led to the report's recommendation for the consideration of the New York Port of Embarkation as a potential NHL. See Marilyn M. Harper, et al., *World War II & the American Homefront: A National Historic Landmarks Theme Study* (Washington: National Historic Landmarks Program, Cultural Resources, National Park Service, 2007), p. 144.

the context of military facilities in general, let alone naval shipyards as a specific subset of those facilities.

Recognizing that there was a need to provide a uniform basis for analyzing military properties under Section 110 of the National Historic Preservation Act, the Army Corps of Engineers in the mid-1990s contracted for the production of two studies which were intended to provide a contextual framework for military installations constructed between 1790 and 1945.¹⁴ This National Military Context (NMC) forms the principal basis for evaluation of the Navy Yard. However, because the yard was also an industrial plant and a community unlike traditional military posts, it also has contexts outside of the National Military Context. The industrial aspects of the yard, both as an industrial plant in general and as a maritime industrial complex in particular, are an overlay to the military context. Thus, as described below, this report expands upon that context to more fully evaluate the Navy Yard.

The National Military Context is, necessarily, an overview and is not a substitute for thematic contextual studies which take a more specialized approach to a subset of military facilities such as shipyards. Nor does it take into account post-1945 developments.

While there is a considerable literature on naval shipbuilding, it concentrates primarily on the design concepts and issues of particular ship types, not the execution of these designs by both naval and private-sector shipbuilders. Many of the yard's facilities relate directly to that process, and are poorly documented.

The individual studies of shipyards which exist range from collections of photographs to scholarly histories, but few, if any, have looked at the larger context of naval shipbuilding and repair policies and practices, let alone the issue of industrial specialization. Cultural resource studies and inventories have examined the architecture and engineering features of individual shipyards in a vacuum with respect to similarities and differences from yard to yard. The issue of navy yard industrial activities should also be examined in the larger context of other military manufacturing operations such as the Army's arsenals.

It is therefore recommended that the National Park Service contract for the preparation of a specific contextual study of naval shipyards. The purposes of this study are described in the PMIS project statement:

The study will examine subjects including the original decision as to the location of the first six yards, the influence of the Board of Navy Commissioners on the master plans developed in 1828, rationale for the industrial specialization of the various yards, attempts to close or realign yards throughout the entire period, the role of central offices such as the Bureau of Yards and Docks in the physical development and architecture of the yards, decisions as to the roles of the various yards in the various wars engaged in during the period, and other topics that will allow the analysis of the specific contributions of the Charlestown Navy Yard to the development and growth of the United States Navy.¹⁵

Within the National Park Service, the project should include

¹⁴ R. Christopher Goodwin & Associates, *National Historic Context for Department of Defense Installations, 1790-1940: Final Report*, 4 vols. (Baltimore: Baltimore District, U.S. Army Corps of Engineers, 1995) [hereafter *National Military Context*]; R. Christopher Goodwin & Associates, *Historic Context for Department of Defense Facilities: World War II Permanent Construction* (Frederick, Md.: Goodwin, 1997).

¹⁵ PMIS 81068, "Produce Contextual Study of Naval Shipyards," last updated Nov. 3, 2006.

involvement from the Maritime Heritage Program. It should also be done in cooperation with relevant Navy offices, including the Navy's Federal Preservation Officer, the Naval Historical Center, and the Naval Facilities Engineering Command, as well as the State Historic Preservation Officers of the states having present or former naval shipyards. In particular, the Cold War period must be thoroughly analyzed with regard to shipyards, since current National Register nominations tend to deal only with significance up to the end of World War II and post-World War II resources are far more vulnerable to change than earlier ones.

The proposed study should look at existing histories of all naval shipyards and relate developments to broader policy decisions made by the naval hierarchy in Washington, including the Board of Naval Commissioners, the Bureau of Yards & Docks, and the Naval Facilities Engineering Command. There is anecdotal, documentary, and photographic evidence that there was considerable commonality in facilities and their design. The study should examine this topic through both archival records concerning facility design and construction and the physical evidence of the resources themselves. Examination of the careers of key naval officers may illuminate this topic as well, since rotation between shipyards may have been an important method by which common concepts were spread between yards.

The lack of a contextual, or theme, study of naval shipyards can be seen in the inconsistent representation of shipyards on the National Register, particularly when compared with facilities of other military services. Eight naval shipyards are represented as districts on the National Register (see Table 4-2). Individual resources from two others are listed, but, except for Norfolk's dry dock, are considered significant for their architecture rather than their relationship to the shipyard. (This analysis excludes Pearl Harbor, listed as a part of the larger naval base which is on the National Register for reasons other than its shipyard function; Pensacola, which had closed as a shipyard in 1911 and is listed primarily for its associations with naval aviation; and Sackett's Harbor, which is listed because it is within a War of 1812 battlefield.)

Four of the eight shipyards on the National Register—Boston, Mare Island, Puget Sound, and Washington—are also National Historic Landmarks, along with, for other reasons, Pearl Harbor and Pensacola. Even there, the listings tend to be confined to particular time periods rather than looking at the entire period of a yard's history, and thus exclude resources added after those periods, or are limited to specific portions of a yard such as officers' quarters areas. Since shipyards are, by their very nature, evolving institutions, the arbitrary policy of excluding more recent resources and limiting the nominations to the more distant past must be forgotten.

The resultant study will provide a consistent, national base for making assessments of the significance of both individual structures and features and entire shipyards under Sections 106 and 110 of the National Historic Preservation Act. One of the major results of a contextual study will be revisions to existing and additional National Register nominations, as well as revised or additional National Historic Landmark designations. It would be a vehicle for finalizing informal determinations of eligibility made during the various base closure programs of the 1980s and 1990s (see Table 4-3).

While individual resources within a given shipyard may have unique aspects which give them different levels of significance than the installation as a whole (and thus qualify them for independent

General Storehouses: A Common Design

DURING WORLD WAR I the Navy realized that it needed large storehouses to stock and issue all of the materials required to supply an expanded fleet. The Bureau of Yards & Docks developed a standard design for general storehouses in the industrial style popularized by architect Albert Kahn. These standard details were issued to individual navy yards, which constructed buildings

to both fit available space within the yards and provide the square footage required for their particular needs. The general storehouse was the first documented instance where Washington mandated not only general form but also actual construction details of structures at all naval facilities. This standard design continued to be used into World War II.



This Mar. 6, 1918, view shows the General Storehouse (Building 149) for the Charlestown Navy Yard under construction. Even before the building was complete, the yard began work to add two additional floors to the facility. *BOSTS-9895*



Building 143 at the Washington Navy Yard, completed in 1914, was the first general storehouse to use the new standard design. Building 28 at right was built in 1942 to replace an 1863 Foundry. *J. Brough Schamp, HABS*



Building 5 was one of two general storehouses constructed at the Philadelphia Navy Yard during World War I. Note the overhead utility line running along the building's facade in this 1995 view. *Jet Lowe, HAER*



The General Storehouse (Building 290) at the Puget Sound Navy Yard is seen around the time of its completion in 1917. The 10-story structure provided 288,000 sq. ft. of storage space. *Bureau of Yards & Docks*



The General Storehouse (Building 4) at the Charleston Naval Shipyard is seen here shortly after the closure of that yard in the mid-1990s. It was one of the smallest constructed during World War I, containing only 96,000 sq. ft. *S.C. Dept. of Archives & History*

Marine Barracks Architecture

WHILE THE NAVY did not generally construct barracks for enlisted sailors until the 20th century, its subsidiary service, the U.S. Marine Corps, provided such facilities for its personnel. Although these barracks were built to a number of different architectural styles—often reflecting the prevailing styles of the time and place—they followed a general design which has become the most significant character-defining feature of a Marine Barracks. This design consisted of a central barracks for enlisted men flanked on either end by multi-story quarters for officers or families. Both of the Marine Barracks constructed at Boston (Quarters I at Charlestown and Building 15 at South Boston) conformed to this design pattern.

The earliest barracks such as those at Portsmouth and Boston featured single-story central sections. Over time these were raised to the same height as their wings. Many barracks featured porches running the width of the central sections. In a number of cases,

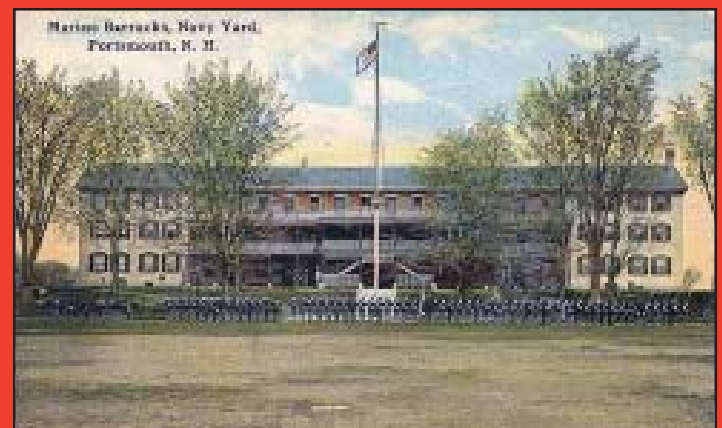
these open structures were subsequently enclosed to provide extra space within the barracks.

A likely explanation as to why this design was adopted is the nature of the Marine presence at naval shore facilities. Unlike the Army, where units occupied an entire post, the Marines were stationed within naval facilities. The area given over to the Corps was often the smallest possible. Thus, space was limited so that the separation of enlisted men and officers prevalent in the Army was impossible. Indeed, Marine Barracks areas were always under pressure from competing naval needs. Throughout the history of the Charlestown Navy Yard, for example, there were repeated proposals to remove the barracks from the yard so that the grounds could be used for other yard activities.

This gallery presents a selection of images of Marine Barracks which illustrate this common design feature.



Marine Barracks (Quarters I), Boston Navy Yard, ca. 1900-1910
It is the oldest extant Marine Barracks structure, having been begun in 1811. *acc. BOSTS-295*



Marine Barracks (Building M1), Portsmouth Navy Yard, ca. 1900-1910
The original portions of this structure date to 1828. *SeacoastNH.com*

Marine Barracks, New York (Brooklyn) Navy Yard, 1870.
This structure is unusual among Marine Barracks in being only two stories high. *Harper's Monthly*



Marine Barracks (Building 169), Puget Sound Navy Yard, ca. 1912-1920
Completed in 1912, it still employed the central section and wings design of 19th-century barracks. Although the separate officers' quarters built at the same time survive, this structure has been demolished. *BNHP*



Marine Barracks (Building M37), Mare Island Navy Yard, ca. 1920
This structure dates to 1917. *NARA (Pacific Region) RG 181*

Table 4-2
NAVAL SHIPYARD NATIONAL REGISTER PROPERTIES

Shipyard	National Register Property	Type	NR Number	Criteria	NHL
Boston Charleston	Boston Naval Shipyard	District	66000134	A,C,D	Yes
	Charleston Navy Yard	District	06000699	A,C	No
	Officers' Quarters Historic District	District	07000100	A,C	No
Long Beach	[None]	—	—	—	No
Mare Island	Mare Island Naval Shipyard	District	75002103	A	Yes
	Mare Island Historic District	District	96001058	A,C,D	No
New York Norfolk	Quarters A	Individual	74001252	B,C	Yes
	Drydock No. 1	Individual	70000862	A	Yes
	Quarters A, B, and C	Individual	74002242	A,C	No
Pearl Harbor	United States Naval Base	District	66000940	A,C	Yes
Pensacola	Pensacola Naval Air Station	District	76000595	A	Yes
Philadelphia	Philadelphia Naval Shipyard	District	99001579	A,C	No
	Commandants' Quarters	Individual	76001661	A,C	No
	Marine Barracks	Individual	76001664	A	No
Portsmouth Puget Sound	Portsmouth Naval Shipyard	District	77000141	A,C	No
	Puget Sound Naval Shipyard	District	88003053	A	Yes
	Marine Reservation Historic District	District	88003051	A	No
Sacketts Harbor San Francisco	Officers' Row Historic District	District	88003054	A	No
	Sacketts Harbor Battlefield	District	74001247	A,C,D	No
	[None]	—	—	—	No
Washington	Washington Navy Yard	District	73002124	A,C	Yes
	Commandant's Office	Individual	73002077	A,C	No
	Main Gate	Individual	73002098	C	No
	Quarters A	Individual	73002111	A,C	No
	Quarters B	Individual	73002112	A,C	No
	USMC Barracks & Commandant's House	District	72001435	A,B,C	Yes

Source: National Register Information System; National Historic Landmark Database
Excludes Naval Hospitals and other non-industrial facilities within or associated with shipyards as well as historic naval vessels berthed at shipyards.

listing on the National Register), the basic assumption which must underlie the listing of any naval shipyard on the National Register is whether or not it played a significant role in naval history as a shipyard. Thus, while it is appropriate to distinguish between contributing and non-contributing resources within the shipyard, it is not appropriate to divide a shipyard into historic and non-historic sections.

Period Of Significance

The Charlestown Navy Yard existed for 174 years, from August 1800 to July 1974. While the level of activity varied throughout this period, reflecting larger developments in American military history, it performed its functions for the entire time that it was in formal existence. Thus, the period of significance for the yard has been defined as 1800 to 1974. Similarly, the period of significance for the South Boston Annex of the Boston Naval Shipyard is 1919 to 1974, covering the entire period of its existence as a military installation.

The National Military Context divides the period from 1790 to 1940 into four chronological eras. Under each, it addresses a number of historical sub-themes by service. Those which relate to the Navy are as follows, with **bold** type denoting those which are relevant to the Charlestown Navy Yard:

1. The Military in the Early Republic and Antebellum Era, 1790-1860
Naval Yards and Stations
2. The Civil War and National Expansion, 1860-1890
Results of the Civil War
Beginnings of Naval Modernization
Changing Roles of Shore Installations
3. The Military and the Progressive Era, 1890-1916
Steel Ship Construction and Repair
Development of Naval Ordnance
Logistical Support to the Fleet
Officer Education and Recruit Training
Personnel Support
New Technology: Submarines, Aircraft, and Radio
World War I Navy Construction
4. The Inter-War Years, 1918-1940
War Plans and the Shift to the Pacific
Submarines and Aviation¹⁶

A further contextual study covers the World War II period (1940-1945). No comprehensive contextual studies have been produced for the post-World War II period. With the ending of the Cold War in 1989, however, Congress recognized that many Cold War resources would slip through the cracks of preservation because of the "fifty year rule" precluding nomination of recent sites or structures to the

¹⁶ *National Military Context*, vol. 1, p. 3.

Table 4-3

POTENTIAL NAVAL SHIPYARD NATIONAL REGISTER PROPERTIES

Shipyards	Property	Type	Note
Boston ¹	Dry Dock 1	Individual	P
	Dry Dock 3 (South Boston)	Individual	P
	Ropewalk	Individual	P
Long Beach	Roosevelt Base Terminal Island	District	D
New York	Navy Yard Brooklyn	Individual ²	C
Norfolk	Norfolk Naval Shipyard	District	P
Philadelphia	Building 4	Individual	C
	Building 6	Individual	C
	Navy Base Philadelphia	District	C
Portsmouth	Portsmouth Naval Shipyard	District	A
San Francisco	Commercial Dry Docks	District	C
	Dry Dock 4	Individual	C
	Ordnance and Optical Building	Individual	P
Washington	Gun Assembly Plant	Individual	D
	Washington Navy Yard Annex	District	D

Source: U.S. Dept. of the Navy, *Reference Guide to Historic Properties*.

Note:

A – Potential additions to existing districts

C – Consensus determination of eligibility by Navy and SHPO

D – Formal Determination of Eligibility for the National Register

P – Potentially eligible for the National Register

¹ This list does not include the resources (Commandant's House; Buildings 5, 31, and 266) for which the Navy drafted but never submitted National Register nominations in 1972.

² Consensus determinations cover approximately 33 individual properties.

National Register. It thus directed the Department of Defense to undertake a series of studies to begin the process of developing the necessary context studies for the evaluation of these resources. Even with this effort, the preservation community has been somewhat reluctant to embrace Cold War resources as being significant. This reluctance has been coupled with other influences, such as the belief that National Register listing precludes successful reuse of a military installation for civilian purposes following its closure. Much of the Section 110 and Section 106 efforts made in conjunction with facilities being closed or realigned under the Base Realignment and Closure (BRAC) rounds of the 1990s and early 2000s have concentrated on World War II or earlier-era resources.

One specialized theme within the Cold War era is that of the development of guided missiles for military purposes. The Navy's historic context study on that theme identifies four sub-themes: Research and Development, Test and Evaluation, Training and Education, and Logistical and Operational Support.¹⁷ This latter category has been defined as encompassing "storage, assembly, and inspection of the missiles."¹⁸ Property types associated with this sub-theme are inspection and test buildings, assembly buildings, and missile magazines.¹⁹

Shipyards facilities involved in the construction and modification of ships to carry and operate missiles are not specifically ad-

¹⁷ R. Christopher Goodwin & Associates, *Navy Cold War Guided Missile Context: Resources Associated with the Navy's Guided Missile Program, 1946-1989: Final Report*, Aug. 1995 (Norfolk, Va.: Atlantic Division, Naval Facilities Engineering Command, 1995), p. 91.

¹⁸ *Ibid.*, p. 149.

¹⁹ *Ibid.*, p. 261-62, 269-70.

However, the Philadelphia Naval Shipyard is listed as having significance under the Logistical and Operational Support sub-theme, citing the yard's construction of two guided missile frigates and its involvement "in the conversion of destroyers and cruisers, providing them with the equipment necessary to carry guided missiles."²⁰ Based on this listing, it is clear that the Boston Naval Shipyard, which was the lead yard for several of the Navy's earliest ship conversion projects, would qualify as significant under this aspect of the Cold War guided missile context theme.

The broad periods of the National Military Context need to be refined to reflect the particular history of individual naval shipyards. For example, a cultural resources survey of the Portsmouth Naval Shipyard identified the following seven periods:

1. Establishment (1800-1815)
2. Early Nineteenth-Century Growth (1815-1840)
3. Development in the Age of Steam (1840-1860)
4. Redesigning the Fleet (1861-1898)
5. War, Expansion, and International Prominence (1898-1913)
6. World War to Depression and Back Again (1914-1945)
7. The Cold War Era (1945-1989)²¹

Similarly, a context study focusing solely on California established the following seven periods:

1. Colonial Era (1789-1846)
2. Frontier Era (1846-1865)
3. Traditional Era (1866-1902)
4. Modernization Era (1903-1918)
5. Interwar Era (1919-1938)
6. World War II (1939-1945)
7. Cold War Era (1946-1989)²²

For the Charlestown Navy Yard, the following periods represent the historical development of the yard and show how they fit under the broader chronological sweep of the National Military Context. For each period, there is a brief description of the historical events which have been utilized in defining the period. The yard today contains features which are associated with each of these periods.

1. The Military in the Early Republic and Antebellum Era, 1790-1860
 - A. **Establishment (1800-1828)** — From the establishment of the Navy Yard, through the War of 1812 and the start of shipbuilding, up until the issuance of the 1828 master plan for the yard.
 - B. **Early Nineteenth-Century Growth (1828-1853)** — From the 1828 master plan up until the appointment of Joseph Billings as the yard's first permanent Civil Engineer. Includes the construction of Dry Dock 1 and the Ropewalk Complex.

²⁰ *Ibid.*, p. A-13. Interestingly, the Portsmouth Naval Shipyard, which designed and produced ballistic missile submarines, has no relevant sub-themes identified with it. See *ibid.*, p. A-8. Although the Trident Refit Facility at the Strategic Weapons Facility Atlantic, Kings Bay, Ga., is identified, no other naval shipyard is included in the report's listing of Navy installations associated with the Navy's Cold War guided missile program. See *ibid.*, p. A-6.

²¹ Cultural Resource Group, Louis Berger & Associates, *Cultural Resources Survey, Portsmouth Naval Shipyard* (Draft; Aug. 1996), p. 14-34.

²² *California Historic Military Buildings and Structures Inventory*, vol. 3, p. 1-2.

2. The Civil War and National Expansion, 1860-1890
 - A. **Development in the Age of Steam (1853-1869)** — From the appointment of Joseph Billings as Civil Engineer through the modernization of the yard to handle steam-powered vessels and the Civil War up to the 1869 master plan.
 - B. **The Post Civil War Period (1869-1890)** — From the 1869 master plan through the proposed conversion of the yard to a manufacturing facility to the resurrection of the yard to handle steel warships.
3. The Military and the Progressive Era, 1890-1916
 - A. **The Yard Resurrected (1890-1919)** — From the start of plant modernization and the Spanish-American War through the major modernization campaign of the early 20th century and the start of steel shipbuilding up to the end of World War I.
4. The Inter-War Years, 1918-1940
 - A. **The Stagnant 1920s (1920-1931)** — From the end of the World War I programs up until the first orders for destroyer construction.
 - B. **The Yard Revitalized (1931-1939)** — From the start of destroyer construction through the WPA modernization of yard facilities up to the outbreak of World War II.
5. World War II, 1940-1945
 - A. **World War II (1939-1945)** — From the declaration of national emergency in 1939 through the end of World War II and the yard's redesignation as Boston Naval Shipyard, including the development of the South Boston Annex.
6. The Post-War Years, 1945-1989
 - A. **The Cold War Era (1945-1974)** — From the end of World War II through the Korean War, Cold War, and Vietnam War until the yard's closure.

The precise definition of these periods is somewhat arbitrary, being keyed to significant events, and there is an overlap between most of them. In addition, the periods could be further broken down. For example, while the Civil War could have been considered as a separate period, it has been included within the larger period from 1853 to 1869 since it represented more of an acceleration of developments already in progress than new directions for the yard. As can be seen, this places the period within two of the periods in the National Military Context.

Although the post-1974 period may achieve significance in its own right under the themes of historic preservation and the conversion of military facilities to other uses, these developments are still too new to allow the development of appropriate historic contexts. Thus, while post-1974 structures and features are included in this study, none are recommended as contributing resources at this time.

Historical Themes

The National Military Context identifies six major historical themes as important to the evaluation of military facilities. These six themes, which are based on National Register themes, are further related to both individual services and chronological periods. The following is a listing of the themes and sub-themes shown as relevant to the Navy under one or more time period, with sub-themes

relevant to the Charlestown Navy Yard in **bold**, without regard to whether or not there are extant physical resources relating to those themes:

1. Communications
 - Early Communications
 - Navy Wireless Communications during the Twentieth Century**
2. Education
 - Military Education in the Early Republic**
 - Beginnings of Military Professionalism**
 - Military Education during the Progressive Era and World War I
3. Medicine
 - Military Medicine in the Early Republic**
 - Military Medicine during the Inter-war Years
4. Planning and Architecture
 - Industrial Eclecticism: Ordnance Facilities and Shipyards**
 - Consolidation and Modernization: The Transition from Eclecticism to Beaux Arts**
 - World War I: Temporary and Permanent Construction**
 - Inter-war Years: Regional Architecture and Community Planning**
5. Technology
 - Weapons and Ammunition
 - Warships**
 - Military Aircraft
6. Transportation
 - Military Contributions to Transportation Development²³

No themes specific to the Marine Corps shown in the National Military Context are applicable to the resources of the Navy Yard.

It should be noted that the National Military Context does not list Military as a theme since all properties that it encompasses, by definition, fall under that theme. The listed themes are closely related to physical resources. Thus, they do not encompass the full range of National Register themes applicable to military facilities in general and a military-industrial facility in particular.

Several of these additional National Register themes can be considered as falling under one of the National Military Context themes. Thus, the military contribution to manufacturing processes (Industry; Invention) forms a logical sub-theme under Technology, while civil engineering (Engineering) can be placed under Planning and Architecture.

The Social History theme (as distinct from Education and Medicine) is completely lacking from the National Military Context. The two primary sub-themes under such a theme as it would relate to the Navy Yard include labor history and the facility as a community, both for its assigned military personnel and for its civilian employees.

Because a portion of the Charlestown Navy Yard is a unit of the National Park System, it is also useful to examine the yard in relation to the eight elements of the NPS thematic framework:

1. Peopling Places
2. Creating Social Institutions and Movements
3. Expressing Cultural Values
4. Shaping the Political Landscape

²³ *National Military Context*, vol. 1, p. 3.

5. Developing the American Economy
6. Expanding Science and Technology
7. Transforming the Environment
8. Changing Role of the United States in the World Community²⁴

Unlike the National Military Context, which focuses on the physical resources of military installations, the NPS thematic framework is intended to present “a larger and more integrated view of history” and to conceptualize “an approach to thematically connecting nationally significant places.”²⁵

In 1978 NPS historian Edwin C. Bearss prepared a historic base map for the Navy Yard.²⁶ In that document, he evaluated the individual resources of the Navy Yard as to their significance with respect to four major historical themes. These themes fit well within the revised NPS thematic framework. In addition, the six themes of the National Military Context, together with the additional National Register themes mentioned above, can be assigned to these four themes as follows:

1. History of the American Navy
NR Theme: Maritime History; Military
2. History of Technology
NMC Theme: Communications; Technology;
Transportation
NR Theme: Industry; Invention
3. History of Social and Worker Movements
NMC Theme: Education; Medicine
NR Theme: Social History
4. History of American Architectural Design and Planning
NMC Theme: Planning and Architecture
NR Theme: Engineering

Because the 1978 Bearss’ framework incorporates all of the themes of the National Military Context together with additional themes mentioned above, it has been utilized in the analysis of individual resources in Chapter 5 of this report.

Character-Defining Features

One of the major developments in the approach to historic preservation over the forty years since the passage of the National Historic Preservation Act of 1966 has been a movement away from an emphasis on individual buildings and structures first to historic districts and then to multiple sites sharing thematic connections. This philosophical change is especially important when dealing with national topics such as the military and properties containing a large variety of buildings, structures, and other features.

A comprehensive study of military facilities in California explains the rationale for taking a larger approach to such properties:

... the service branches could achieve better consistency in evaluating historic buildings and structures at military bases by taking a statewide and interservice approach. Such a coordinated approach would help in avoiding the pitfalls of over-representing

or under-representing important time periods or historic themes in National Register ... nominations.²⁷

One of the pitfalls has been a bias towards architecture. The same California study states: “In considering World War II buildings and structures, the challenge is to evaluate historic rather than architectural significance (association with significant events, rather than association with a unique or important architectural or engineering design).”²⁸ This becomes even more important in approaching Cold War period resources.

Character-defining features are defined as prominent or distinctive aspects, qualities, or characteristics of a property that contribute significantly to its physical character and which must be retained in order to preserve that character. They exist on several levels. This study deals with those features which define the overall historic property rather than those which characterize any particular resource within the yard. The character-defining features of individual resources within the yard should be developed as part of historic structure reports.

The Navy Yard is a shipyard. Primary character-defining features of a shipyard include a waterfront location; the presence of wharves and piers for berthing ships; the existence of dry docks and/or marine railways for repairing ships; and/or the presence of shipways for ship construction, together with industrial buildings devoted to the myriad activities necessary to support ship construction and repair.²⁹

A shipyard is a subset of an industrial complex. Among the character-defining features of an industrial facility are internal circulation using both roadways and railways; the presence of manufacturing, storage, and office buildings; and the existence of specialized facilities customized to the products being produced. The use of building materials such as brick, concrete, and granite reflect the heavy and permanent nature of such sites. A systematic building identification scheme and signage promoting job safety are also characteristics of industrial complexes.

The Navy Yard is also a military installation. As such, as will be seen in the following section, it includes property types which are characteristic of a military installation. Among the general characteristics of a military installation are fences and gates to control access; distinct ceremonial, residential, and recreational areas; and areas for the carrying out of the specific functions of the installation. As with an industrial facility, a systematic building identification scheme is a characteristic of a military installation. As a naval base, it possesses characteristics such as waterfront facilities and the presence of a Marine Barracks. It is the overlay of these two groups of character-defining features which constitute a naval shipyard.

²⁷ *California Historic Military Buildings and Structures Inventory*, vol. 2, p. viii.

²⁸ *Ibid.*, vol. 1, p. xiii.

²⁹ See, e.g., the official definition of a shipyard by the Canadian government states: “**Shipyards** are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as water-craft suitable or intended for **other than personal or recreational use**. The activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship sections and barge sections, and specialized services, such as ship scaling, when performed at the shipyard.” See Industry Canada, “Definition – Ship Building and Repairing (NAICS 336611)” [web page] [http://strategis.ic.gc.ca/canadian_industry_statistics/cis.nsf/idE/cis336611defE.html, accessed Feb. 12, 2008].

²⁴ U.S. National Park Service, *History in the National Park Service: Themes & Concepts*, rev. 2nd printing (Washington: Park History Program, National Park Service, 2000), p. 7-14.

²⁵ *Ibid.*, p. 15, 17.

²⁶ *Historical Base Map: Evaluation of Extant Structures, Charlestown Navy Yard, Boston National Historical Park* [graphic], Mar. 1978, TIC 457/40016.

20th Century Naval Shipyards: A Gallery

THESE AERIAL VIEWS of 20th century naval shipyards show the key character-defining features of a shipyard: a waterfront lined

with piers; dry docks and shipbuilding ways; mobile and stationary cranes; and industrial buildings.



Portsmouth Naval Shipyard, ca. 2005

Boston.Com



New York (Brooklyn) Navy Yard, Mar. 9, 1944

NHC NH-93234



Philadelphia Navy Yard, ca. 1945

NHC



Charleston Navy Yard, ca. 1945

NHC



Norfolk Naval Shipyard, ca. 2005

Norfolk Naval Shipyard

20th Century Naval Shipyards: A Gallery



San Francisco (Hunter's Point) Naval Shipyard, Mar. 27, 1967
LC HAER-CA-181



Mare Island Navy Yard, Oct. 1930
LC HABS-CA-1543



Puget Sound Navy Yard, July 25, 1941
NHC NH-84926



Pearl Harbor Navy Yard, Dec. 10, 1941
NARA 80-G-387598



Naval Gun Factory (Washington Navy Yard), ca. 1946
NHC NH-91946



Long Beach Naval Shipyard, Oct. 6, 1993
Dept. of Defense DN-SC-94-00782

The specific features which are important in defining the character of the Charlestown Navy Yard include:

1. Navy Yard Boundary Wall and Fence surrounding the yard and separating it from Charlestown; pedestrian and vehicular gates.
2. Grid circulation pattern, with predominately rectangular buildings arranged parallel to the grid; paving materials: asphalt, brick, granite, and wood block.
3. Division of the yard into ceremonial/residential; working waterfront; and production and manufacturing areas.
4. Marine Barracks and Parade Ground.
5. Landscaped and open spaces, including laydown yards.
6. Large scale industrial buildings and smaller scale residential structures; building materials: brick, granite, concrete, and wood.
7. Industrial facilities representing the yard's manufacturing activities: Ropewalk Complex (Building 58 and 60) and Forge Shop (Building 105), including in-situ equipment.
8. Dry docks and piers.
9. Railroad and crane tracks.
10. Large scale structures such as cranes; grit hoppers; floodlights; aboveground utility lines; and the remains of Shipways 1 and 2 and the Marine Railway.
11. Small scale features such as trash receptacles, monuments and memorials, and identification and safety signage; use of historically-accurate colors for crosswalks, dry dock railings, hydrants, bollards, etc.

Property Types

A facility such as the Navy Yard consists of many different types of properties. The National Military Context has identified ten major categories of buildings typically found on military installations. These categories correspond to the National Register's system for classifying properties by historic function and help to link historic properties to historic contexts and aid in the comparison of related historic properties. Each major category of property types is divided into sub-categories that describe specific building types. The categories of property types are related to the historic functions of buildings on military installations, not their current uses.³⁰ In the following list, property sub-categories which are found in the Navy Yard (both for the Navy and the Marine Corps) are in **bold** type:

1. Administration
 - Fire Stations**
 - Guardhouses/Gatehouses/Sentry Boxes**
 - Headquarters Buildings, Administration Buildings, and Office Buildings**
 - Post Offices
2. Communications
 - Radio Buildings**
 - Telegraph and Telephone Buildings**
3. Education
 - Classroom Buildings**
 - Drill and Riding Halls**

4. Health Care
 - Dispensary/Infirmary**
 - Hospitals
5. Industrial
 - Maintenance and Repair Shops**
 - Manufacturing**
 - Service Facilities**
 - Bakeries
 - Laundries**
 - Storage
 - General Storage**
 - Ordnance**
6. Infrastructure
 - Power Plants/Electrical Systems**
 - Water and Sewage Systems**
7. Recreation/Social/Cultural/Religion
 - Assembly Halls**
 - Athletic Facilities**
 - Chapels
 - Clubs (Officer and NCO)**
 - Elementary Schools
 - Exchange**
 - Theaters**
 - YMCA and Red Cross Buildings
8. Research and Development
 - Laboratories/Research and Testing Facilities**
9. Residential
 - Institutional Housing
 - Bachelor Officers Quarters**
 - Barracks/Dormitories**
 - Institutional Housing Support Buildings
 - Detached Lavatories/Bathhouses
 - Mess Halls**
 - Family Housing
 - Non-Commissioned Officers (NCO) Housing
 - Officer Housing**
 - Family Housing Support Buildings
 - Garages**
 - Servants Quarters
10. Transportation
 - Air-Related
 - Airplane Hangers
 - Lighter-than-Air Aircraft Hangers
 - Animal-Related
 - Stables and Stable Complexes**
 - Vehicle-Related
 - Gas Stations
 - Motor Pools**³¹

Studies of the Cold War era follow a similar breakdown in property types, emphasizing elements which are closely related to technological development. They generally add an additional category for Weapons Systems and Platforms. Although warships and aircraft would generally fit within that property type, the existing surveys tend to restrict it to missiles and their support infrastructure.

These general property types do not specifically include landscape-related properties, although the National Military Context study includes such features in its specific listings of property types for individual military installations. For example, dry docks and piers are listed under the manufacturing sub-category of industrial properties. In other cases, an additional Landscape property type

³⁰ *National Military Context*, vol. 2, p. 1-2.

³¹ *Ibid.*, vol. 2, p. iii-iv.

Character-Defining Features: A Gallery

1. Boundary Wall, Fence & Gates



Navy Yard Boundary Wall/Gate 2, Nov. 3, 2006

The Navy Yard Boundary Wall extended along the west and north sides of the Navy Yard. It was punctuated by a series of gates providing access into the yard, which were opened and closed in response to operational needs.

Stephen P. Carlson, BNHP



Navy Yard Boundary Fence, Sept. 11, 2006

In order to increase the amount of light in the Ropewalk, the section of the Boundary Wall along Chelsea St. parallel to that structure was removed in 1929 and replaced by a concrete post and iron picket fence.

Stephen P. Carlson, BNHP

2. Grid Circulation Pattern



Views Along First and Second Aves., Aug. 23, 2004

The spine of the grid pattern in the Navy Yard is First Ave. (left), although Second Ave. (right) had originally been projected in the 1828 master plan by Loammi Baldwin as its "Main Avenue." These views show how the yard's structures have been organized according to the grid pattern. First Ave. is paved with asphalt, which had become the predominant paving material in the yard by the 1950s. Second Ave. has been paved with granite pavers which reflect historic materials, although the profile and details do not exactly match the original granite paving.

Stephen P. Carlson, BNHP



3. Division of Yard Into Distinct Zones



Shipyard Mall, Quarters G, and Marine Barracks, Dec. 14, 2006

The core of the yard's ceremonial and residential area is the Shipyard Mall. Quarters B-F border the west side of 3rd St., while the Commandant's House (Quarters G) occupies the north side of Second Ave. Note the yellow brick paving on 3rd St. and the use of historic Navy Yard colors on the fire hydrant and crosswalk.

Stephen P. Carlson, BNHP



Working Waterfront, 2006

This view of the working waterfront area shows several character-defining features, including Portal Crane 30, Pier 2, Dry Dock 1, the laydown area west of Dry Dock 1, the Grit Hoppers, and the Aboveground Steam Line.

Ralf Brown

Character-Defining Features: A Gallery

4. Marine Barracks & Parade Ground



Marine Barracks and Parade Ground, Mar. 3, 2008

This view shows the Marine Barracks following the replacement of the 1960s-vintage design storm windows in the main portion of the structure with new windows which replicate those used when the porch was permanently enclosed in the early 1950s. *Stephen P. Carlson, BNHP*

5. Landscaped & Open Spaces



This Apr. 14, 2005, view shows the landscaped area to the west of the driveway leading to the Commandant's House and the interior face of the Navy Yard Boundary Wall. *OCLP*

6. Large Scale Industrial Buildings & Smaller Scale Residential Buildings



Building 42, Oct. 5, 2006

The Machine Shop Complex (Building 42) was one of the largest of the yard's industrial structures. The portion of the structure seen in this view was a World War II addition which matched the structure's World War I additions in architectural detail. *Stephen P. Carlson, BNHP*



Quarters P, Oct. 31, 2006

The only residential structure in the yard built in the 20th century, Quarters P is part of the residential compound at the northeast corner of the yard. *Stephen P. Carlson, BNHP*

7. Specialized Manufacturing Facilities



Ropewalk Complex, Oct. 19, 2006

This view shows the Tarring House (Building 60) at left and the Ropewalk (Building 58) at right. *Stephen P. Carlson, BNHP*



Forge Shop, July 25, 2001

This view looking west shows the equipment in the Forge Shop (Building 105) following hazardous materials cleanup. *Stephen P. Carlson, BNHP*

Character-Defining Features: A Gallery

8. Dry Docks & Piers



Waterfront, Oct. 9, 2004

This view of the yard waterfront between Dry Dock 1 and Dry Dock 2 shows Pier 2, the site of the Marine Railway, the Pier 3 Marginal Wharf, and Pier 3. Note the Bunker Hill Monument in the background. Other character-defining features visible include all three of the yard's remaining portal cranes and three light towers.

Stephen P. Carlson, BNHP

9. Railroad & Crane Tracks



This May 6, 2003, view shows the crane tracks at the head of Dry Dock 1. The mast in the background sits on railroad tracks which run parallel to First Ave. Note the yellow safety striping surrounding the crane rail and the section of red brick paving.

OCLP

10. Large Scale Structures



Grit Hoppers, Nov. 2, 2006

This view of the two Grit Hoppers in the laydown area north of Building 10 also shows (right) the Aboveground Steam Line running the length of the pier.

Stephen P. Carlson, BNHP



Shipways 2, June/July 2003

While condominiums have been built on top of Shipways 2, elements of that feature remain visible.

Jane Carolan, BNHP

11. Small Scale Features



This 2003 view shows an array of signage on Building 107, including the building number and identification, a safety promotional message, and a sign indicating that the structure is in the controlled industrial area of the shipyard.

Jane Carolan, BNHP



Displays of anchors, cannons, and other military hardware are typically found on naval installations. This 2003 view of the anchors next to 4th St. also shows one of the yard's yellow trash receptacles in the left background.

Jane Carolan, BNHP

has been used for parade grounds, flagpoles, and similar features. These listings, as well as the Landscape category, have been used as a guide in assigning such features of the Navy Yard to the property type categories and sub-categories. Because the two weapons systems and platforms (warships) found at the Navy Yard are not treated here as contributing features of the NHL but as historic properties in their own right, the Weapons Systems and Platforms category has not been shown in Table 4-4, which lists extant historic properties by the eleven property types. Because many structures have served multiple functions through the years, some properties are shown under more than one property type. It should be noted that extant properties may or may not retain their historic integrity with respect to any or all of the property types under which they are shown.

Table 4-5 provides an index of property types broken down by both historical periods and themes. In assigning properties to historical periods, the dates of usage, not solely dates of original construction, have been used. As can be seen, property types associated with all historical periods (other than the period from 1869 to 1890 when no development occurred) are present in the Navy Yard. (Note that the chronological span for the South Boston Annex is 1914 to 1974 only.) In addition, there are property types representing all four of the major historical themes used in this report.

Integrity

“Architectural attractiveness is often mistaken as the sole source of historical value,” an Army study of Cold War historic resources warns.³² Similarly, Air Force guidance on the same subject cautions that “change does not automatically mean that a property has lost integrity.”³³ These two statements are important to keep in mind as one evaluates the integrity of the Boston Naval Shipyard.

The National Register defines integrity as “the ability of a property to convey its significance.”³⁴ It identifies seven different criteria with which to evaluate a resource’s integrity. These are location, design, setting, materials, workmanship, feeling, and association. A property need not meet all of these criteria to retain its integrity.

The following analysis sets aside the criteria of location since, unlike individual buildings or structures, a site cannot be physically moved and its integrity depends on the combination of the other six aspects. Thus, the analysis will concentrate on those aspects.

The relative level of integrity under any of the criteria will vary from period to period and from location to location within the yard. Facilities such as Dry Dock 1 and Dry Dock 3, which continue to perform their historic function, retain a high degree of integrity. While Pier 7 retains integrity in terms of design and materials, its feeling has been compromised by the construction of structures on what had historically been an open pier.

As could be expected for a property which continually evolved over 174 years, the Navy Yard possesses its greatest integrity to its most recent historic period. Even that integrity, however, has been

³² U.S. Army Environmental Center, *Thematic Study and Guidelines: Identification and Evaluation of U.S. Army Cold War Era Military-Industrial Historic Properties*, Jan. 1998, p. 89.

³³ “Interim Guidance, Treatment of Cold War Historic Properties for U.S. Air Force Installations,” June 1993, in U.S. Dept. of Defense, *Legacy Cold War Project, Coming in From the Cold: Military Heritage in the Cold War* [n.d.], p. 117.

³⁴ National Register Bulletin 15, p. 44.

compromised as the site has continued to evolve into new uses. It is not unreasonable to expect that, given the passage of time, post-1974 developments will be evaluated under the broad theme of reuse of military facilities and that the period of significance of the Navy Yard will be extended to incorporate this period and theme.

Despite these changes over time, the yard possesses one or more of the seven elements of integrity for all of its historic periods.

Setting: The Charlestown Navy Yard setting is diminished due to the changes that have taken place inside and outside of the gates of the Navy Yard. Construction of the Mystic River Bridge in the late 1940s physically and visually separated the yard from the surrounding community even more than the yard’s gates and stone walls. As both Charlestown and the yard grew, services, such as hotels, barrooms, grocery stores, and other small retail establishments were often located immediately outside of the yard’s main gates. The closure of the yard in the 1974 heavily impacted these small businesses, resulting in their closure as well. In the 1970s and 1980s these structures were demolished. In more recent times, reuse of the Navy Yard as a historic site and a residential and institutional community has changed the mission of the yard and therefore its relationship to Charlestown, opening the yard to greater interaction with surrounding community.

Design: The Navy Yard retains the basic elements of its overall design, with the interrelationship between circulation, structures, buildings, and open space intact. The grid pattern developed in the master plan of 1828 is still intact as is the relationship of rows of piers and dry docks oriented to Boston Harbor and on axis with the major north/south streets. For the most part, buildings are aligned parallel to streets. Most buildings are uniformly rectangular in shape. Materials such as brick, stone, wood, and granite work in harmony with each other to demonstrate the evolution of building design and the Navy’s periods of expansion. Within the national park area, the historic relationship between housing/ceremonial areas and the working waterfront is intact. While the buildings in the Historic Monument Area of the yard have lost most of their additions and accretions, they retain their historic scale and massing. New construction has been sited within the grid to minimize disruption of new construction and support the historic layout.

Materials and Workmanship: The Navy Yard retains its integrity of materials and workmanship, with architectural forms and building materials from every construction campaign from 1800 through 1974, with an emphasis on the periods 1828-1869 and 1890-1919. This includes materials such as brick, granite, concrete, steel, and wood. Construction techniques are evident from all periods as well and most buildings and structures retain a high degree of workmanship.

Feeling and Association: Integrity of feeling and association varies within the Navy Yard. The national park section retains feeling and association of the former Navy Yard due to the retention of not only buildings and landscape but the smaller, less noticeable features such as building additions, small buildings, and laydown areas for construction material. The presence of an active-duty naval force and two historic vessels reinforce this feeling and association. The activity of visitors to this section of the yard lends a level of activity that makes this section feel “busy” in the way a working yard would function. The remainder of the yard does have integrity of feeling and association but it is diminished. While the grid pattern is still evident, as are the piers and dry docks, and

Table 4–4

NAVY YARD PROPERTY TYPES

The following table assigns individual extant properties in the Navy Yard to one of the eleven property types identified in the National Military Context. Because some buildings housed different functions at different times (or were multi-functional), indi-

vidual structures may be shown under more than one category. However, buildings used for storage in 1974 which were originally built for other purposes are shown only under their original use.

1. AdministrationFire Stations

SBA: Building 29; Building 104

Guardhouses, Gatehouses, Sentry Boxes

CNY: Boundary Fence; Boundary Wall; Building 1; Building 267; Gate 1; Gate 2; Gate 4; Gate 5; Railroad Gate; USS *Constitution* Gate

Headquarters, Administration, and Office Buildings

CNY: Building 5; Building 31; Building 32; Building 39; Building 109

SBA: Building 21; Building 49

2. CommunicationsRadio Buildings

CNY: Building 10

Telegraph and Telephone Buildings

CNY: Building 31

3. EducationClassroom Buildings

CNY: Building 5

Drill and Riding Halls

CNY: Building 5

4. Health CareDispensary / Infirmary

CNY: Building 120

SBA: Building 29

5. IndustrialMaintenance and Repair Shops

CNY: Building 96; Building 105; Building 107

SBA: Building 28; Building 49

Manufacturing

CNY: Building 10; Building 22; Building 24; Building 28; Building 33; Building 36; Building 38; Building 40; Building 42; Building 58; Building 60; Building 62; Building 79; Building 103; Building 104; Building 105; Building 106; Building 110; Building 114; Building 125; Building 195; Building 197

SBA: Building 16; Building 18; Building 31; Building 53; Building 54; Building 56

Maritime Facilities

BAB: Berth 1 through 10

CNY: Building 22; Building 123; Caisson, Dry Dock 1; Capstans, Dry Dock 1; Capstans, Dry Dock 2; Dry Dock 1; Dry Dock 2; Dry Dock 5; Finger Pier; Marginal Wharf 3; Marine Railway 11; Pier 1; Pier 2; Pier 3; Pier 4; Pier 5; Pier 6; Pier 7; Pier 8; Pier 11; Portal Crane 30; Portal Crane 62; Portal Crane 65; Protective Dolphins 289; Shipways 1; Shipways 2

5. IndustrialMaritime Facilities – Continued

SBA: Building 1; Caisson, Dry Dock 3; Caisson, Dry Dock 4; Capstans, Dry Dock 3; Capstans, Dry Dock 4; Dry Dock 3; Dry Dock 4; Pier 5; Pier 6; Pier 10; Portal Crane 64; Portal Crane 66; Portal Crane 68; Portal Crane 89; Portal Crane 90; Portal Crane 91; Wharf 106; Wharf 107; Wharf 108

Service Facilities

CNY: Building 10; Building 19; Building 28; Building 36; Building 124; Building 228; Building 230; Building M-39; Grit Hopper 259; Grit Hopper 273; Light Tower 238; Light Tower 239; Light Tower 240; Light Tower 246; Light Tower 247; Scale 234; Scale 235

SBA: Building 22; Building 23; Building 40; Building 103

Storage – General

BAB: Building 4 (SBA 114); Building 8 (SBA 118); Building 10 (SBA 119)

CNY: Building 4; Building 5; Building 34; Building 62; Building 75; Building 103; Building 149; Building 199

SBA: Building 17; Building 19; Building 32

Storage – Ordnance

CNY: Building 32; Building 39; Building 272

SBA: Building 31

6. InfrastructurePower Plants/Electrical Systems

CNY: Building 22; Building 28; Building 79; Building 96; Building 105; Building 108; Building 109; Building 224; Building M-1; Aboveground Steam Line 281; Underground Conduit 280; Underground Fuel Storage Tank 220

SBA: Building 20

Water and Sewage Systems

CNY: Dewatering Tunnel 1; Dewatering Tunnel 2; Underground Conduit 280; Underground Fuel Storage Tank 220; Underground Water Storage Tank 221; Underground Water Storage Tank 223

7. Recreation/Social/Cultural/ReligionAssembly Halls

CNY: Building 38

Athletic Facilities

CNY: Tennis Court 236; Tennis Court 237

Clubs (Officer and NCO)

CNY: Building 4; Building 5

Exchange

CNY: Building 4; Building 38; Building 79

Theaters

CNY: Building 38

Table 4–4
NAVY YARD PROPERTY TYPES — *Continued*

8. Research and DevelopmentLaboratories / Research and Testing Facilities

CNY: Building 10; Building 22; Building 28; Building 34;
Building 62

SBA: Building 16; Building 53

9. ResidentialInstitutional Housing – Bachelor Officers Quarters

CNY: Building 5

Institutional Housing – Barracks/Dormitories

CNY: Building 33; Building 36; Quarters I

SBA: Building 29

Institutional Housing Support Buildings – Mess Halls

CNY: Building 5; Building 33; Building 36; Quarters I

SBA: Building 21

Family Housing

CNY: Building 265; Building 266; Quarters G; Quarters I,
Quarters P

Family Housing Support Buildings – Garages

CNY: Building 1; Building 245; Building 269

10. TransportationAnimal-Related – Stables and Stable Complexes

CNY: Building 21

10. Transportation – *Continued*Vehicle-Related – Motor Pools

CNY: Building 1

SBA: Building 28

11. LandscapeMiscellaneous Features

CNY: Anchors; Bandstand 260; Cannon & Cannonball
Display (Shipyard Mall); Flag Pole 242; Historical
Plaque 270; Saluting Battery 261; Torii Gate 282;
War Memorial 279

Parks and Parade Grounds

CNY: Commandant's House Grounds; Marine Barracks
Parade Ground; Shipyard Mall

Transportation Infrastructure

BAB: Railroad Tracks; Terminal Street

CNY: Crane Tracks, Dry Dock 1 & 2; Crane Tracks, Pier
11; Railroad Tracks; Road System (First Avenue;
Second Avenue; Third Avenue; Fourth Avenue;
Fifth Avenue; Lincoln Avenue; 3rd Street; 4th Street;
6th Street; 7th Street; 8th Street; 9th Street; 13th
Street; 16th Street; Baxter Road)

SBA: Crane Tracks, Dry Dock 3; Crane Tracks, Dry Dock
4; Railroad Tracks; Road System (Dry Dock Av-
enue; 7th Street; A Street; C Street)

Key: BAB = Boston Army Base; CNY = Charlestown Navy Yard; SBA = South Boston Annex

symmetrically arranged rectangular buildings, the rehabilitation of the area and adaptive reuse has lessened the feeling and association of an active navy yard. Here, the details of the industrial process such as cranes and railroad and crane tracks are missing.

In conclusion, while the Charlestown Navy Yard has undergone changes that have diminished its integrity it still possesses a high enough level to be considered to retain integrity. As demonstrated above, each area of the yard has enough of the basic characteristics of the former Navy Yard, particularly circulation patterns, street grid, buildings, and structures to retain integrity, albeit diminished.

The South Boston Annex also retains a high degree of overall integrity. Like Charlestown, the degree of integrity varies from location to location. The basic circulation pattern consisting of Dry Dock Ave., 7th St. (Harbor St.), Northern Ave. (A St.), and Fid Kennedy Ave. (C St.) remains. Because Dry Dock 3 continues as an active ship repair facility, it possesses a very high degree of integrity.

As the individual resource profiles in Chapter 5 show, all structures and features existing as of November 1966 or which were added to the shipyard prior to July 1974 related in some way to the operation of the Navy Yard. They have, therefore, been considered to be contributing resources to the site. Table 4-6 summarizes the contributing and non-contributing resources of the Navy Yard based on the four National Register categories of buildings, structures, objects, and sites. The relative significance of these resources differs, ranging from those which could stand alone as National Historic Landmarks to those which have minimal historical value. These

relative values, shown in the individual listings in Chapter 5, provide a means of evaluating the impact of proposed changes. The individual character-defining features of these resources need to be established; in so doing, it is important to evaluate changes over time in the context of the individual resource. Not all physical changes are necessarily significant and worthy of preservation. While the basic philosophy of sympathetic change should be applied to the evaluation of alterations made in the historic period, functional significance of an unsympathetic change must be considered as well. For example, the large picture windows installed in the southeast corner of the second floor of Building 125 in the mid-1950s had no functional relationship to the building and were thus found to be “insensitive” and “detrimental to the building’s architectural and historical integrity.”³⁵ For that reason, they were removed and replaced by windows matching the original configuration during the structure’s recent rehabilitation.

One of the major factors in maintaining the integrity of the Navy Yard is the presence of active-duty naval personnel. Ironically, their presence also leads to severe pressures on the National Park Service area of the Navy Yard because of the Navy’s concern with the protection of its forces from perceived threats, especially in the aftermath of the September 11, 2001, terrorist attacks. Thus, there has been an overlay of security imposed upon the yard which impacts both the historic fabric of the site and the movement of

³⁵ Einhorn Yaffe Prescott, *Historic Structure Report for Building 125 (Paint Shop), Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts* (Boston: Einhorn Yaffe Prescott, 2003), TIC 457/D6326, p. 49.

Table 4–5

INDEX OF PROPERTY TYPES WITH CHRONOLOGICAL OVERVIEW AND THEMES

KEY:	PROPERTY TYPES										
	Administration	Communications	Education	Health Care	Industrial	Infrastructure	Recreation/Social/Cultural/Religion	Research and Development	Residential	Transportation	Landscape
CHRONOLOGICAL OVERVIEW											
The Military in the Early Republic and Antebellum Era, 1790-1860											
Establishment (1800-1828)	●				●				●		●
Early Nineteenth Century Growth (1828-1853)	●				●				●	●	●
The Civil War and National Expansion, 1860-1890											
Development in the Age of Steam (1853-1869)					●						
The Post Civil War Period (1869-1890)											
The Military and the Progressive Era, 1890-1916											
The Yard Resurrected (1890-1919)	●	●		●	●●	●			●	●	●
The Inter-War Years, 1918-1940											
The Stagnant 1920s (1920-1931)			●					●			●
The Yard Revitalized (1931-1939)					●	●			●●	●	●
World War II, 1940-1945											
World War II (1939-1945)	●●			●	●●	●●				●	●●
The Cold War, 1945-1989											
The Cold War Era (1945-1974)					●●	●	●	●	●		●
THEMES											
History of the American Navy	●●				●●				●●		●●
History of Technology		●			●●			●		●●	●●
History of Social and Worker Movements	●●		●	●●			●●		●●		
History of American Architectural Design and Planning	●●				●●	●●			●●		●●

visitors seeking to experience the park's resources. This is a complete reversal of historic practice, where USS *Constitution* was freely accessible to visitors while the remainder of the yard was closed for both safety and security reasons.

The Department of Defense has recognized that it has a dual function to ensure personnel safety and security and “to ensure that properties representing significant aspects of U.S. military history and culture are not severely or irreparably damaged.”³⁶ While

³⁶ Julie L. Webster, Patrick E. Reicher, and Gordon L. Cohen, *Antiterrorism Measures for Historic Properties*, ERDC/LAB TR-06-23 (Champagne, Ill.: Construction Engineering Research Laboratory, U.S. Army Engineer Research & Development Center, 2006), p. 2.

proposals to better segregate naval personnel from the public have been put forth,³⁷ such projects are unlikely to occur in the short term. Thus, there will be a need to balance security needs and the access that the public expects within a national park. Any security enhancement project within the Charlestown Navy Yard should take into account the guidance developed in 2006 by the Department of Defense Legacy Resource Management Program.³⁸

³⁷ See, e.g., PMIS 88983, “Relocate Navy Functions and Upgrade Park Systems to Protect Public Safety and Historic Resources,” last updated Feb. 5, 2008.

³⁸ Webster, et al., *Antiterrorism Measures for Historic Properties*.

Table 4-6
CONTRIBUTING RESOURCES SUMMARY

	Charlestown		South Boston	
	C	NC	C	NC
Buildings	51	18	19	16
Structures	62	8	23	2
Objects	3	1	0	0
Sites	3	2	0	2
<i>Total</i>	119	29	42	20

Source: Table 5-1

C = Contributing; NC = Non-Contributing

Existing Conditions

The changes which have occurred in the Navy Yard since 1974 have tended to create four distinct areas within the yard. The westernmost portion of the yard, the Charlestown Navy Yard unit of Boston National Historical Park, retains the greatest integrity to the historic period, although adaptation of facilities for both administrative and public use have resulted in significant changes. The Historic Monument Area, which has the strictest preservation guidelines of any of the three conveyed parcels, has a mixture of treatments which both imposed a more typical city streetscape over the industrial site and arbitrarily “restored” structures to their so-called original appearance. The Recreation (Public Park) Parcel saw the permanent flooding of Dry Dock 2 and the creation of a contemporary urban park on a site which had been first a more austere recreation field and then an industrial shop. The New Development Area (Buy Parcel) has seen some structures restored, others rehabilitated beyond recognition, and contemporary structures built in place of industrial buildings or on top of historic features making them barely if at all recognizable. Heavy industrial piers have become parts of recreational marinas.

In all three of the transferred parcels change has virtually eliminated the industrial character of the Navy Yard in favor of more typical urban features. Preserved structures have been cleaned up, philosophically (although not actually) restored to their “original” appearance. New construction has introduced modern architectural elements in areas which were historically open piers or shipways. Even in the national park parcel, buildings and sites have been cleaned up to remove overlays of utilities which detract from the more significant features of them. Thus, in reality, the park is no longer preserving the industrial character present in 1973, but a cleaned up version of what the yard once was.

Appendix F contains drawings showing existing conditions within the Boston Naval Shipyard NHL, including both the Charlestown Navy Yard and South Boston Annex (Boston Marine Industrial Park), as of January 2006. The drawings differentiate between contributing (historic) and non-contributing (post-historic) resources, reflecting the assessment of individual resources shown in Chapter 5.

The Historic Monument Area was developed under guidelines that included historic preservation restrictions for 18 of the 21 buildings with an emphasis on reuse rather than new construction. The

New Development Area, although containing six historic structures, was dominated by new streetscapes and new buildings in contemporary designs. Unfortunately, in both areas, preservation guidelines were not strictly adhered to. The period of significance for the Navy Yard is 1800 to 1974 and during that time period many buildings acquired additions sometimes in materials other than the original building along with overlays of utilities. The streets contained railroad and crane tracks. The BRA tended to focus on the original “block” of the structure and on the mid-19th and early 20th century periods, removing anything later, including many World War II wooden additions, as well as all the industrial supply lines running along buildings and streets. It should be noted, however, that the work on the exterior of the buildings themselves did retain character-defining features such as original windows, doors, and entryways and the treatment of the surfaces of the buildings did not detract from the granite and brick structures. But the connecting elements of the yard, those things that made it look like a working shipyard, were stripped to be replaced with buildings set amidst green spaces giving the areas more of a campus, rather than military/industrial setting.

Within the New Development Area great liberties were taken with the structures. The Shipways were partially demolished and new housing built on top of them. Building 42, the massive Machine Shop, was partially demolished. Condominiums were built on Pier 7, and similar plans for Pier 5 are proceeding through the regulatory process. Building 197, the Electronics Shop, had two stories and wings added to it, as well as new skin to complete the transformation to luxury condominiums. Recreational marinas have sprouted from former industrial piers. The BRA is still struggling with the area designated Land’s End, at the most eastern end of the yard. All the buildings in the area have been demolished. A number of development options now under active consideration will introduce new institutional buildings in a much larger scale than was historically present.

Redevelopment of the Historic Monument Area is also incomplete. The Power Plant (Building 108) remains vacant, development stymied by the lack of funding by the Army Corps of Engineers to complete hazardous material abatement and demolition. The Chain Forge, the Ropewalk, and the Tarring House, all within the national park boundary but owned by the city, are also undeveloped. These buildings will be developed in a partnership between the NPS and the BRA. Financial constraints make it impossible for any of these buildings to be used only for interpretative exhibits. Therefore, a new use for each building, combined with an interpretative area as well, will have to be determined. The current guidelines, which call for them to be renovated under the Standards for Rehabilitation (rather than that for preservation as in the original transfer deed), need to be reviewed and amended as necessary in response to specific proposals for reuse.

The marketing of the new condominium developments has not, with the exception of the Shipways and Parris Landing (inappropriately-named since the structure post-dated Parris’ death), reflected its historic heritage. Names such as Flagship Wharf and HarborView have no historic precedents and do not immediately bring an image of a former Navy base to mind. (In contrast, the Admiral’s Hill development on the site of the former Chelsea Naval Hospital on the opposite side of the Mystic River prominently reflects its naval antecedents.)

The National Park Service has had to grapple with a complex set of issues within its Navy Yard holdings. The 1980 General Management Plan (GMP) for the NPS portion of the Navy Yard called for “the preservation and maintenance of the 20th century industrial character of the Navy Yard as it existed in 1973 prior to transfer to the National Park Service.”³⁹ This “Preservation Subzone” created considerable controversy because it was often interpreted to mean the literal retention of the yard as it looked in 1973 rather than a recognition that the yard was an active, always changing, facility and that it would be both economically impossible and inappropriate to restore the yard to any particular point in time. The GMP, both as written in 1980 and as amended in 1987, however, supported the introduction of visitor amenities and the selective restoration of historic elements of the yard.

Preservation Guidelines

Both the National Park Service and the Boston Redevelopment Authority, as well as the private parties who have purchased portions of the Navy Yard from the BRA, have a responsibility under the Boston National Historical Park Act of 1974 and the provisions of the various deeds from the United States to the BRA to preserve and protect the historic character of the Charlestown Navy Yard.

While the preservation guidelines for the non-park sections drawn in the late 1970s are not those which would be drawn under contemporary historic preservation practices (especially with regard to recognition and retention of later additions and the cultural landscape), it must be recognized that for the most part they have been successful in helping to transform the non-park portions of the Navy Yard into a mixed-use community containing housing, offices and research laboratories, and public amenities. However, the sense of the Navy Yard as something special has gradually eroded as standard city design practices have made its streets into nothing different from other city streets, historic signage has been allowed to deteriorate, and promised interpretive programs have yet to materialize.

Obviously, it is neither possible nor desirable to correct deviations from the guidelines (particularly the groundplane guidelines which called for retention of railroad tracks and some of the overhead utility lines). However, it remains possible to reinforce the feeling of the Navy Yard in the non-park portions through measures which are not costly to implement.

This task is a challenging one, for the yard continues to evolve as it is adapted for new uses, whether they are the interpretation of the yard’s history to visitors or the creation of housing, office and laboratory space, and establishment of other commercial uses and public amenities in the yard. The existing preservation guidelines provide a framework for the treatment of the Navy Yard, but, while considered some of the best prepared for transferred federal property,⁴⁰ they unfortunately serve to reinforce the artificial division of the site into distinct areas.

Today, with new scholarship and a rethinking of the meaning of preservation, rehabilitation, restoration, and reconstruction treatments, both the NPS and the BRA are in a better position to make

choices that will support their mandate of development, interpretation, and visitor services. In 1996 the Secretary of the Interior published Guidelines for the Treatment of Cultural Landscapes, which takes a more holistic approach than previous guidelines.⁴¹ The Cultural Landscape guidelines are expansions of the Secretary of the Interior’s Standards so that all cultural resources are included, not just buildings and structures. Now landscape and elements (buildings, structures, and objects) within a landscape (be it natural or manmade) can be addressed as an interrelated whole.

This study does not recommend a wholesale revision of the guidelines. The process of amending the guidelines for individual buildings and parcels on a case-by-case basis in response to specific development proposals has worked and is consistent with the spirit of the Secretary of the Interior’s Standards. However, there is a need for the revision of the groundplane portion of the guidelines and their expansion to include the entire yard, not just the Historic Monument Area. The completion of the Cultural Landscape Report for the remainder of the Navy Yard will provide a major opportunity to involve all of the stakeholders in the yard in this process.

Recommended Approach: Rehabilitation And Interpretation

The Secretary of the Interior’s Standards for Historic Preservation define four major treatment approaches for historic properties—preservation, restoration, rehabilitation, and reconstruction.⁴² Reconstruction of the yard to an earlier appearance is neither desirable nor feasible. Neither preservation nor restoration treatments are appropriate for the Navy Yard as a whole, although there may be individual resources within the yard where such treatments best reflect their historic significance and character (e.g., the restoration of the Muster House). Rather, rehabilitation, which balances necessary evolution to meet contemporary needs with the retention of those features which best define the historic character and significance of both the overall yard and the specific contributing resource being treated, is the one recommended by this study.

Clearly, reuse of a facility such as a military base for other uses requires changes, including the removal of structures and the addition of new structures. Unfortunately, the approach to many evolved structures has been to remove subsequent additions to restore them to their original appearance. For a facility where continual change has been the norm, this practice, while aesthetically pleasing, too often results in the removal of additions which, while not architecturally in keeping with the original design, express both the evolving function of the structure and the style of their own period. Thus, it is extremely important in the Historic Monument Area of the Navy Yard to preserve the existing form of the Chain Forge (Building 105) and not to either remove or alter for aesthetics the World War II additions since in all other cases in that part of the yard all evidence of post-World War I alterations have been destroyed. Similarly, approaches to the redevelopment of the Power Plant (Building 108)

⁴¹ Charles A. Birnbaum with Christine Capella Peters, eds., *The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (Washington: Historic Landscape Initiative, Heritage Preservation Services, Cultural Resource Stewardship and Partnerships, National Park Service, 1996).

⁴² For brief definitions of these treatments, as well as other historic preservation terminology, see the appropriate entries in the Glossary in Appendix D of this report.

³⁹ National Park Service, *Charlestown Navy Yard, Boston National Historical Park: General Management Plan, Volume II* (Denver, National Park Service, 1980), TIC 457/D1553A, p. 9.

⁴⁰ Author’s conversation with Alisa McCann, NPS, Aug. 16, 2006.

should consider the retention of the portion of the structure along Third Ave. which forms a continuous streetscape with Building 107.

In arriving at a comprehensive approach to the yard which both meets contemporary use needs and retains the sense that this area is historically distinct from surrounding urban neighborhoods, one must concentrate on the yard's major character-defining features, identified in a previous portion of this chapter.

The most important character-defining feature of the Navy Yard is its grid plan developed in the 1820s and the relationship of buildings, structures, and open space to it. The grid, with buildings constructed parallel to the street line, defines the yard to a great extent. In the national park section the grid breaks down a bit due to the size of Pier 1 in proportion to its surroundings but a plan view clearly show the grid in place. Even with new gates added or expanded, such as Gates 4, 5, and 6, the grid is still intact. Therefore, since the grid was and is of primary importance in the way the Navy Yard was arranged and utilized, and is considered a contributing element to the significance of the Navy Yard⁴³ and is within the period of significance, it would make sense that the grid be treated under the guidelines of preservation.

Maintaining the integrity of the character-defining features of a facility as complex as the Charlestown Navy Yard is a task that must balance the needs of current uses of the facility with an understanding of how changes to accommodate such needs impact those features. While "freezing" the yard's appearance to the end of its period of significance is as impractical as restoring it to any past period, changes should respect the essential character-defining features and be as sympathetic as possible in their treatment of historic fabric. In particular, efforts should be made to retain the industrial overlay of pipes, conduits, etc., rather than to restore a pristine appearance that a structure probably never had.

Alterations and change can be done in ways which are sensitive to and reflective of the historic character of a facility. For example, the post-and-chain railing around Dry Dock 2 can be painted in its historic safety yellow color rather than the generic black favored for contemporary urban waterfront railings. Similarly, while the existing violations of the Ground Plane Guidelines such as the removal of railroad tracks are not easily corrected—and this study does not recommend that tracks be reinstalled—other measures such as the use of historically accurate solid green crosswalks rather than City of Boston white ladder patterns require little effort except education of those responsible for the site. The maintenance of historic signage, particularly building numbers, is another easily done step in helping to make sure that the feeling of the Navy Yard as something distinct from other urban neighborhoods is preserved. (In some ways, the approach of the EDIC in the Boston Marine Industrial Park in using typical marine bollards throughout the site creates a maritime feeling lacking in non-waterfront areas of the Charlestown Navy Yard.)

While the presence of an active-duty Navy contingent means that the entire yard can never be a totally open site, simple measures can be taken to help express the unity of the yard. Historic building

number signs, as well as historic street signs attached to buildings, can be kept in good condition, and other signs specified for retention which have not been retained (such as those on the west end of Building 39) can be restored. The Safety Shoe sign can be returned to its historic location adjacent to the west side of Building 36. The typical black round trash receptacles in the Historic Monument Area and Shipyard Park can be replaced by new, historically accurate yellow "Keep Our Shipyard Clean" trash receptacles similar to those used by the park.

While changes since 1974, particularly in the non-National Park Service portion of the Navy Yard, have severely reduced the integrity of the industrial facility the yard once was, much still exists, albeit in smaller pockets. Wherever possible, those elements which exemplify the site's industrial character, even if aesthetically unattractive, should be retained. Thus, the compressed air line running on a trestle from Building 24 and the west face of Building 125 should be retained since such utility lines are a basic feature of an industrial complex. The desire to "clean up" areas such as the laydown space around the Grit Hoppers must balance the need not to accumulate inappropriate materials with a recognition that a working shipyard—and the Navy Yard remains a working shipyard—requires places for materials and equipment to be stored. Such laydown spaces should be managed, not eliminated.

Nothing is more characteristic of a working shipyard than a dry dock. Dry Dock 1 should be rehabilitated in accordance with the recommendations of the recently completed historic structure report⁴⁴ and then used for the maintenance of historic vessels. While the experience of the park with SS *Nobska*, which ran out of money and encumbered the dock for many years prior to her disposal, illustrates the potential problems surrounding such use, the park should either restrict work to federally-owned vessels (including USS *Cassin Young*, USS *Constitution*, and Salem Maritime National Historic Site's *Friendship*) or permit work on private vessels only after receipt of bonds which would cover the cost of clearing the dock in case of default.

Cranes are another key character-defining feature of a shipyard. In particular, Portal Crane 62 should be repositioned from the west side of Dry Dock 1 to Pier 1 near USS *Cassin Young* to reinforce the image of the yard as a place where work was done on ships, not just simply piers for tying up vessels making port visits. Efforts should be made to ensure that Portal Crane 30, considered excess to its needs by the Navy, be retained by the NPS.

Because so much of the industrial yard has disappeared, way-side and other exhibits become important in helping to convey this theme to visitors, most of whom come to the yard only because of USS *Constitution*. The relocation of the primary Navy Yard exhibit to the new Navy Yard Visitor Center in Building 5 exposes greater numbers of visitors to the history and significance of the yard. Although large numbers of visitors will not go beyond the immediate area of Pier 1, the National Park Service and the BRA should actively pursue the development of interpretive waysides throughout the Navy Yard for the benefit of those who do, as well as for the thousands of workers and residents in the yard who have little awareness of its historic significance. In particular, Dry Dock 2 and the Pump House (Building 123) should be interpreted for the thou-

⁴³ In concurring with the NPS assessment of what constituted contributing resources of the national park section of the yard, the Massachusetts State Historic Preservation Officer wrote that "we recommend that those streets that are part of the Parris [*sic*] plan should contribute as a single structural system." See Brona Simon to Marie Rust, Jan. 30, 1995, Boston Support Office Boston Naval Shipyard NHL File [copy], Division of Cultural Resources, BNHP.

⁴⁴ McGinley Kalsow & Associates, *Dry Dock 1 Historic Structure Report, Charlestown Navy Yard, Boston National Historical Park*, June 21, 2007, TIC 457/D6348.

sands of commuters and tourists who pass these structures each day to access the water shuttle.

A uniform series of interpretive markers can be installed throughout the yard. Care should be taken that any approach to the interpretation of the yard not create a series of maritime “theme parks” which have little or no grounding in the actual history of the shipyard. The Waterfront Activation Network Plan for the yard released by the BRA in 2007 needs to be carefully reviewed and revised so that its recommendations not only serve the goal of increasing public activity in the yard but also that of preserving and interpreting those elements of the yard which make it one of the nation’s most significant historic sites rather than presenting generic maritime-related themes.⁴⁵

Although visitation will never be large, the promised theme museums in both the Ropewalk and the Forge Shop should be developed. Building developers should be encouraged to use historic imagery not simply for lobby decoration but to present an interpretive story. The entrance lobby of Building 114 is an excellent example of how graphics can be used for both decoration and interpretation.

Coordination Between NPS And BRA

The National Park Service and the Boston Redevelopment Authority should work together to ensure that actions by either agency within the Navy Yard take into consideration the historic character of the area. In particular, the BRA should take steps to ensure that its lessees conform to the preservation guidelines, especially with regard to the retention and maintenance of historic signage. While regrettable, past deviations from guidelines, especially those relating to the groundplane, cannot be easily corrected. However, the BRA and the NPS need to emphasize to tenants and to other agencies of the City of Boston that the Navy Yard buildings and streets are not simply urban buildings and streets but contributing features of a nationally-significant historical resource. Deviations from standard practices which do not compromise vehicular or pedestrian safety to maintain the yard’s historic industrial character should not be rejected simply because they “do not meet code” or are not aesthetically pleasing. Many such actions, such as the use of historically-accurate colors for dry dock railings, crosswalks, and fire hydrants have no cost impact.

From the outside, it would appear that the fact that two different National Park Service offices interface with the Boston Redevelopment Authority is counterproductive. While this could be simplified by the delegation of the responsibility for the oversight of the deeds of transfer, now vested in the Northeast Regional Office in Philadelphia, to the Superintendent of Boston National Historical Park, such a transfer may create a tension between the park, as a regulator, and an agency with which it needs to work cooperatively to promote and interpret the Navy Yard to the American people. Therefore, this study recommends that the lines of communication between the various NPS offices and both the BRA and the wider historic preservation community be improved and that the preservation guidelines be reviewed and updated comprehensively to take into account both a better understanding of the history and significance of yard features and the evolution of historic preservation

philosophy and practices over the three decades since they were put into place.

The National Park Service, the Boston Redevelopment Authority, and other interested parties should work together to produce a master plan for the development of the Navy Yard as a whole which reflects a rehabilitation treatment for the yard. Where economically feasible, the BRA and other stakeholders should be encouraged to utilize historic precedents and treatments rather than standard, off-the-shelf contemporary approaches. While it is totally impossible to create a seamless yard, every effort should be made to reinforce the fact that, while now used for differing purposes, all areas of the yard share a nationally-significant historic heritage.

As a part of this master plan effort, the NPS and the BRA should review the boundaries of the park in the vicinity of Buildings 58, 60, 105, and 107. For example, it may be desirable from both a maintenance and law enforcement perspective to include the area between the Ropewalk and Chelsea Street within park boundaries. Any changes recommended in the master plan could be handled under existing NPS legal authority to make minor boundary changes without requiring specific Congressional action.

Documentation Of The Navy Yard

The Historic American Engineering Record (HAER) was established in 1969 by the National Park Service, the American Society of Civil Engineers, and the Library of Congress to document historic sites and structures related to engineering and industry. From its inception, HAER focused less on the building fabric and more on the machinery and processes within, although structures of distinctly industrial character continue to be recorded. In recent years, maritime documentation has become an important program focus.

A large portion of HAER projects have been instituted as mitigation for adverse effects under the procedures established for the implementation of Section 106 of the National Historic Preservation Act. Thus, projects tend to be initiated at a point in time when a full documentation of machinery and processes is virtually impossible. Such was definitely the case with the Charlestown Navy Yard. Starting in 1976, there have been several HAER campaigns to record the Navy Yard. Each dealt with very specific goals rather than attempting to provide an overall picture of a large and complex military-industrial facility.

Complicating the HAER project has been the fact that, more than three decades later, most of the documentation produced has yet to be transmitted to the Library of Congress, the official repository for HAER material. Table 4-7 lists the individual HAER documentation packages and shows which ones have, at least in part, been transmitted.

The Historic American Buildings Survey (HABS), from which HAER evolved, included the Commandant’s House in its initial efforts during the 1930s. Subsequently, the Ropewalk and Tarring House were recorded by a HABS team in 1988. That effort focused on the architecture of the structures and not on the industrial processes which took place in them.

The individual HAER projects in the yard can be summarized as: (1) the initial Navy-sponsored effort to record machinery and cranes being disposed of (MA-90-1-9); (2) the creation of Shipyard Park (MA-90-10-11); (3) the Gate 4/5th St. project (MA-90-12-14); (4) the BRA redevelopment of the yard (MA-90-15-65); (5) the Building

⁴⁵ Boston Redevelopment Authority, *Waterfront Activation Network Plan for the Charlestown Navy Yard* (2007), TIC 457/D6350A.

Table 4–7

**HISTORIC AMERICAN ENGINEERING RECORD DOCUMENTATION
BOSTON NAVAL SHIPYARD**

Survey No.	Subject	In LC	Survey No.	Subject	In LC
MA-90-1	Building 114	No	MA-90-36	Building 127	No
MA-90-2	Building 58	No ¹	MA-90-37	Building 131	No
MA-90-3	Building 105	No	MA-90-38	Building 143	No
MA-90-4	Pier 7	No	MA-90-39	Building 149	No
MA-90-5	Portal Crane 20	No	MA-90-40	Building 150	No
MA-90-6	Pier 5	No	MA-90-41	Building 165	No
MA-90-7	Pier 10	Yes	MA-90-42	Building 178	No
MA-90-8	Hammerhead Crane 2	No	MA-90-43	Building 191	No
MA-90-9	Hammerhead Crane 4	No	MA-90-44	Building 193	No
MA-90-10	Building 195	No	MA-90-45	Building 195	No
MA-90-11	Building 123	No	MA-90-46	Building 196	No
MA-90-12	Gate 4	No	MA-90-47	Building 197	No
MA-90-13	Building 136	No	MA-90-48	Building 199	No
MA-90-14	Building 198	No	MA-90-49	Building 200	No
MA-90-15	Building 31	No	MA-90-50	Building 203	Yes
MA-90-16	Building 33	No	MA-90-51	Building 206	No
MA-90-17	Building 34	No	MA-90-52	Building 210	No
MA-90-18	Building 36	No	MA-90-53	Building 211B	No
MA-90-19	Building 38	No	MA-90-54	Building 224	No
MA-90-20	Building 39	No	MA-90-55	Building 225	No
MA-90-21	Building 40	No	MA-90-56	Building 226	No
MA-90-22	Building 42	No	MA-90-57	Building 228	No
MA-90-23	Building 58	No ¹	MA-90-58	Building 230	No
MA-90-24	Building 60	No ¹	MA-90-59	Building 233	No
MA-90-25	Building 62	No	MA-90-60	Building 266	No
MA-90-26	Buildings 75, 187	No	MA-90-61	Building 217	No
MA-90-27	Building 79	No	MA-90-62	Building 277	No
MA-90-28	Building 96	No	MA-90-63	Building 279	No
MA-90-29	Building 103	No	MA-90-64	Dry Dock 5	No
MA-90-30	Building 104	Yes	MA-90-65	Quarters P	No
MA-90-31	Building 105	No	MA-90-66	Shipways	No
MA-90-32	Building 106	No	MA-90-67	Pier 9	Yes
MA-90-33	Building 107	No	MA-90-68	Pier 11	Yes
MA-90-34	Building 108	Yes	MA-90-69	Marine Railway	Yes
MA-90-35	Building 120	No			

¹ HABS documentation (MA-1247-A) has been submitted.

104 project (MA-90-30); and (6) the Army Corps remediation project (MA-90-7, 34, 50, 67-69). In addition, the NPS produced a recordation project for the Marine Railway which was perhaps the most comprehensive done for any structure but which was never formally a HAER effort.

In particular, the BRA effort was minimal, and largely consisted of exterior photographs of structures, many of which had originally been taken for other purposes. While the stripping of buildings had rendered process documentation impossible, there is no excuse for the BRA not to have recorded the interior of the major industrial structures.

The existing HAER material needs to be finalized and transmitted to the Library of Congress. The two projects completed in the 1990s should be the model for this effort, incorporating historic materials along with the original HAER photography. In particular, the 1974 Navy Yard recordation project (see the Navy Yard In 1974 gallery in Chapter 2) should be included in the final HAER package, along with the 1973 images taken by Eric DeLony of the HAER staff. The NPS recordation project for the Marine Railway should also be integrated into the existing HAER documentation for that facility.

To this end, the park has prepared a PMIS funding request

(PMIS 119094) to complete the HAER documentation of the Navy Yard. This project should be funded as soon as possible.

It is also recommended that a HAER project be undertaken to record Dry Dock 3 and Dry Dock 4 at South Boston. Such a project should include not only the docks themselves but also all of their supporting structures, including caissons, capstans, cranes and crane trackage, and pump houses.

On a broader level, the HAER efforts for the Navy Yard point to the need for establishing general HAER guidelines for both when and how to record large military or industrial complexes. For military installations, such a project should be the first project required once a base closure or realignment is approved. It should be scoped to record the entire facility—ignoring any distinction between historic and non-historic areas or contributing and non-contributing features—as a “snapshot” of the base at that particular point in time. The package must include aerial and other overall views of the property. Views of streetscapes and landscapes, as well as details of representative small-scale features such as signs, street furniture, etc., must be included along with both exterior and interior views. While it is not necessary to make a detailed record of the interior of identical structures (for example, a series of barracks), representa-

1978 National Register Nomination Photographs: A Gallery

IN MAY 1978 Edwin C. Bearss and Peter J. Snell of the National Park Service prepared a National Register nomination form for the Charlestown Navy Yard. Accompanying this nomination form, which was never officially accepted although it is widely circulated as such even by the NPS, were a series of historic and existing conditions photographs. The latter were taken in June and July

1978 by Richard Frear (misabeled as Fear in the captions) of the NPS Mid-Atlantic Regional Office. This gallery presents those images, with the original captions but with the geographic orientation corrected to the Navy/NPS conventions used throughout this report. These images should eventually be incorporated into the HAER record for the yard.



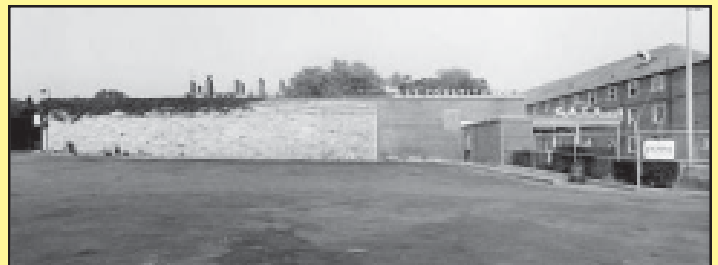
Navy Yard Wall, North Boundary, View West, June 1978



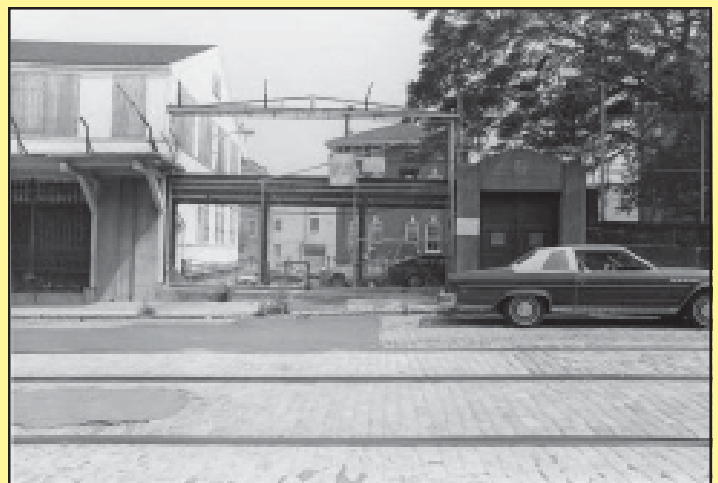
Navy Yard Wall, West Boundary, View East, June 1978



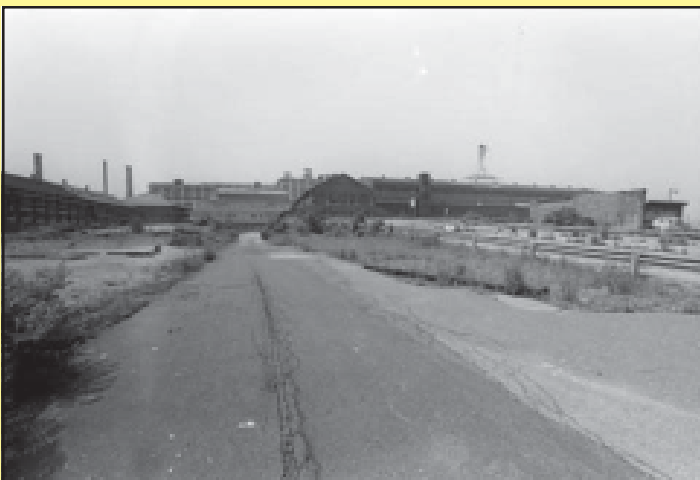
Second Ave., View East, July 1978



Gate 2, Yard Wall, Gate 1, Building 5, View East, July 1978



Gate 4, View South, June 1978

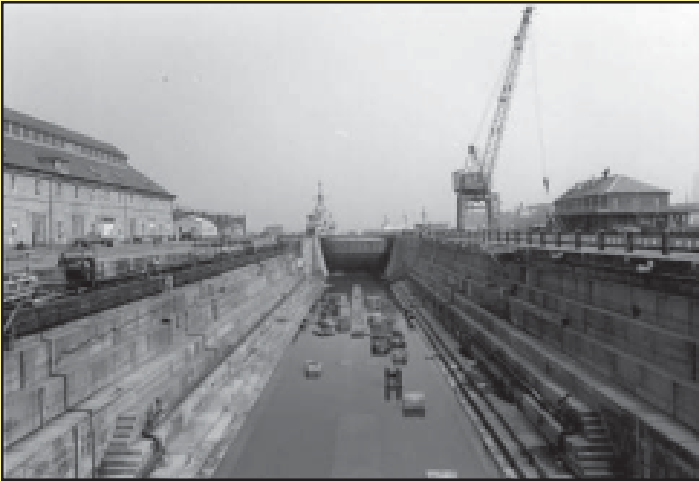


Shipways 2 (at right), View North, June 1978



Building 10, Crane 65, Dry Dock 1, Building 24, View Northeast, June 1978

1978 National Register Nomination Photographs: A Gallery



Building 24, Dry Dock 1, Crane 65, View South, June 1978



Building 197, Dry Dock 2, Buildings 125, 24, View South, June 1978



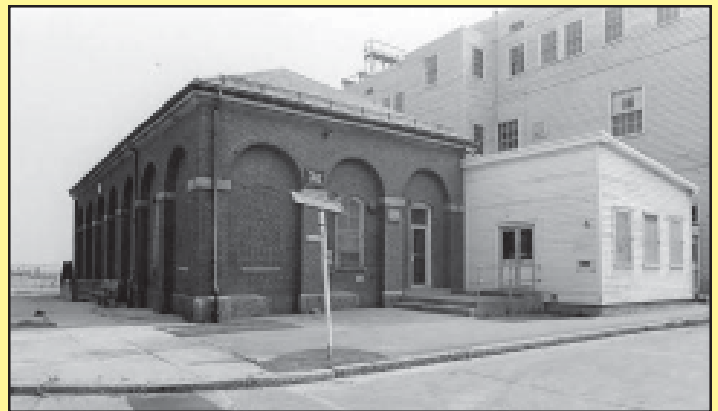
Building 22, Building 24, West Elevations, June 1978



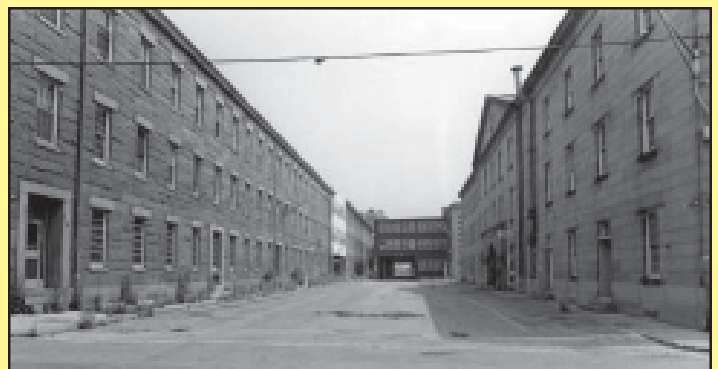
Crane 65, Building 24, View Northeast, June 1978



Building 31, Building 120, View Northeast, June 1978



Building 32, View Southwest, June 1978



Building 33, Second Ave., Building 34, View East, June 1978

1978 National Register Nomination Photographs: A Gallery



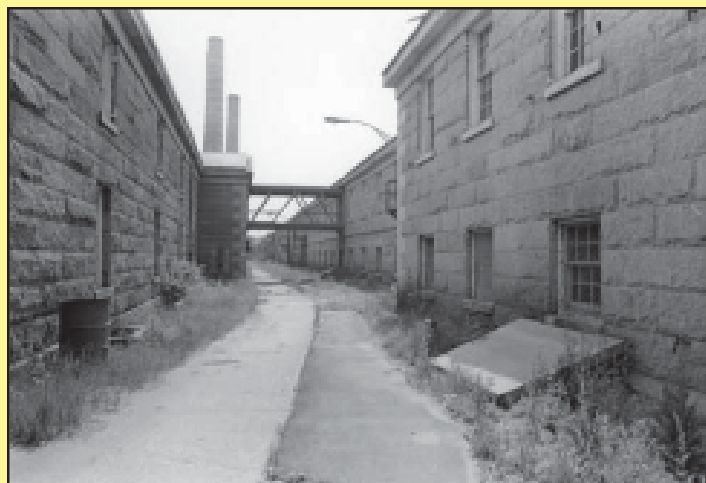
Building 34, Building 200, West Elevation, June 1978



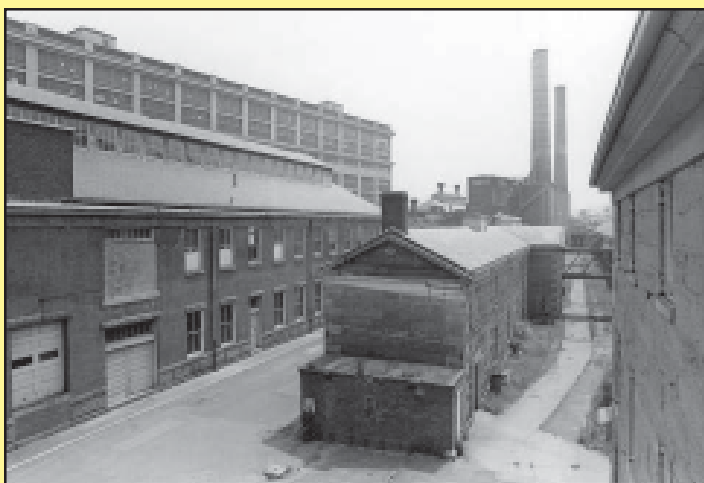
Building 42, View Northeast, June 1978



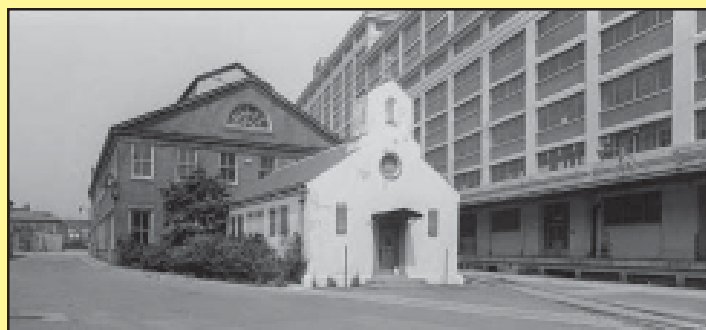
Building 58, North Boundary, View Southwest, June 1978



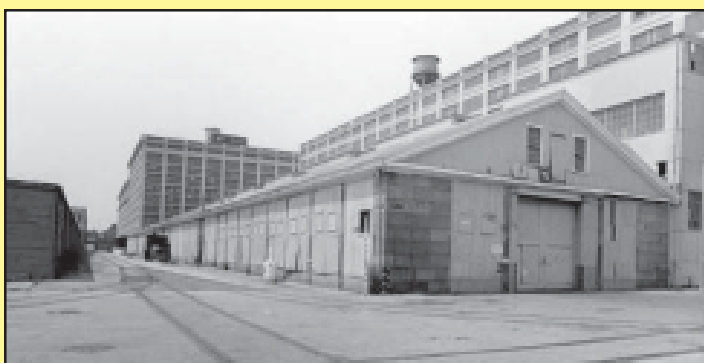
Building 60, Building 58, View West, June 1978



Building 60, Building 62, Building 58, View Southwest, June 1978



Building 62, Building 143, View East, July 1978



Second Ave., Building 75, View Northwest, June 1978



Bridge Across Shipways 1, Building 103, View West, June 1978

1978 National Register Nomination Photographs: A Gallery



Building 79, View Southwest, June 1978



Building 103, Shipways 1, Building 105, Building 104, View North, June 1978



Building 103, View Southwest, June 1978



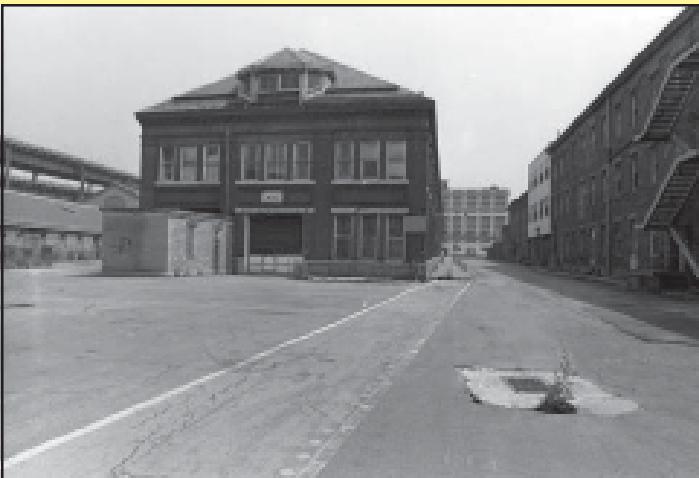
Building 103, East Elevation, June 1978



Building 105, View Northwest, June 1978



Building 105, West Elevation, June 1978



Building 107 and Third Ave., View East, June 1978



Building 107, View Northeast, June 1978

1978 National Register Nomination Photographs: A Gallery



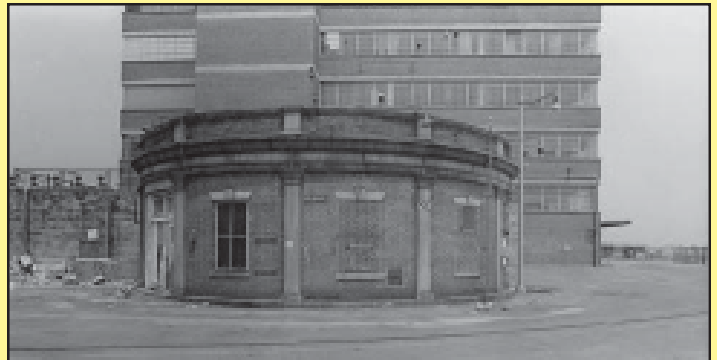
Building 108, View Northwest, June 1978



Building 120, South Elevation, June 1978



Building 120, Building 58, View Northwest, June 1978



Building 123, View East, June 1978



Building 136, West Elevation, June 1978



Building 197, South Elevation, June 1978



Building 198, View Southeast, June 1978

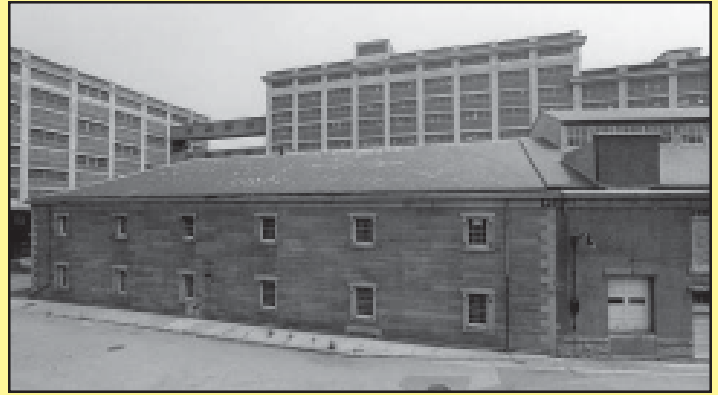


Gate 5, Building 199, Building 79, View South, June 1978

1978 National Register Nomination Photographs: A Gallery



Building 199, Gate 5, Building 79, View Southwest, June 1978



Building 199, Building 62, Building 149, View Southeast, June 1978



Building 199, View Southeast, June 1978



Barracks I, Parade Ground, Building 136, View Northeast, June 1978



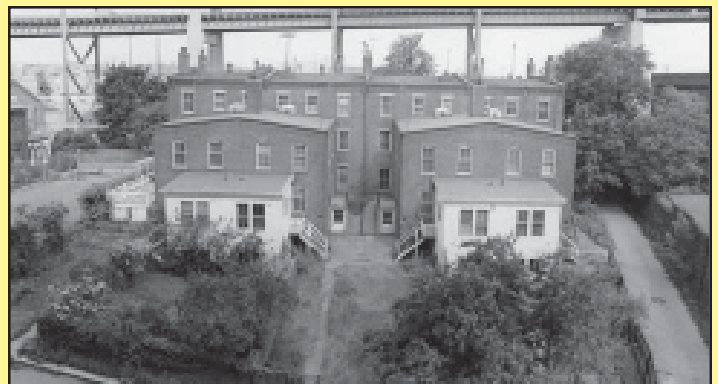
Barracks I, South Elevation, June 1978



Yard Wall, Quarters G, View South, June 1978



Quarters G, View Northeast, June 1978



Quarters L, M, N, O, View North, June 1978

tive interiors should be included. Photography of industrial shops should be done before any disposal of even the smallest equipment is permitted. Significant office spaces should also be recorded, as administrative activities are as important to the overall operation of a facility as are mission-related ones. Where appropriate, such as in the case of landscapes or structures of particular architectural merit, companion Historic American Buildings Survey (HABS) and Historic American Landscape Survey (HALS) projects should be encouraged. Historic materials, including original plans and photographs, should be identified, but need not be included in the HAER package if their preservation as intact collections is assured through agency and National Archives regulations. The acceptance of the HAER package should be a prerequisite to the finalization of any Section 110 and 106 review and/or transfer of a property out of federal ownership.⁴⁶

Recommendations For Physical Treatment

The following is a summary of the recommendations for the physical treatment of the Navy Yard. These recommendations should help inform the comprehensive management plan for the yard discussed above which recognizes the yard's historic nature while allowing for future development for other uses.

These recommendations highlight major actions needed to maintain the character-defining features of the Navy Yard. They do not include most projects to stabilize, preserve, or rehabilitate individual structures or other elements within the national park currently identified in the NPS Project Management Information System (PMIS) or the specific treatment recommendations contained in the Cultural Landscape Report which should, with minor exceptions such as the preservation rather than removal of the Building 198 foundation, be implemented. Where existing PMIS projects are closely related to the recommendations, they are shown in parentheses. The individual project statements should be consulted for further detail, as well as for cost information.

(1) Maintain the Historic Grid Circulation Pattern of the Yard and Associated Viewsheds. The grid pattern established by the 1828 Baldwin master plan, while compromised in a few areas, remains largely intact. Since this grid governed the growth of the yard, it should be maintained. In particular, new development should be inserted within the existing grid pattern. Views along both First and Second Avenues, the primary yard thoroughfares, should be preserved. Views along the north-south streets extending to the harbor should be preserved.

(2) Maintain the Navy Yard Boundary Wall and Fence (PMIS 73612). The Navy Yard Boundary Wall and Fence are character-defining features of the yard as a military installation. The NPS

⁴⁶ For an example of HAER documentation which approaches a military installation from a comprehensive point of view, see HAER RI-15, Quonset Point Naval Air Station, 1979, HABS/HAER Collection, Library of Congress. For naval shipyards, the HAER documentation for the Philadelphia Naval Shipyard comes closest to the approach recommended here, although it is not as comprehensive as that for Quonset Point. See HAER PA-387, Naval Base Philadelphia-Philadelphia Naval Shipyard (Philadelphia Navy Yard), 1994, HABS/HAER Collection, Library of Congress. Supplementing the overview package are packages (PA-387-A to PA-387-W) covering 23 individual structures. Although a brief HAER package was prepared for the Mare Island Naval Shipyard (HAER CA-3), the recording of that facility was done as a HABS project (HABS CA-1543), which treats each of the recorded structures individually rather than holistically.

should repoint the Boundary Wall, while the BRA should repair the Boundary Fence parallel to the Ropewalk.

(3) Maintain the Boston HarborWalk through the Navy Yard. The Boston HarborWalk is an effort to provide public access along Boston's inner harbor, an area historically inaccessible to the general public. Portions of the HarborWalk have already been constructed within the Public Park and New Development Areas. While security considerations mean that the HarborWalk through the national park cannot follow the western edge of Pier 1, an alternative routing along First Ave. and 3rd St. to the south end of Pier 1 is possible. The NPS and the BRA should work to create a safe pedestrian route across the caisson for Dry Dock 1, the site of the Marine Railway, and Dry Dock 2 to connect the HarborWalk on Pier 1 to the remainder of the HarborWalk in the yard.

(4) Retain Dry Dock 1 as a Working Dry Dock (PMIS 152558, 75135). Dry Dock 1 is the most important historic structure in the Navy Yard since it not only is one of the first two dry docks in the United States but also the most characteristic of the industrial nature of a naval shipyard. Dry Dock 1 should be rehabilitated in accordance with the recommendations of the recent historic structure report, and should be used for the drydocking of appropriate historic ships. Use of the dock by non-federal vessels should be allowed only with sufficient guarantees that such use will not encumber the dock in the same manner as occurred with SS *Nobska*.

(5) Retain Portal Cranes. Portal cranes are a character-defining feature of a shipyard. The three existing portal cranes should be retained and repositioned in ways which enhance their interpretive value while minimizing restrictions on active ship repair activities. The NPS should pursue the formal transfer of Portal Crane 30 from the Navy and restore its original number as Portal Crane 63.

(6) Restore Remaining Navy Yard Piers (PMIS 151177). The NPS and the BRA should move ahead to complete the restoration of Piers 2 and 3. The BRA should ensure that development at the eastern end of the yard does not preclude the future use of Pier 11 for berthing of visiting ships.

(7) Dredge Piers 1, 2, 3, 4, and 11 for Visiting Ships (PMIS 2099). Visiting ships reinforce the maritime nature of the Navy Yard and attract visitors to the yard. Both the NPS and the BRA have been active in promoting scheduled harbor ferry and harbor tour boat service between the yard and downtown Boston. Such vessels, however, do not require the same depths of water as do larger visiting ships. The NPS and the BRA should, in association with the Army Corps of Engineers, Massport, and other partners, dredge the berths at Piers 1, 2, 3, 4, and 11 to provide sufficient draft to accommodate visiting ships, especially American and foreign naval vessels and tall ships.

(8) Stabilize and Interpret the Marine Railway (PMIS 88432). The NPS should stabilize the remaining portions of the Marine Railway and interpret the facility, including the machinery room in Building 24, to the public as a part of the HarborWalk.

(9) Preserve Small-Scale Features (PMIS 12892, 88437, 116758, 124804). The NPS should ensure the preservation of the remaining industrial features of the yard such as the Grit Hoppers and Light Towers, as well as the smaller-scale buildings such as Buildings 110 and 124. The remaining Light Towers on Piers 4 and 6 should be retained by the BRA.

(10) Complete Restoration of the Muster House (Building 31). The Muster House (Building 31) was restored to appearance at the

Boston HarborWalk In The Navy Yard



This map shows the existing and proposed routing of the Boston HarborWalk.
The Boston Harbor Associates

The former Dock St. between Pier 4 and Pier 7 has been developed as part of the Boston HarborWalk, as seen in this 2005 view. *John P. Harris*

IN 1984 the BRA and The Boston Harbor Associates (TBHA) began work to create a 46.9-mile public walkway along Boston's waterfront. Boston's HarborWalk includes parks, public art, seating areas, cafes, exhibit areas, interpretive signage, water transportation facilities, and other amenities. Within the Navy Yard, portions of the HarborWalk have been completed around Dry Dock 2 and from Pier 4 to Pier 8, using the former Dock St. and the Shipways' bridges, as well as along the edges of the adjoining piers. In 2007 it was extended along the Parcel 4 area as part of the HarborView project. Completion of the walk around Dry Dock 5 and along Pier 11 will be part of the development of those areas of the yard.

While the route of the HarborWalk on Pier 1 has been designated as running from the Lincoln Ave. (Railroad) Gate along the edge of the pier, the security zone created in the wake of the September 11, 2001, attacks has meant that the portion on the west side of the pier is no longer freely accessible. An alternate route should be developed using First Ave. and 3rd St., and the gap across Dry Docks 1 and 2 and the Marine Railway site needs to be bridged.



conclusion of the construction of the third floor in 1871. However, the brick walls are currently bare brick. During the entire period prior to the demolition of the building's canopy around 1929, it was painted (or otherwise coated). The walls should be painted with historically accurate colors.

(11) Review Existing Preservation Guidelines and Amend as Appropriate. The NPS and the BRA should review the existing preservation guidelines to ensure that they have been complied with or to amend them to reflect better information on the history of the structure being treated. The NPS should work with the BRA to enforce guideline provisions which are being ignored by tenants (such as maintenance of historic building signage). New groundplane guidelines for the entire yard should be developed in accordance with the Cultural Landscape Report for the non-NPS portion of the yard.

(12) Rehabilitate and Interpret the Ropewalk and Tarring House (PMIS 71089). The Ropewalk and Tarring House are two of the most significant buildings in the yard yet to be redeveloped. The NPS and the BRA should move forward to amend the current guidelines to reflect a more modest exhibit component in any future development. The physical treatment of the building, including interpretive exhibits, should be in accordance with the guidelines or amendments made in response to specific programmatic needs.

(13) Rehabilitate and Interpret the Chain Forge (PMIS 16850, 19802, 70250). The Chain Forge should be rehabilitated following the completion of hazardous material abatement. This should include conservation of in situ equipment and development of interpretive exhibits. The NPS and the BRA should review and amend the current guidelines to balance the preservation of the yard's only intact industrial shop with the spatial needs for successful rehabilitation. The World War II additions to the structure should be maintained and restored.

(14) Rehabilitate and Interpret the Dry Dock Pumphouse (Building 123). The BRA should be encouraged to rehabilitate the Dry Dock Pumphouse in a manner which allows public viewing of in situ pumping equipment.

(15) Maintain Historic Signage (PMIS 16704). Existing historic signage in the yard, including building numbers and identification signs, street signs, safety signage, etc., should be maintained in accordance with NPS policies and the transfer guidelines. The NPS and the BRA should consider replacement of the Safety Shoe Sign in its historic location at the west end of Building 36. Within the national park, minor signage such as utility location stencils should be maintained (and updated where appropriate).

(16) Treat Streetscape Features in Accordance with Historic Precedents. Streetscape features, including crosswalks, fire hy-

drants, and dry dock safety railings should be painted in historic colors in accordance with 1973 photographic evidence and the provisions of the Navy's manual on *Color for Naval Shore Facilities*.¹⁴ The BRA and other property managers within the non-national park portions of the yard should be encouraged to utilize trash receptacles which duplicate historic Navy Yard trash receptacles.

(17) Develop Comprehensive Interpretive Waysides. The NPS and the BRA should work together to develop a comprehensive system of interpretive waysides, especially along the route of the HarborWalk. These waysides should be of a uniform design so as to reinforce the concept that the yard was historically a single property. While the NPS standard waysides can form the basis for the new waysides, the NPS should not refuse to consider variant designs simply because of policy.

(18) Manage Laydown Spaces. Because the NPS portion of the yard remains an active shipyard, laydown spaces are essential. The NPS should work with the Navy to ensure that defined laydown spaces do not spill over into other areas of the yard and do not become dumping grounds for obsolete equipment and materials.

Recommendations For Further Studies

The following is a summary of the recommendations for further study or other actions as a result of this report. Most of these projects have been included in the National Park Service's Project Management Information System (PMIS). The individual project statements should be consulted for further detail, as well as for cost information.

(1) Prepare Contextual Study of Naval Shipyards (PMIS 81068)

— The evaluation of the significance of the Charlestown Navy Yard in its larger contexts of both naval shipbuilding and technology has been difficult because of the lack of a comprehensive study of naval shipbuilding policies and practices. It is recommended that this study, as discussed above, be undertaken in partnership with the Navy. The study should be coordinated with the appropriate State Historic Preservation Officers so that it can inform the completion of National Register nominations for both shipyard properties already identified as eligible and those so identified during the study. While it is probably still too early to evaluate the reuse of shipyard properties,⁴⁸ reuse plans should be examined to the extent that they impacted decisions made as part of the closure process.

(2) Revise National Register Documentation (PMIS 16784)

— The existing National Register documentation for the Navy Yard consists primarily of a 1978 draft document never officially accepted, although distributed by, the National Register. Because it was drafted before extensive research had been conducted into Navy Yard records, it contains numerous factual errors. This documentation should be updated to both correct those errors and to reflect current conditions, as well as to include the entire Boston Naval Shipyard.

⁴⁷ Naval Facilities Engineering Command, *Color for Naval Shore Facilities*, NAVFAC P-309 (Washington: Naval Facilities Engineering Command, 1971).

⁴⁸ To date, studies on the reuse of naval shipyards have dealt only with Boston, Philadelphia, and San Francisco (Hunters Point). See Catherine Alison Hill, *The Political Economy of Military Base Redevelopment: An Evaluation of Four Converted Naval Bases* (Ph.D. dissertation, Rutgers, 1998); Ron Hess, et al., *The Closing and Reuse of the Philadelphia Naval Shipyard*, MR-1364-Navy (Santa Monica, Calif.: National Defense Research Institute, RAND, 2001).



The NPS has installed a number of interpretive waysides in its portion of the yard, including this one at the head of Dry Dock 1. A comprehensive series of waysides in either this or another uniform design should be extended throughout the entire yard. OCLP

The study should also look at the possibility of preparing individual National Register nominations for Dry Dock 1 (which should be combined with the existing NHL designation of Norfolk Dry Dock 1 as a multi-property thematic nomination for the Navy's first two dry docks), Dry Dock 3, and the Ropewalk. (This work could be incorporated into the broader contextual study recommended above.)

The PMIS project is broader than just the Navy Yard, encompassing all sites within Boston National Historical Park. As a part of this larger effort, the existing documentation for USS *Cassin Young* (DD-793) should be reevaluated in terms of the role of the vessel during the Cold War in the 1950s, the period which the physical fabric of the ship represents and the period where it has a close association with the Navy Yard's primary mission of modernizing and overhauling naval vessels.

Since the former Boston Army Base property is not proposed to be within the revised boundaries of the Boston Naval Shipyard NHL, the Boston Landmarks Commission should be encouraged to undertake the necessary work to nominate the Boston Army Base to the National Register. This study should include consideration of proposing the property for nomination as a National Historic Landmark in its own right.

(3) Complete HAER Documentation, Charlestown Navy Yard (PMIS 119094) — At the time of the closure of the Boston Naval Shipyard in 1974, documentation of the yard to the standards of the Historic American Engineering Record was begun, but that effort has never been finalized. Only limited material has been processed and transferred to the Library of Congress. This project would locate and organize (in accordance with the original MA-90-Subnumber scheme) HAER photographs taken in 1973 and 1976 by Eric DeLony and Jack Boucher of the HABS/HAER staff, those taken in 1977 by the Boston Redevelopment Authority (BRA) as mitigation under various deeds of transfer, and subsequent documentation prepared under the auspices of the Army Corps of Engineers and private developers. In addition, it will make copies to HAER archival standards of photographs taken by Navy Yard photographers in 1973 and 1974 intended to document the conditions of the yard at the time of its closure.

(4) Update List of Classified Structures (PMIS 100030) —

The existing entries in the List of Classified Structures (LCS) should be updated to reflect the information developed in this report. The descriptive fields of this document should identify the character-defining features of each structure to the extent that they have been developed in historic structure reports (HSR), and the LCS should be subsequently updated as further HSRs are completed.

As a part of this project, structures outside of the national park boundaries but which are subject to preservation restrictions under the deeds of transfer, which have been created as drafts in the “shadow” LCS database, should be completed and incorporated into the LCS database so that all resources in the Navy Yard can be monitored in the same way.

(5) Prepare Archeological Overview and Assessment (PMIS 100018) — The current archeological overview dates to 1980 and represents an assessment based solely on documentary materials. A more detailed overview and assessment, taking into account the findings of archeological work in and adjacent to the yard, should be prepared. Ideally, this project should be done in cooperation with the Boston Redevelopment Authority and include the entire Charlestown Navy Yard within its scope. This project is currently funded for FY 2010 under the regional archeological resources inventory (SAIP) program.

(6) Complete Cultural Landscape Report (PMIS 16796) — The remaining phase of the project for the Navy Yard cultural landscape report, covering non-NPS areas of the yard, should be undertaken. In developing treatment guidelines for this portion of the Navy Yard, the project should engage the park, the Boston Redevelopment Authority, local community groups, and other stakeholders in a visioning process and landscape character study of this portion of the yard as it transitions from predominantly industrial to institutional and residential uses. The result of this study will be used to develop revised groundplane treatment guidelines for the Historic Monument Area.

(7) Complete Draft/Prepare Historic Structure Reports (PMIS 12449, 16786, 74409, 74774, 144744) — The Historic Structure Report (HSR) provides essential information regarding the history of individual structures, identifies their character-defining features, and makes recommendations for their ultimate treatment. Most HSRs completed to date for Navy Yard structures have been done as part of the preliminary planning process for major rehabilitation projects. The most recent of these have been ones on Building 24, Building 125, and Dry Dock 1.

In the earliest years of the park, a number of HSRs were begun but never completed. These draft HSRs in the park’s Technical Information Collection should be reviewed, and those which represent sound research should be finalized. Currently, statements exist for finalizing the HSRs on Quarters G (PMIS 16786) and the Chain Forge (PMIS 144744) and undertaking HSRs on Building 22 (PMIS 12449), Building 265 (PMIS 74774), and the Marine Barracks (PMIS 74409). A systematic program for the preparation of additional historic structure reports should be instituted.

(8) Prepare Administrative History (PMIS 12450) — The administrative history of Boston National Historical Park, especially as it relates to the creation of the park and the decision to include

the Navy Yard in it, should be undertaken as soon as possible, while it is still possible to interview individuals involved in that process. This project is currently programmed for funding in FY 2014 under the regional cultural resources preservation program. Because this document may be of value in the preparation of the new General Management Plan for the park currently underway, it may be expeditious to explore working with the public history community to encourage graduate students to undertake it as a thesis/dissertation project.

(9) Prepare Labor History Studies — While the administrative, architectural, and technological history of the Navy Yard is fairly well represented in existing studies, special history and other studies are required to provide more information on the yard work force, its relationship to the Charlestown community, and how its composition changed over time, including women and minority workers. Since NPS funding for such studies is unlikely to be obtained in the near future, it is recommended that the park work with the public history community to encourage graduate students to adopt them for thesis/dissertation projects.

(10) Revise/Update Scope of Collections Statement and Collection Management Plan (PMIS 90812) — The current Scope of Collections Statement (SOCS) was prepared in 1985, while the Collection Management Plan (CMP) was approved in 1994. Both documents are outdated and not in compliance with current NPS standards for those documents. A project to produce a new CMP for the park is currently underway. An update of the SOCS is currently scheduled for FY 2011.

(11) Prepare Comprehensive Finding Aid, Boston Naval Shipyard Archival Collections (PMIS 108004) — The current finding aids for the Boston Naval Shipyard Archival Collections are outdated, both in terms of changes to the organization of the collection since the original finding aid was prepared in 1981 and in terms of including all Navy Yard-related collections. This project will provide a comprehensive and consistent finding aid for the Records of the Boston Naval Shipyard, the Boston Naval Shipyard Related Collections, the Boston Naval Shipyard Oral History Project, and the Boston Naval Shipyard Photo Collection.

(12) Digitize Photographs to Provide Access to Collection (PMIS 16841) — The Boston Naval Shipyard Photo Collection and the architectural drawing files in the Records of the Boston Naval Shipyard are among the most-utilized material in the Boston National Historical Park Archival Collection. To facilitate access to this material, it is recommended that portions of these collections be digitized and made available to researchers in electronic form through the Internet. Among the series of items which should be digitized first are general views (including aerial photographs), exterior views of significant structures, selected views of ships (including USS *Cassin Young* and USS *Constitution*) and material from the two ship history files relating to them, and the annual yard site plans. The yard newspaper, *Boston Naval Shipyard News*, has previously been microfilmed. It is recommended that this microfilm be converted to digital format and made available in electronic form as well. As an initial step, pending creation of archival-quality scans, the images digitized for this report should be made available.

Appendix E

Bibliography







THE FOLLOWING BIBLIOGRAPHY includes official documents, research reports, and secondary sources consulted in the preparation of this report. It excludes primary sources discussed in Appendix C, as well as the finding aids to them. Also omitted are National Park Service manuals and technical publications relating to historic preservation. For items which are available through the National Park Service's Technical Information Center (TIC), the document number is provided. While not all reports have yet been included in the central depository at the NPS Denver Service Center, they are available in the Division of Cultural Resources of Boston National Historical Park. Documents available in digital form are indicated by a PDF symbol (PDF).





















Only the most significant web sites and web-based documents cited are listed here. It should be noted that while web addresses were valid at the time they were accessed, the Internet is a fluid institution and addresses may change or items may be removed from it. In many cases where a single document is listed, a physical copy has been created for inclusion in the project file for this study.












Individual articles in newspapers and most general periodicals (both print and on-line), including the *Boston Naval Shipyard News* and *The Broadside/Boston National Historical Park*, are not listed separately.

Official Documents, Reports, Studies

- ABB Environmental Services. *Alternatives Evaluation Report, Pier #2 Sediments, Boston Navy Yard*. Feb. 1994. TIC 457/D66. PDF
- . *Plan to Address Sediment Contaminants, National Park Service, Charlestown Navy Yard, Charlestown, Massachusetts*. May 1994. TIC 457/D90. PDF
- Alar Corp. *Relocation of Historic Wall, Boston National Historical Park, Boston, Massachusetts: Technical Proposal*. RFP-NARO-1-0002. Rev. Mar. 11, 1981. TIC 457/D6913A.
- Albee, Peggy A. *The Commandant's House: Historic Structure Report, Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts*. Draft. Boston: Cultural Resources Center, North Atlantic Region, 1990. TIC 457/D6314.
- Alonzo B. Reed, Inc. *Specification, National Naval Park Utilities Support, Boston Naval Shipyard, Boston, Massachusetts*. June 6, 1974. TIC 457/D6289.
- Anderson, Nain E., Peter Thorbahn, and Neill DePaoli. *Preliminary Archaeological Investigation of Gate 4-106, Charlestown Navy Yard, Charlestown, Massachusetts*. Jan. 1979. Providence, R.I.: Public Archaeological Laboratory, 1979. TIC 457/D6088.
- Archetype Architecture. *Historic Pavement Study, Charlestown Navy Yard, Charlestown, MA*. Sept. 1, 1995. TIC 457/D113. PDF
- , et al. *Master Lighting Plan & Guidelines, Charlestown Navy Yard, Boston National Historical Park, Charlestown, MA*. Feb. 3, 1997. TIC 457/D6275.
- . *Notice of Intent: Repaving & Site Improvements, Charlestown Navy Yard, Boston National Historical Park, Charlestown, MA*. May 1998. TIC 457/D6374.
- Banister, Jennifer Bonner, and Suzanne G. Chereau. *Archeological Investigations, Marine Barracks, Charlestown Navy Yard, Boston National Historical Park, Boston (Charlestown), Massachusetts*. PAL Report 1787.01. Feb. 2006. Pawtucket, R.I.: PAL, 2006. TIC 457/D6356.
- Bargmann Hendrie + Archetype. *Marine Barracks Window Renovation Phase: Compliance Report*. Sept. 5, 2005. TIC 457/D6375.
- , and Techmark Security Integration. *Design Recommendations for Charlestown Navy Yard CCTV*. Rev. May 2003. TIC 457/D6371.
- Barton, Andrew, et al. *Historic Structure Report: Building 28 and Electrical Substation, Building 22, Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts*. 2 vols. Denver: Denver Service Center, 1989. TIC 457/D70. PDF
- Basilica Associates. *Development Proposal, Charlestown Navy Yard Buildings 75 & 106*. Oct. 19, 1984. TIC 457/D6404. PDF
- Bawden, Garth, Randall Moir, and C.C. Lamberg-Karlovsky. *Final Report, Phase II Archaeological Investigation of Chelsea-Water Street Connector Project, Charlestown, Massachusetts*. ICA 103. Cambridge, Mass.: Institute for Conservation Archeology, 1979. TIC 457/D6049.
- Bearss, Edwin C. *Charlestown Navy Yard, 1800-1842*. 2 vols. Denver: National Park Service, 1984. TIC 457/D26. PDF
- , et al. *Historic Structure Report, Building 198, Charlestown Navy Yard, Boston National Historical Park, Massachusetts*. Denver: Denver Service Center, 1982. TIC 457/D1888. PDF
- , et al. *Historic Structure Report, Historical, Archeological, and Architectural Data Sections: Building 204, Garage and Transportation Office, Charlestown Naval Shipyard, Charlestown, Massachusetts, Boston National Historical Park*. Draft. Denver: Denver Service Center, 1979. TIC 457/D13. PDF
- Black, Frederick R. *Charlestown Navy Yard, 1890-1973*. Cultural Resources Management Study No. 20. 2 vols. Boston: Boston National Historical Park, 1988. TIC 457/D6162A. PDF
- , and Edwin C. Bearss. *The Charlestown Navy Yard, 1842-1890*. Boston: National Park Service, 1993. TIC 457/D6307.
- Booz, Allen & Hamilton. *Engineering Survey of Boston Naval Shipyard*. Aug. 23, 1974. TIC 457/D6344.
- Boston. Mayor's Office of Commerce & Manpower. *Interim Reuse Plan for the Boston Naval Complex*. Mar. 19, 1974. TIC 457/D6352.
- . *Preliminary Data/Boston Naval Shipyard & South Boston Naval Annex*. Boston: City of Boston, 1973. TIC 457/D6159.
- Boston. Office of the Mayor. *Charlestown Naval Shipyard Urban Development Action Grant*. Jan. 1978. TIC 457/D6272. PDF
- Boston Investment & Development Co. *The Anchor Building: Development Proposal for Building 108, Charlestown Navy Yard*. Sept. 27, 1985. TIC 457/D6387. PDF

- Boston Landmarks Commission. *The Ropewalk*. June 7, 1988. TIC 457/D6373A.
- “Report to the Boston Landmark Commission on the potential designation of the Ropewalk Building as a Landmark Under Chapter 772 of the Acts of 1976.”
- Boston National Historic Sites Commission. *Final Report of the Boston National Historic Sites Commission: Letter From the Secretary of the Interior Transmitting the Final Report of the Boston National Historic Sites Commission Pertaining in Particular to Major Problems of Historic Preservation in the Municipality of Boston*. House Doc. No. 107, 87th Cong., 1st sess. Washington: U.S. Govt. Printing Office, 1961.
- Boston National Historical Park. *Final Revised General Management Plan/Volume II, Boston National Historical Park, Charlestown Navy Yard*. Boston: Boston National Historical Park, 1987. TIC 457/D6175A. 
- . *Scope of Collection Statement, Boston National Historical Park*. Mar. 1995. TIC 457/D6145.
- . *Statement of Requirements (SOR) (Fact Sheet) Under Which a Concession Contract Will Be Negotiated for the Operation of a Fast Service Restaurant at Charlestown Navy Yard, Boston National Historical Park*. July 9, 1987. TIC 457/D7100.
- . *Statement of Requirements (SOR) (Fact Sheet) Under Which a Concession Contract Will Be Negotiated for the Operation of a Food Service Facility at Charlestown Navy Yard, Boston National Historical Park*. Apr. 25, 1988. TIC 457/D7100A.
- Boston Naval Shipyard. Industrial Relations Dept. Employee Services Division. *Family Album of Boston Naval Shipyard*. [Boston], 1951.
- Boston Redevelopment Authority. *Application for Federal Assistance (For Construction Program) Under Title I of the Grant and Loan for Public Works and Development Facilities Program (Catalog No. 11.300) for Boston Naval Shipyard/Charlestown Submitted to Economic Development Administration, U.S. Department of Commerce*. Feb. 1976. TIC 457/D6110.
- . *Application for Transfer of 19.6 Acres of the Boston Naval Shipyard at Charlestown to the Boston Redevelopment Authority for Public Park and Recreation Purposes under P.L. 91-485 Submitted to U.S. Bureau of Outdoor Recreation*. Dec. 1975. TIC 457/D6123.
- . *Application for Transfer of 29.8 Acres of the Boston Naval Shipyard at Charlestown to the Boston Redevelopment Authority for Historic Monument Purposes (40 U.S.C. 484(k)(3)) Submitted to General Services Administration*. Feb. 1976. TIC 457/D9.
- . *Application for Transfer of 29.8 Acres of the Boston Naval Shipyard at Charlestown to the Boston Redevelopment Authority for Historic Monument Purposes (40 U.S.C. 484(k)(3)) Submitted to General Services Administration*. Apr. 1976. TIC 457/D9A.
- . *Application for Transfer of 30.9 Acres of the Boston Naval Shipyard at Charlestown to the Boston Redevelopment Authority for Historic Monument Purposes (40 U.S.C. 484(k)(3)) Submitted to General Services Administration*. July 25, 1977. TIC 457/D9B.
- . *Biennial & Status Report, Charlestown Naval Shipyard, Boston, Massachusetts*. 1990. TIC 457/D6370.
- . *Biomedical Research Center: Buildings B & C, Charlestown Navy Yard: Draft Environmental Impact Report*. EOE #8883, Apr. 15, 1992. TIC 457/D6361.
- . *Boston Naval Shipyard at Charlestown: Plan & Development Program*. Oct. 1975. TIC 457/D6074.
- . *Boston Naval Shipyard/Charlestown: Planning and Development Program*. Dec. 1975. TIC 457/D6074A.
- . *Building 33, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6015.
- . *Building 34, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6016.
- . *Building 36, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6017.
- . *Building 38, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6018.
- . *Building 39, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6019.
- . *Building 75, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6021.
- . *Building 79, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6022.
- . *Building 96, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6023.
- . *Building 106, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6024.
- . *Building 107, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6025.
- . *Building 114, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6027.
- . *Building 120, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6028.
- . *Building 149, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6029.
- . *Building 199, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6031.
- . *Building 266, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6033.
- . *Building P Redeveloper's Kit*. Draft. Dec. 1990. TIC 457/D6277.
- . *Building P108, Boston Naval Shipyard at Charlestown*. May 20, 1977. TIC 457/D6026.
- . *Buildings 62, 96, 105, 108: Summary of Proposals*. Nov. 1985. TIC 457/D129. 
- . *Charlestown Naval Shipyard Planning Data Package*. Aug. 1975. TIC 457/D6378.
- . *The Charlestown Navy Yard*. [Boston: Boston Redevelopment Authority, 1976]. TIC 457/D6293. 
- . *Charlestown Navy Yard*. Boston: Boston Redevelopment Authority, 1980. TIC 457/D6293A.
- . *Charlestown Navy Yard*. Aug. 1985. TIC 457/D6285.
- . *Charlestown Navy Yard: A Comprehensive Update*. Dec. 1994. TIC 457/D6284A.
- . *Charlestown Navy Yard: Framework for Discussion*. Draft. Apr. 1987. TIC 457/D6274.
- . *Charlestown Navy Yard: Master Plan for the Yard's End*. Jan. 1990. TIC 457/D6290C. 
- . *Charlestown Navy Yard: Master Plan for the Yard's End*. Mar. 1990. TIC 457/D6290A. 
- . *Charlestown Navy Yard: Master Plan for the Yard's End*. Oct. 1990. TIC 457/D6290B.
- . *Charlestown Navy Yard: Master Plan for the Yard's End: Community Comments*. Mar. 1990. TIC 457/D6279.
- . *Charlestown Navy Yard: Master Plan for Yard's End: A Framework for Discussion*. Jan. 1990. TIC 457/D6290.
- . *Charlestown Navy Yard Master Plan Executive Summary*. May 10, 1988. TIC 457/D6280. 
- . *Charlestown Navy Yard Pier Management Plan*. Apr. 19, 1992. TIC 457/D6273.

- . *Charlestown Navy Yard Public Access/Open Space Plan: A Framework for Discussion*. Feb. 1990. TIC 457/D6283. 
- . *Charlestown Navy Yard Redevelopment: Final Supplemental Environmental Impact Report*. 2 vols. EOE #02383, Sept. 3, 1991. TIC 457/D6291A. 
- . *Charlestown Navy Yard Update 1994*. 1994. TIC 457/D6284.
- . *Charlestown Navy Yard Urban Renewal Plan Amendment: Addendum to Final Environmental Impact Report*. EOE #02383, Jan. 1978. TIC 457/D6287A.
- . *Charlestown Navy Yard Urban Renewal Plan Amendment: Final Environmental Impact Report*. EOE #02383, Jan. 31, 1977. TIC 457/D6287. 
- . *Design Guidelines: Boston Naval Shipyard at Charlestown*. [1978?]. TIC 457/D6040A. 
- . *Design Guidelines, New Development Area, Boston Naval Shipyard at Charlestown*. June 1978. TIC 457/D6040. 
- . *Design/Development Guidelines, Buildings 62, 96, 105 and 108*. Aug. 1985. TIC 457/D6189. 
- . *Design/Development Guidelines, Buildings 75, 105, 106, 114, 266/Parcel 6 & 7*. Sep. 1984. TIC 457/D6189A. 
- . *A Development Proposal for the Charlestown Navy Yard*. n.d. [ca. 1971]. TIC 457/D6001B.
- . *Double Interpretive Loop Plan, Charlestown Naval Shipyard, Boston, Massachusetts*. Draft. 1991. TIC 457/D6292.
- . *Harborpark 1986 Update: The Charlestown Navy Yard*. 1986. TIC 457/D6354. 
- . *Harborpark Plan: City of Boston Municipal Harbor Plan*. Oct. 1990. TIC 457/D6276. 
- . *The John F. Kennedy Museum, Charlestown Naval Shipyard/A Proposal*. [1975]. TIC 457/D6282.
- . *The John F. Kennedy Museum, Charlestown Naval Shipyard/A Proposal*. Nov. 15, 1975. TIC 457/D6282A.
- . *The Navy Yard*. Boston: Boston Redevelopment Authority, 1986. TIC 457/D6293B. 
- . *Parcel 7, Charlestown Navy Yard, Request for Proposals*. May 1990. TIC 457/D6368.
- . *A Proposal for a National Historic Park & Naval Museum, Charlestown Navy Yard, Boston, Massachusetts*. Boston: Boston Redevelopment Authority, 1973. TIC 457/D6001C.
- . *Proposed Municipal Harbor Plan, Minor Geographic Amendment, Charlestown Navy Yard/Building 114*. June 1999. TIC 457/D6281.
- . *South Boston Waterfront District Municipal Harbor Plan*. Draft. Mar. 2000. TIC 457/D6286.
- . *Specifications: Demolition and Site Clearance Contract No. 2*. [ca. July 1978]. TIC 457/D6907.
- . *Specifications: Sewer, Drain and Water Construction Contract No. 1*. 1978. TIC 457/D6905.
- . *Specifications: Site Preparation Contract No. 1, Phase I Redevelopment*. July 1980. TIC 457/6903.
- . *Water-Dependent Use Management Plan, Charlestown Navy Yard*. May 2007. TIC 457/D6349. 
- . *Waterfront Activation Network Plan for the Charlestown Navy Yard*. 2007. TIC 457/D6350A. 
- . Capital Construction Dept. *Marine Industrial Park*. Sept. 2002. TIC 457/D6343.
- . Neighborhood Planning Dept. *Buildings in the Historic Monument Area & New Development Area of the Charlestown Naval Shipyard*. [1977]. TIC 457/D5. 
- . Planning Dept. *Charlestown Naval Shipyard Historic Park Proposal (revised)*. Charlestown Naval Shipyard Re-Use Study, Report III: Historic Park Proposal. Aug. 1971 [1975 revision]. TIC 457/D6001A.
- . ————. *Charlestown Naval Shipyard Re-Use Study, Report I: Analysis of the Site and Framework for the Development of the Shipyard*. Nov. 1970. TIC 457/D6000.
- , and Courageous Sailing Center. *The Courageous Sailing Center*. Jan. 27, 1987. TIC 457/D6402. 
- Boston Shipbuilding Corp. *Boston Shipbuilding Corporation, Boston, Mass.: Confidential Information Book*. July 1, 1974. TIC 457/D6347.
- Boston Transportation Planning Review. *Harbor Crossing Draft Environmental Impact Statement, Preliminary Location Report, Program Package Evaluation Report*. Sept. 1972.
- Brady, Mary Jane. *Historic Structure Report, Architectural Data Section, Pier 1 and 2, Charlestown Navy Yard, Boston National Historical Park, Massachusetts: Volume I, Historical Background*. Denver: Denver Service Center, 1982. TIC 457/D1842. 
- , and Christopher J. Foster, Inc. *Historic Structure Report, Dry Dock 1, Charlestown Navy Yard: Architectural Data, Boston National Historical Park, Massachusetts*. Draft. Denver: Denver Service Center, 1980. TIC 457/D6059. 
- , and Crandall Dry Dock Engineers, Inc. *Historic Structure Report, Marine Railway No. 11, Architectural Data Section, Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts*. Denver: Denver Service Center, National Park Service, 1982. TIC 457/D1879. 
- Bricklayers & Laborers Non-Profit Housing Corp. *Elderly Housing Proposal, Building 104 in the Charlestown Navy Yard*. Apr. 30, 1991. TIC 457/D6405. 
- Brockway, Lucinda A., and Patrice A. Todisco. *Charlestown Navy Yard Historic Grounds Management Report*. [Boston]: Boston National Historical Park, 1985. TIC 457/D6157.
- Butowsky, Harry A. *Warships Associated With World War II in the Pacific: National Historic Landmark Theme Study*. Washington: National Park Service, 1985. TIC 457/D6201. 
- Carden, Marie L., and Lawrence A. Sorli. *Ropewalk and Tar House (Buildings 58 and 60): Historic Structure Report, Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts*. Rev. by Louis P. Hutchins. 2 vols. 1999. TIC 457/D6301A.
- Carlson, Stephen P. *Captains' Row, Charlestown Navy Yard, Historical Summary*. Rev. May 1992. TIC 457/D6325A.
- . *Completion Report, 1443-CX1720-99-003, Repaving of Charlestown Navy Yard, Boston National Historical Park*. Dec. 7, 2004. TIC 457/D6362. 
- . *Ships Built at the Charlestown Navy Yard*. Draft. Boston: Boston National Historical Park, 1992. TIC 457/D6304.
- Carolan, Jane. *Building 105/The Chain Forge, Charlestown Navy Yard*. Rev. draft. Dec. 2003. TIC 457/D6312.
- Carroll, Orville W. *Completion Report: Adaptive Use and Renovations to Building 28, Charlestown Navy Yard, Charlestown, Massachusetts*. Feb. 1980. TIC 457/D6107.
- . *Historic Structure Report, Architectural Data Section, Building 10, Charlestown Navy Yard, Mass.* Draft. Jan. 30, 1989. TIC 457/D6310.
- Childs Bertman Tseckares & Casendino. *Conceptual Study, Museum of New England Life at the Ropewalk*. Rev. Apr. 1989. TIC 457/D6376A.

- Childs Engineering Corp. *Notice of Intent, USS Constitution Finger Pier and Platform Repairs, Charlestown Navy Yard, Charlestown, Massachusetts*. Mar. 7, 2007. TIC 457/D6359.
- Conlin, David L., ed. *USS Housatonic Site Assessment*. Submerged Resources Center Professional Papers No. 19. 2005. TIC 999/D1753. 
Also issued by Naval Historical Center as Underwater Archaeology Branch Papers No. 4.
- Craig, Bruce. *Building 109 Historical Survey Section*. Apr. 1978. TIC 457/D6038.
- Cumberland, Donald R., Jr. *Collection Storage Plan, Charlestown Navy Yard, Boston National Historical Park*. Aug. 1988. TIC 457/D6187.
- Denver Service Center. *Assessment of Alternatives, Charlestown Navy Yard, Boston National Historical Park*. Apr. 1979. TIC 457/D6.
- . *Boundary Enlargement Report, Charlestown Navy Yard, Boston National Historical Park*. Dec. 1978. TIC 457/D1302A.
- . *Environmental Assessment of Management Alternatives for Boston National Historical Park*. Nov. 1976. TIC 457/D1133A.
- Desmond, Childs & Adams, Inc. *Appraisal, Boston Naval Shipyard, Charlestown, Boston, Massachusetts*. June 15, 1974. 2 vols. TIC 457/D6390.
- . *Appraisal, Boston Naval Shipyard, South Boston Annex, Boston, Massachusetts*. May 15, 1974. TIC 457/D6391.
- Dessauer, Peter F. *Completion Report, Rehabilitation of Pier II, Phase III, Charlestown Navy Yard, Boston National Historical Park*. Oct. 1987. TIC 457/D6184. 
- Dudley, William S., ed. *The Naval War of 1812: A Documentary History: Volume I, 1812*. Washington: Naval Historical Center, 1985.
- Economic Development & Industrial Corporation of Boston. *Economic Development Plan for the Boston Marine Industrial Park, Formerly the South Boston Naval Annex*. July 1976. TIC 457/D6382. 
- . *First Amendment to the Economic Development Plan for the Boston Marine Industrial Park*. Jan. 1980.
- . *Marine Industrial Park Master Plan Final Environmental Impact Report*. EOE #08161. Dec. 1999.
- , in cooperation with O'Connell Seafood Co. *Boston Marine Industrial Park O'Connell Seafood Company, Inc. Project: A Restoration of Boston Harbor Pier Facility for the Fishing Industry Urban Development Action Grant Application to the U.S. Department of Housing and Urban Development*. Jan. 31, 1980. TIC 457/D6383. 
- Einhorn Yaffe Prescott. *Historic Structure Report for Building 125 (Paint Shop), Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts*. Boston: Einhorn Yaffe Prescott, 2003. TIC 457/D6326. 
- Environmental Waste Technology, Inc. *Tank Closure Reports, Charlestown Navy Yard, Charlestown, Massachusetts*. DACA33-93-0070. [1995] TIC 457/D6311.
- Epsilon Associates. *Spaulding Rehabilitation Hospital: Draft Environmental Impact Report/Draft Project Impact Report*. EOE #13861. Mar. 27, 2009. TIC 457/D6381. 
- Evans, G. Rodger. *Historic Structure Report, Marine Barracks (Bldg. I), Charlestown Navy Yard: Architectural Data, Boston National Historical Park, Charlestown, Massachusetts*. Draft. Denver: Denver Service Center, 1978. TIC 457/D36. 
- Fay, Spofford & Thorndike. *Boston Army Supply Base: Final Report to the Construction Division, United States Army*. July 17, 1919.
- . *Report Upon the Utilities at the Boston Army Supply Base Made to the Construction Division of the United States Army*. Boston: Fort Hill Press, 1919.
- , et al. *Basic Design Report for a Portion of Interstate Route 95, Boston (Charlestown)*. Boston, 1965. TIC 457/D6108.
- Fisher, Charles E. *Aluminum Replacements for Steel Industrial Sash*. Preservation Tech Notes. Windows no. 12. Washington: National Park Service, 1986.
- Fort Point Associates. *Building 39A, Charlestown Navy Yard, Boston, Massachusetts: Project Notification Form*. Dec. 10, 2001. TIC 457/D6363.
- . *Harborview Point, Charlestown Navy Yard, Boston, Massachusetts: Notice of Project Change*. Dec. 17, 2001. TIC 457/D6366.
- . *Harborview Point, Charlestown Navy Yard, Boston, Massachusetts: Project Notification Form*. Dec. 17, 2001. TIC 457/D6367.
- . *Harborview Point, Charlestown Navy Yard, Boston, Massachusetts: Supplemental Environmental Impact Report, Draft Project Impact Report*. 2 vols. Aug. 15, 2002. TIC 457/D6364.
- . *The Residences at Pier 5, Charlestown Navy Yard: Expanded Environmental Notification Form, Project Notification Form*. May 17, 2004. Boston: Fort Point Associates, 2004. TIC 457/D6351. 
- . *The Residences at Pier 5, Charlestown Navy Yard: Project Update*. May 25, 2006. Boston: Fort Point Associates, 2006. TIC 457/D6351A. 
- . *Yard's End Research Center, Charlestown Navy Yard Parcel 6/7*. Apr. 30, 2003. TIC 457/D6372.
- Foster Wheeler Environmental Corp., et al. *California Historic Military Buildings and Structures Inventory*. 4 vols. Sacramento: U.S. Army Corps of Engineers, Sacramento District, 2000. 
- Fox, Robert. *Completion Report, Reroofing of the Commandant's House, Boston National Historical Park, Charlestown Navy Yard*. Jan. 1991. TIC 457/D6278.
- Friends of the Museum of Printing. *The Friends of the Museum of Printing, Inc., Invite You to Join the Founders Club to Create a New Museum, The National Museum of Printing, Boston*. [ca. 1993].
- Goodwin, Proctor & Hoar. *Historic Preservation Certification Application, Boston Naval Shipyard—Building 40-42 Complex. Part I, Evaluation of Significance*. Dec. 16, 1977. TIC 457/D6388.
- . ———. *Part II, Certification of Proposed Rehabilitation*. Jan. 5, 1978. TIC 457/D6388.
- Goody, Clancy & Associates. *Building 24 Historic Structures Report, Charlestown Navy Yard, Boston National Historical Park*. Oct. 2003. TIC 457/D139. 
- Gow, Charles R. *Completion Report of the Constructing Quartermaster of the Boston Army Supply Base*. June 28, 1919.
- Graffam, Gray, and C.C. Lamberg-Karlovsky. *Final Report, Scale-Rectified Photographic Documentation of the Historic Walls at the Charlestown Naval Yard: A Record Made Prior to the Construction of the Chelsea-Water Streets Connector, Charlestown, Massachusetts*. ICA 103. Dec. 1980. Cambridge, Mass.: Institute for Conservation Archeology, 1980. TIC 457/D6080.
- Guditz, Kenneth, et al. *Historic Structure Report: Muster House/Building 31, Boston Naval Shipyard, Charlestown, MA*. 1991. TIC 457/D6113.
- Guitian, Alane, and Merrill A. Wilson. *Status Report, Anchor Park, Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts*. Oct. 1979. Denver: National Park Service, 1979. TIC 457/D7.
- Hamlin, P. W., comp. *History of the Boston Naval Shipyard (formerly Boston Navy Yard), 1800-1937*. Boston: Boston Naval Shipyard, 1948. TIC 457/D6171.


Appendix E, Bibliography

- Harper, Marilyn, et al. *World War II & the American Homefront: A National Historic Landmarks Theme Study*. Washington: National Historic Landmarks Program, Cultural Resources, National Park Service, 2007. 📄
- Heald, Sarah H. *Historic Furnishings Report, USS Cassin Young, Boston National Historical Park, Boston, Massachusetts*. [Harpers Ferry, W.Va.]: Media Services, Harpers Ferry Center, National Park Service, 2005. TIC 457/D152. 📄
- Highland, Jack. *Completion Report, Rehabilitate Building 28, Charlestown Navy Yard, Contract No. 1443-1600-9-4902*. Feb. 1996. TIC 457/D6320.
- Himmelfarb, David. *Ropewalk Study Final Report*. 7 vols. 1988. TIC 457/D6308.
- Hoke, Amy, and Eliot Foulds. *Cultural Landscape Report for Fort Mason, Golden Gate National Recreation Area*. Brookline, Mass.: Olmsted Center for Landscape Preservation, 2004. TIC 641/D451. 📄
- Holbrook, Cabot & Rollins Corp. *Heavy Construction*. Boston: Holbrook, Cabot & Rollins, 1921.
- Hutchins, Louis P. *Work, Culture, and Resistance to Mechanization in the American Rope Making Industry, 1830-1850*. Typescript. 1999. TIC 457/D6300.
- Jacobs, Scott, Alain Guitian, and Childs Engineering Corporation. *Historic Structure Report, Architectural Data Section: The Railroad Tracks, Charlestown Navy Yard, Boston National Historical Park, Charlestown, Massachusetts*. Denver: National Park Service, 1983. TIC 457/D2127. 📄
- James H. Ballou, Architect. *Project Manual for U.S.S. Constitution Museum*. Apr. 30, 1975. TIC 457/D6321.
- Keeshan, Lalande L. *Historic Structure Report, Navy Yard Granite Wall, Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts*. Draft. Boston: Boston National Historical Park, 1981. TIC 457/D6081.
- Krent/Paffett Associates. *The Navy Yard Signage Plan, Charlestown, Massachusetts: Design Recommendations*. Draft. Oct. 4, 1989. TIC 457/D6397. 📄
- Laden, Greg. *Archaeological Monitoring of the Chelsea-Water Street Connector, Charlestown Navy Yard, Charlestown, Massachusetts*. 1985. TIC 457/D6128.
- Larson, Leslie. *The Ropewalk at the Charlestown Navy Yard: A History and Reuse Plan*. Dec. 30, 1987. TIC 457/D6394. 📄
- Louis Berger & Associates. Cultural Resource Group. *Cultural Resources Survey, Portsmouth Naval Shipyard*. Draft. Aug. 1996.
- Mansfield, George O. Q. *Boston Naval Shipyard (formerly Boston Navy Yard) Historical Review, 1938-1957*. Boston: Boston Naval Shipyard, 1957. TIC 457/D6087.
- Marie, Audrey R. *Cultural Resources Inventory: Potential Archeological Resources, Charlestown Navy Yard, Boston National Historical Park*. Denver: Denver Service Center, 1980. TIC 457/D1555.
- , and Alane Guitian. *Historic Structure Report: The Scale House*. Draft. TIC 457/6065A.
- Massachusetts. Joint Commission on Federal Base Conversion. *Recommendations and Summary of Activities, May, 1973 to May, 1974*. 1974. TIC 457/D6346.
- Massachusetts Port Authority. Business Development and Maritime Depts. *Massport Marine Terminal: Development Issues And Alternatives Analysis – Executive Summary*. Dec. 2002. 📄
- . Economic Planning & Development Dept. *Waterfront Smart Growth: Lessons from the South Boston Waterfront*. Dec. 7, 2007. 📄
- McCarthy, Robert J. *Appraisal of Charlestown Navy Yard, Charlestown, Massachusetts*. Dec. 18, 1974. Boston: William H. Dolben & Sons, [1975]. TIC 457/D6342.
- McGinley Hart & Associates. *Historic American Engineering Record: Historical Documentation of Selected Structures at the Charlestown Navy Yard*. Sept. 1993. TIC 457/D6302.
- . *Historic Monument Area, Charlestown Navy Yard, Boston, Massachusetts. III – Audit of Buildings and Sites*. July 24, 2000. TIC 457/D6295.
- . *Post-Fire Conditions Assessment & Treatment Options for Stabilization, Building 58–The Ropewalk, Charlestown Navy Yard*. Draft. June 2002. TIC 457/D6271.
- . *Shipfitters' Shop, Building 104, Charlestown Navy Yard: Historic American Buildings Survey*. July 1992. TIC 457/D6313.
- . *Stabilization Report: Ropewalk–Building 58, Tar House–Building 60, Chain Forge–Building 105, Charlestown Navy Yard*. Draft. May 1991. TIC 457/D6270.
- McGinley Kalsow & Associates. *Dry Dock 1 Historic Structure Report, Charlestown Navy Yard, Boston National Historical Park*. June 21, 2007. TIC 457/D6348. 📄
- McGrath, H. Thomas, Jr., and Anne Booth with Terry Wong. *Historic Structure Report, Architectural Data Section, Buildings 4 and 5, Charlestown Navy Yard, Boston National Historical Park, Charlestown, Massachusetts*. Denver: Denver Service Center, 1983. TIC 457/D2092. 📄
- Melvin F. Levine & Associates. *A Retail and Attractions Concept for the Navy Yard*. Draft. Apr. 3, 1987. TIC 457/D6365.
- Metcalf & Eddy. *Phase III Remedial Action Plan, Former Charlestown Navy Yard, Building No. 105, Boston, Massachusetts*. May 1997. TIC 457/D6268C.
- Micholet, Margaret A. *Public Place, Private Home: A Social History of the Commandant's House at the Charlestown Navy Yard, 1805-1974*. Boston: Boston National Historical Park, 1986. TIC 457/D6156A.
- Mitchell, Jonathan. *Completion Report, Contract No. 1443C4500040905, Rehabilitate Building 24, Charlestown Navy Yard, Boston National Historical Park*. Feb. 2008. TIC 457/D6392. 📄
- Naval Facilities Engineering Command. *Color for Naval Shore Facilities*. NAVFAC P-309. Jan. 1971. Washington: Naval Facilities Engineering Command, 1971.
- . *Command History, 1965-1974*. OPNAV 5750-1. 📄
- . Engineering Services Center. *USS Constitution Barrier*. Nov. 3, 2006. TIC 457/D6379. 📄
- Naval Historical Center. *Dictionary of American Naval Fighting Ships*. 8 vols. Washington: Naval History Division/Naval Historical Center, 1959-1981.
- . *Dictionary of American Naval Fighting Ships*. Vol. 1, Pt. A. Rev. ed. Washington: Naval Historical Center, 1991. Revised and updated version available on Naval Historical Center *Dictionary of American Naval Fighting Ships* web site.
- New England Aquarium. *The New England Aquarium: A Report to the Charlestown Community*. June 1989. TIC 457/D6380. 📄
- Oranchak, Eugene G. *Completion Report, Rehabilitation of Bulkheads and Piers, Boston National Historical Park, Charlestown Navy Yard*. Sept. 8, 1981. TIC 457/D6105.
- . *Completion Report, Restoration of Pier 2, Phase I, Charlestown Navy Yard, Boston National Historical Park*. June 1986. TIC 457/D6166.
- . *Completion Report, Restoration of Pier 2, Phase II, Charlestown Navy Yard, Boston National Historical Park*. June 1986. TIC 457/D6167.

- Pelletier, David R. *Historical Survey of Building 21*. June 1982. TIC 457/D6111.
- Pendery, Steven R., and William A. Griswold. *Archeological Testing at Building 28, Charlestown Navy Yard, Charlestown, Massachusetts*. Draft. May 1997. TIC 457/D6396.
- Pousson, John F. *Archeological Monitoring Report, Geotechnical Testing at Building 28, Charlestown Navy Yard, Boston National Historical Park*. Nov. 1987. TIC 457/D6395.
- Preble, George Henry. *History of the Boston Navy Yard, 1797-1874* [microcopy]. Microcopy M118. Washington: National Archives, 1967.
- Pulsifer, Woodbury, comp. *Navy Yearbook: Compilation of Annual Naval Appropriations Laws From 1883 to 1912*. Senate Doc. No. 955, 62nd Cong., 3rd sess. Washington: U.S. Govt. Printing Office, 1912. 
- R. Christopher Goodwin & Associates. *Historic Context for Department of Defense Facilities: World War II Permanent Construction*. Frederick, Md.: Goodwin, 1997. 
- . *National Historic Context for Department of Defense Installations, 1790-1940: Final Report*. 4 vols. Baltimore: Baltimore District, U.S. Army Corps of Engineers, 1995. 
- . *Navy Cold War Guided Missile Context: Resources Associated with the Navy's Guided Missile Program, 1946-1989: Final Report*. Norfolk, Va.: Atlantic Division, Naval Facilities Engineering Command, 1995.
- . *Support and Utility Structures and Facilities (1917-1946): Overview, Inventory, and Treatment Plan: Final Report*. Norfolk, Va.: Atlantic Division, Naval Facilities Engineering Command, 1995. 
- Raber, Michael S., and Matthew W. Roth. *Boston Naval Shipyard: A Plan for Cultural Resource Management in the Buy Parcel Area*. Feb. 1981. New Haven, Ct.: Raber Associates, 1981. TIC 457/D6154.
- Raymond Cattle Co. *Development Proposal, Building #149 and Building #199, Boston Naval Shipyard at Charlestown*. Oct. 6, 1983. TIC 457/D6403. 
- Richardson, James D., comp. *A Compilation of the Messages and Papers of the Presidents, 1789-1897*. 10 vols. Washington: U.S. Govt. Printing Office, 1896-1899.
- Roberts, Shelley K., and Audrey Marie. *Historic Structure Report: Architectural Data and Archeological Data Sections, Building 136, Charlestown Navy Yard, Boston National Historical Park, Massachusetts*. Denver: Denver Service Center, 1982. TIC 457/D1933. 
- Roosevelt, Franklin D. *The Public Papers and Address of Franklin D. Roosevelt – 1940 Volume: War–And Aid to Democracies*. Samuel I. Rosenman, comp. New York: Macmillan, 1941.
- Rubertone, Patricia E., Nain E. Anderson, and Neill DePaoli. *Archaeological Investigations at the Gate 4 Area, Charlestown Naval Yard, Charlestown, Massachusetts*. Providence, R.I.: Public Archaeological Laboratory, [1980]. TIC 457/D24.
- Schroeder, Clyde L. *Historic Structure Report, Captain's Row (Bldg. 265), Charlestown Navy Yard: Architectural Data, Boston National Historical Park, Charlestown, Massachusetts*. Draft. Denver: Denver Service Center, 1979. TIC 457/D37. 
- SEA Consultants and Normandeau Associates. *Assessment of Alternatives for Remediation at Pier 2, Charlestown Navy Yard*. Mar. 1990. TIC 457/D41. 
- Shiman, Philip. *Forging the Sword: Defense Production During the Cold War*. USACERL Special Rept. 97/77. July 1977. 
- Snell, Charles W., comp. *Odyssey of USS Cassin Young, 1951-1960*. June 1979. TIC 457/D6095.
- Society for the Preservation of New England Antiquities. *The New England Museum at the Ropewalk*. Apr. 1989. TIC 457/D6377.
- Spero, Michael. *Boston Navy Yard and South Boston Annex, July 1940-September 1942: A Narrative Describing the Activities of the Small Group of Construction Inspectors Who Watched Over the Navy Yard Construction at South Boston and Charlestown, Massachusetts*. Typescript. Dec. 1986. TIC 457/D6305.
- Stevens, Christopher, et al. *Cultural Landscape Report for Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts*. Boston, Mass.: [Olmsted Center for Landscape Preservation], National Park Service, 2005. TIC 457/D154. 
- Stone & Webster. *Final Interim Evaluation Report, Building 105, Former Charlestown Navy Yard, Boston, Massachusetts*. Nov. 2000. TIC 457/D6316.
- . *Interim Evaluation Report-II, Building No. 105, Former Charlestown Navy Yard, Boston, Massachusetts*. Aug. 2002. TIC 457/D6316A.
- Stone & Webster Environmental Technology & Services. *Final Environmental Assessment Report, Sump Room at Barnes Building*. May 1997. 
- U.S. Army. *Marine Crewman's Handbook*. Field Manual No. 55-501, Dec. 1, 1999. Washington, 1999. 
- . Assistant Chief of Staff for Installation Management. *Real Property Summary And Site Statistics for Fiscal Year 2006 Quarter 2*. Apr. 17, 2006. 
- U.S. Army. Corps of Engineers. New England Division. *Boston Harbor, Massachusetts, Reserve Channel Survey (Review of Reports)*. Nov. 5, 1954. Boston: The Corps, 1954. 
- U.S. Army Environmental Center. *Thematic Study and Guidelines: Identification and Evaluation of U.S. Army Cold War Era Military-Industrial Historic Properties*. Jan. 1998. 
- U.S. Bankruptcy Court. District of Delaware. *In re: Compentrol Acquisition Partnership, L.P., et al., Debtors: Memorandum Opinion*. Case Nos. 94-622 through 94-626. Aug. 2, 2000. 
- U.S. Congress. *American State Papers: Documents, Legislative and Executive, of the Congress of the United States. Naval Affairs*. 4 vols. Washington: Gales & Seaton, 1834-1861.
On-line access provided by Library of Congress A Century of Lawmaking web site.
- U.S. Congress. House of Representatives. Committee on Armed Services. *Status of Shipyards: Hearings by the Seapower Subcommittee of the Committee on Armed Services, House of Representatives, Ninety-first Congress, Second Session*. H.A.S.C. No. 91-71. Washington: U.S. Govt. Printing Office, 1970.
- U.S. Congress. House of Representatives. Committee on Naval Affairs. *Hearings Before Committee on Naval Affairs of the House of Representatives on Estimates Submitted by the Secretary of the Navy, 1918*. Washington: U.S. Govt. Printing Office, 1918. 
Includes (p. 839-73) hearings on "Purchase of Dry Dock from the Commonwealth of Massachusetts."
- . *The Sale of the Charlestown Navy Yard, Massachusetts*. House Rept. No. 1077, 47th Cong., 1st sess. Washington: U.S. Govt. Printing Office, 1882.
- U.S. Congress. Senate. Committee on Interior and Insular Affairs. Subcommittee on Parks and Recreation. *Boston National Historical Park: Hearings Before the Subcommittee on Parks and Recreation of the Committee on Interior and Insular Affairs, United States Senate, Ninety-third Congress, First Session, on S.210*. Washington: U.S. Govt. Printing Office, 1974.
- U.S. Dept. of Defense. Legacy Cold War Project. *Coming in From the Cold: Military Heritage in the Cold War*. [c. 1993]. 

Appendix E, Bibliography

- U.S. Dept. of Defense. Office of Economic Adjustment. *Report of Economic Adjustment Program*. Mar. 1974. TIC 457/D6345.
- U.S. Dept. of the Interior. Office of Inspector General. *Review of National Icon Park Security*. Report 2003-I-0063. Aug. 2003. 📄
- U.S. Federal Highway Administration and Mass. Dept. of Public Works. *Central Artery (I-93)/Third Harbor Tunnel (I-90) Project: Supplemental Environmental Impact Statement/Report and Supplemental Final Section 4(f) Evaluation*. Agency Review Draft. 2 vols. FHWA-MA-EIS-82-02-DS2. Mar. 1989. TIC 457/D6401.
- . *Chelsea-Water Streets Connector, Little Mystic Channel Crossing, Charlestown, Boston, Massachusetts: Final Negative Declaration, Section 4(f) Statement*. June 1978. TIC 457/D2A.
- . *Third Harbor Tunnel, Interstate 90/Central Artery, Interstate 93: Final Environmental Impact Statement and Final Section 4(f) Evaluation*. 2 vols. FHWA-MA-EIS-82-02-F. Aug. 1985. TIC 457/D6400.
- U.S. General Accounting Office. *Environmental Contamination: Cleanup Actions at Formerly Used Defense Sites*. GAO-01-557. July 2001. 📄
Detailed project listing appendixes only available on-line: <http://www.gao.gov/gao-01-1012sp/>.
- U.S. Laws, etc. *The Public Statutes at Large*. 8 vols. Boston: Little, Brown, 1845-1867.
On-line access provided by Library of Congress *A Century of Lawmaking* web site.
- . *The Statutes at Large*. Vols. 9-17. Boston: Little, Brown, 1851-1873.
On-line access provided by Library of Congress *A Century of Lawmaking* web site.
- . *Statutes at Large*. Vols. 18-49. Washington: U.S. Govt. Printing Office, 1875-1936.
- . *United States Statutes at Large*. Vols. 50-118. Washington: U.S. Govt. Printing Office, 1937-2006.
- U.S. National Park Service. *Boston Naval Shipyard: An Alternative for Development*. Mar. 1975. TIC 457/D872.
- . *Charlestown Navy Yard, Boston National Historical Park: General Management Plan, Volume II*. [Denver]: National Park Service, 1980. TIC 457/D1553A. 📄
- . *Charlestown Navy Yard Planning Workbook*. [1977.] TIC 457/D1285.
- . *Charlestown Navy Yard Special Study, Boston National Historical Park*. Final report. Sept. 1976. TIC 457/D1080.
- . *New Area Master Plan for Boston Naval Shipyard U.S.S. Constitution National Historic Site, Boston, Massachusetts*. Rev. Dec. 1973. TIC 457/D6002A.
- . *New Area Study for Boston Naval Shipyard U.S.S. Constitution National Historic Site, Boston, Massachusetts*. Working draft. Aug. 3, 1973. TIC 457/D6002.
- . Denver Service Center, *see* Denver Service Center.
- . Eastern Service Center. Office of Environmental Planning and Design. *Proposed Boston National Historic Sites, Boston, Massachusetts*. Dec. 1971. TIC 457/D4.
- . Harpers Ferry Center. Division of Interpretive Planning. *A Plan for the Interpretation of Boston National Historical Park, Charlestown Navy Yard, Massachusetts*. Interpretive Prospectus, Vol. II. Harpers Ferry, W.Va., 1990. TIC 457/6155B.
- . North Atlantic Region. Branch of Museum Services. *Boston National Historical Park Collection Management Plan*. Sept. 1994. Boston, 1994. TIC 457/D6288.
- U.S. Navy. *Letter from the Secretary of the Navy, Transmitting ... the Report of the Commission on Navy-Yards*. Dec. 1, 1883. Senate Ex. Doc. No. 55, 48th Cong., 1st sess. Washington: U.S. Govt. Printing Office, 1884.
- . *Message From the President of the United States, Transmitting ... a Communication ... From the Secretary of the Navy, in Relation to the Title by Which the United States Holds the Land Now Occupied as a Navy-Yard at Boston, Mass.* Aug. 4, 1882. Senate Ex. Doc. No. 195, 47th Cong., 1st sess. Washington: U.S. Govt. Printing Office, 1882.
- . *Ships' Data, U.S. Naval Vessels, 1911*. Washington: U.S. Govt. Printing Office, 1912. 📄
- . *Ships' Data, U.S. Naval Vessels, January 1, 1914*. Washington: U.S. Govt. Printing Office, 1914. 📄
- . *Ships' Data, U.S. Naval Vessels, January 1, 1916*. Washington: U.S. Govt. Printing Office, 1916. 📄
- . *Ships' Data, U.S. Naval Vessels, October 1, 1919*. Washington: U.S. Govt. Printing Office, 1920.
- . *Ships' Data, U.S. Naval Vessels, July 1, 1920*. Washington: U.S. Govt. Printing Office, 1920. 📄
- . *Ships' Data, U.S. Naval Vessels, July 1, 1921*. Washington: U.S. Govt. Printing Office, 1921. 📄
- . *Ships' Data, U.S. Naval Vessels, July 1, 1922*. Washington: U.S. Govt. Printing Office, 1922. 📄
- . *Ships' Data, U.S. Naval Vessels, July 1, 1924*. Washington: U.S. Govt. Printing Office, 1924.
- . *Ships' Data, U.S. Naval Vessels, July 1, 1929*. Washington: U.S. Govt. Printing Office, 1929.
- . *Ships' Data, U.S. Naval Vessels, July 1, 1935*. Washington: U.S. Govt. Printing Office, 1935.
- . *Ships' Data, U.S. Naval Vessels, January 1, 1938*. Washington: U.S. Govt. Printing Office, 1938.
- . *Ships' Data, U.S. Naval Vessels, April 1, 1943*. Washington: U.S. Govt. Printing Office, 1943.
- U.S. Navy. Bureau of Construction and Repair. *Ships' Data, U.S. Naval Vessels, 1912*. Washington: U.S. Govt. Printing Office, 1913. 📄
- U.S. Navy. Bureau of Ships. *Naval Vessel Register, 1 January 1949*. NAVSHIPS 18-1-11. Washington: Dept. of the Navy, 1949. 📄
- . *Ship Contracts Awarded, 1 January 1934-1 July 1956, Private and U.S. Naval Shipyards*. NAVSHIPS 250-641. Washington: Dept. of the Navy, 1956.
- . *Ships' Data, U.S. Naval Vessels, April 15, 1945*. 3 vols. NAVSHIPS 250-010, 011, 012. Washington: U.S. Govt. Printing Office, 1945-1946. 📄
- U.S. Navy. Bureau of Yards and Docks. *Activities of the Bureau of Yards and Docks, Navy Department, World War, 1917-1918*. Washington: U.S. Govt. Printing Office, 1921. 📄
- . [Berthing and Ship Repair Facilities]. Jan. 1, 1944.
Copy in author's collection lacks title page.
- . *Building the Navy's Bases in World War II: History of the Bureau of Yards and Docks and the Civil Engineer Corps, 1940-1946*. 2 vols. Washington: U.S. Govt. Printing Office, 1947.
Available on-line at *HyperWar*.
- . *Federal Owned Real Estate Under the Control of the Navy Department*. Washington: U.S. Govt. Printing Office, 1937.
- . *Public Works of the Navy Under the Cognizance of the Bureau of Yards and Docks and the Corps of Civil Engineers, U.S. Navy*. Bulletin No. 24, Sept. 1916. Washington, 1916.
- . *Shipbuilding and Docking Facilities*. NAVDOCKS P-253. Apr. 26, 1948.
- U.S. Office of Economic Adjustment. *Report of Economic Adjustment Program, Metropolitan Boston*. Mar. 1974. Washington: Office of

- Economic Adjustment, Office of the Assistant Secretary of Defense (Installations & Logistics), 1974. TIC 457/D6353.
- U.S. Office of Naval Records & History. *Glossary of U.S. Naval Abbreviations*. 5th ed. OPNAV 29-P1000, Apr. 1949. Washington, 1949.
- U.S. Supreme Court. *Cases Adjudged and Decided in the Supreme Court of the United States*, 9, 10, 11, 12 Peters. Lawyers ed., Book 9. Rochester, N.Y.: Lawyers Co-Operative Pub. Co., 1883.  Includes decision in the case of *Harris et al. v. Elliott* (10 Peters 25-57; 9 L. ed. 333-45).
- United States Naval Administration, World War II: Commandant, First Naval District [microform]. 11 vols. Typescript. 1946.
- USS Constitution Museum. *USS Constitution Museum Expansion Plan*. Boston, n.d. TIC 457/D6322.
- Wade, Michael J., et al. *Summary Evaluation of the Environmental Impact Resulting from the Use of Creosoted Pilings in the Historic Restoration of Pier #2 at the Charlestown Navy Yard*. Sept. 3, 1987. Duxbury, Mass.: Battelle Ocean Sciences, 1987. TIC 457/D71.
- Waite, Diana S. *Historical Study of the Charlestown Navy Yard Rope-walk and Tar House*. Draft. May 1991. TIC 457/D6306.
- Wallace, Floyd, Ellenzweig, Inc., et al. *Land Use and Transportation Study, Boston Naval Shipyard: Phase II Report*. July 19, 1974. TIC 457/D6006. 
- . *National Historic Preservation Act Section 106 Preliminary Consultation: Effects of North Terminal Area Highway Improvements on the Boston Naval Shipyard*. Rev. Sept. 26, 1973. TIC 457/D8.
- Wallace, Floyd, Ellenzweig, Moore. *Master Plan & Feasibility Study, Massachusetts College of Art at the Boston Naval Shipyard, Charlestown, Part 2*. Mass. State Project E76-11. Draft. July 1968. [Boston]: Mass. Executive Office of Administration and Finance, Bureau of Building Construction, 1968. TIC 457/D6114.
- Webster, Julie L., Patrick E. Reicher, and Gordon L. Cohen. *Antiterrorism Measures for Historic Properties*. ERDC/LAB TR-06-23. Champagne, Ill.: Construction Engineering Research Laboratory, U.S. Army Engineer Research & Development Center, 2006. 
- Wegner, Dana M. *Fouled Anchors: The Constellation Question Answered*. DTRC-91/CT06. Bethesda, Md.: David Taylor Research Center, 1991. 
- Weidlinger Associates. *Building 75, Charlestown Navy Yard: Field Survey and Structural Engineering Report of Existing Conditions*. Mar. 1, 1993. TIC 457/D6369.
- Weinbaum, Paul O. *Building 10 Historic Structure Report: Historical Data Section*. Draft. July 1988. TIC 457/D6309.
- . *Hoosac Docks: Foreign Trade Terminal*. Cultural Resource Management Study No. 11. Boston: Division of Cultural Resources, North Atlantic Region, National Park Service, 1985. TIC 457/D6117A.
- Wondercabinet Interpretive Design. *Charlestown Navy Yard: Ropewalk Building: Educational Exhibit Assessment Report*. Dec. 6, 2002. TIC 457/D6393.
- Wright, David. *Boston Naval Shipyard Architectural and Environmental Inventory*. May 17, 1974. TIC 457/D6005.
- Yacht Club International. *Yacht Club International Brochure Draft*. Feb. 3, 1989. TIC 457/D6398. 
- Bernardo, Celeste. *There Were No "Sheila Shipfitters": Gender Segregation at the Boston Navy Yard, 1942 to 1945*. M.A. thesis, Northeastern University, 2001. TIC 457/D6389.
- Davis, Helen W., Edward M. Hatch, and David G. Wright. *An Initial Investigation Into the Architectural History of the Boston Naval Shipyard*. Dec. 20, 1972. Thesis, Architectural History 1-2b, Graduate School of Design, Harvard University. TIC 457/D6170.
- Donofrio, Julie Therese. *Preservation as a Tool for Waterfront Revitalization: Design, Management, and Financing Solutions from Vancouver, Boston, and London*. M.S. thesis, University of Pennsylvania, 2007. 
- Hill, Catherine Alison. *The Political Economy of Military Base Redevelopment: An Evaluation of Four Converted Naval Bases*. Ph.D. dissertation, Rutgers, 1998.
- Kaufman, James A. *Siting Amenities and the Public Review Process: The Kennedy Library in Cambridge and New England Aquarium in the Charlestown Navy Yard*. M.C.P. thesis, Massachusetts Institute of Technology, 1990. 
- Pendery, Steven Roger. *Symbols of Community: Status Differences and the Archaeological Record in Charlestown, Massachusetts, 1630-1760*. Ph.D. dissertation, Harvard University, 1987.
- Sorenson, Megan Laurel. *Comparative Analysis of Two Urban Historic Military Base Redevelopment Projects: The Presidio of San Francisco and Boston's Charlestown Navy Yard*. M.S. thesis, University of Pennsylvania, 2002. 
- Van Vlandren, Jennifer. *Defended Neighborhoods: Charlestown and the Charlestown Navy Yard*. M.A. thesis, Boston University, 1992.

Books

- Ahern, Joseph-James. *Philadelphia Naval Shipyard*. Images of America. Dover, N.H.: Arcadia, 1997.
- Axelrod, Alan. *Encyclopedia of the U.S. Navy*. New York: Checkmark Books, 2006.
- Baker, William A. *A History of the Boston Marine Society, 1742-1967*. Boston: Boston Marine Society, 1968.
- Bartow, Aquilla P., and Elizabeth Bartow Berg, comps. *Gleanings From the Records of the Boston Marine Society Through Its Second Century, 1842 to 1942*. Boston: The Society, 1999.
- Bauer, K. Jack, and Stephen S. Roberts. *Register of Ships of the U.S. Navy, 1775-1990: Major Combatants*. New York: Greenwood Press, 1991.
- Bennett, Frank M. *The Steam Navy of the United States*. Pittsburgh: Warren, 1897.
- Berner, Thomas F. *The Brooklyn Navy Yard*. Images of America. Charleston, S.C.: Arcadia, 1999.
- Beschloss, Michael, ed. *Taking Charge: The Johnson White House Tapes, 1963-1964*. New York: Simon & Schuster, 1997.
- Bishop, David J. *Naval Submarine Base New London*. Images of America. Charleston, S.C.: Arcadia, 2005.
- Bither, Barbara A., and Boston National Historical Park. *Charlestown Navy Yard*. Images of America. Charleston, S.C.: Arcadia, 1999.
- Bonner, Kit, and Carolyn Bonner. *Warship Boneyards*. Osceola, Wisc.: MBI Publishing, 2001.
- The Boston Naval Shipyard, Boston, Massachusetts*. Reprint from U.S. Naval Institute *Proceedings*, vol. 86 (Oct. 1960).
- Brennan, Robert E., and Jeannie I. Brennan. *Sackets Harbor*. Images of America. Charleston, S.C.: Arcadia, 2000.
- Brodine, Charles E., Jr., Michael J. Crawford, and Christine F. Hughes. *Interpreting Old Ironsides: An Illustrated Guide to USS Constitution*. Washington: Naval Historical Center, 2007.
- Abbott, Frederick K. *The Role of the Civil Engineer in Internal Improvements: The Contributions of the Two Loammi Baldwins, Father and Son, 1776-1838*. Ph.D. dissertation, Columbia University, 1952.

Academic Theses

Appendix E, Bibliography

- Cable, John H., ed. *Building Redesign and Energy Challenges*. Washington: American Institute of Architects, 1985.
This collection of papers from a conference includes "Rehabing Historic Structures With Energy Conservation: Constitution Quarters, Charlestown Navy Yard" by Edward O. Nilsson.
- Callahan, Edward A., ed. *List of Officers of the Navy of the United States and of the Marine Corps from 1775 to 1900*. New York: Hamersly, 1901.
Revised and updated version available on Naval Historical Center *Officers of the Continental and U.S. Navy and Marine Corps, 1775-1900* web site.
- Canney, Donald L. *The Old Steam Navy*. 2 vols. Annapolis: Naval Institute Press, 1990-1993.
- . *Sailing Warships of the US Navy*. Annapolis: Naval Institute Press, 2001.
- Chapelle, Howard I. *History of the American Sailing Navy: The Ships and Their Development*. New York: Norton, 1949.
- Coletta, Paolo E., ed. *United States Navy and Marine Corps Bases, Domestic*. Westport, Ct.: Greenwood Press, 1985.
- Crandall Dry Dock Engineers. *A Short History of Railway Dry Docks Since Their Inception in 1854*. Cambridge, Mass., 1950.
- Cutler, Deborah W., and Thomas J. Cutler. *Dictionary of Naval Abbreviations*. 4th ed. Annapolis: Naval Institute Press, 2005.
- . *Dictionary of Naval Terms*. 5th ed. Annapolis: Naval Institute Press, 2005.
- Dowart, Jeffrey M., with Jean K. Wolf. *The Philadelphia Navy Yard: From the Birth of the U.S. Navy to the Nuclear Age*. Philadelphia: University of Pennsylvania Press, 2001.
- Earls, Alan R. *Watertown Arsenal*. Images of America. Charleston, S.C.: Arcadia, 2007.
- Ford, Charles, ed. *Immersed Tunnel Techniques 2*. London: Thomas Telford, 1997.
This collection of papers from an international conference includes "From Concept to Completion: The Ted Williams Tunnel" by Anthony R. Lancillotti and Walter C. Grantz.
- Friedman, Norman. *U.S. Amphibious Ships and Craft: An Illustrated Design History*. Annapolis: Naval Institute Press, 2002.
- . *U.S. Battleships: An Illustrated Design History*. Annapolis: Naval Institute Press, 1985.
- . *U.S. Cruisers: An Illustrated Design History*. Annapolis: Naval Institute Press, 1984.
- . *U.S. Destroyers: An Illustrated Design History*. Annapolis: Naval Institute Press, 1982.
- Furer, Julius Augustus. *Administration of the Navy Department in World War II*. Washington: Naval History Division, 1959.
Available on-line at [HyperWar](http://www.history.navy.mil/seairland/index.html).
- Garbin, Randy. *Diners of New England*. Mechanicsburg, Pa.: Stackpole Books, 2005.
- Gaynor, Frank, ed. *The New Military and Naval Dictionary*. New York: Philosophical Library, 1951.
- Gillmer, Thomas C. *Old Ironsides: The Rise, Decline, and Resurrection of the USS Constitution*. Camden, Me.: International Marine, 1993.
- Goodspeed, M. Hill. *U.S. Navy: A Complete History*. Washington: Naval Historical Foundation/Hugh Lauter Levin Associates, 2003.
- Hagan, Kenneth J. *This People's Navy: The Making of American Sea Power*. New York: Free Press, 1992.
- , ed. *In Peace and War: Interpretations of American Naval History, 1775-1984*. 2nd ed. Westport, Ct.: Greenwood Press, 1985.
- Halevi, Marcus, and George Putz. *The Spirit of Massachusetts: Building a Tall Ship, 1983-1984*. Thorndike, Me.: Thorndike Press, 1984.
- Harmon, J. Scott. *U.S.S. Cassin Young (DD-793): A Fletcher Class Destroyer*. Missoula, Mont.: Pictorial Histories Publishing Co., 1985.
- Hepburn, Richard D. *History of American Naval Dry Docks: A Key Ingredient to a Maritime Power*. Arlington, Va.: Noesis, 2003.
- Hess, Ron, et al. *The Closing and Reuse of the Philadelphia Naval Shipyard*. MR-1364-Navy. Santa Monica, Calif.: National Defense Research Institute, RAND, 2001. 
- Hibben, Henry B. *Navy-Yard, Washington: History from Organization, 1799, to Present Date*. Washington: U.S. Govt. Printing Office, 1890.
- Junior League of Boston. *2004 Decorators' Show House: The Commandant's House*. Annapolis, Md.: Cyphers Agency, 2004.
- Landauer, Lyndall, and Donald Landauer. *Pearl: The History of the United States Navy in Pearl Harbor*. South Lake Tahoe, Calif.: Flying Cloud Press, 1999.
- Lemmon, Sue. *Closure: The Final Twenty Years of Mare Island Naval Shipyard*. Vallejo, Calif.: Sue Lemmon & Silverback Books, 2001.
- , and Ernest D. Wichels. *Sidewheelers to Nuclear Power: A Pictorial Essay Covering 123 Years at the Mare Island Naval Shipyard*. Annapolis: Leeward Publications, 1977.
- Lewis, Ann-Eliza H., ed. *Highway to the Past: The Archeology of Boston's Big Dig*. Boston: Secretary of the Commonwealth, 2001.
- Linder, Bruce. *Tidewater's Navy: An Illustrated History*. Annapolis: Naval Institute Press, 2005.
- Lott, Arnold S. *A Long Line of Ships: Mare Island's Century of Naval Activity in California*. Annapolis: Naval Institute Press, 1954.
- Lull, Edward P. *History of the United States Navy-Yard at Gosport, Virginia (Near Norfolk)*. Washington: U.S. Govt. Printing Office, 1874.
- Madsen, Daniel. *Forgotten Fleet: The Mothball Navy*. Annapolis: Naval Institute Press, 1999.
- Maloney, Linda M. *The Captain From Connecticut: The Life and Naval Times of Isaac Hull*. Boston: Northeastern University Press, 1986.
- Manuel, Dale. *Pensacola Bay: A Military History*. Images of America. Charleston, S.C.: Arcadia, 2004.
- Marolda, Edward J. *By Sea, Air, and Land: An Illustrated History of the U.S. Navy and the War in Southeast Asia*. Washington: Naval Historical Center, 1994.
Available on-line at <http://www.history.navy.mil/seairland/index.html>.
- . *The Washington Navy Yard: An Illustrated History*. Washington: Naval Historical Center, 1999.
- Martin, Tyrone G. *A Most Fortunate Ship: A Narrative History of Old Ironsides*. Rev. ed. Annapolis: Naval Institute Press, 1997.
- McDonnell, Janet A. *The National Park Service: Responding to the September 11 Terrorist Attacks*. Washington: National Park Service, 2004. 
- McNeil, Jim. *Charleston's Navy Yard: A Picture History*. Charleston, S.C.: Coker Craft Press, 1985.
- Morison, Samuel L., and John S. Rowe. *The Ships and Aircraft of the U.S. Fleet*. 10th ed. Annapolis: Naval Institute Press, 1975.
- Norton, Bettina A. *The Boston Naval Shipyard, 1800-1974*. Boston: The Bostonian Society, 1975.
- Parkman, Aubrey. *Army Engineers in New England: The Military and Civil Work of the Corps of Engineers in New England, 1775-1975*. Waltham, Mass.: New England Division, U.S. Army Corps of Engineers, 1978. 
- Pearce, George F. *The U.S. Navy in Pensacola: From Sailing Ships to Naval Aviation, 1825-1930*. Pensacola: University Presses of Florida, 1980.
- Peck, Taylor. *Round-Shot to Rockets: A History of the Washington Navy Yard and U.S. Naval Gun Factory*. Annapolis: Naval Institute Press, 1949.

- Peltier, Eugene J. *The Bureau of Yards and Docks of the Navy and the Civil Engineer Corps*. New York: Newcomen Society in North America, 1961.
- Perry, Fredi. *Bremerton and Puget Sound Navy Yard*. Bremerton, Wash.: Perry Publishing, 2002.
- Preble, George Henry. *History of the United States Navy-Yard at Portsmouth, N.H.* Washington: U.S. Govt. Printing Office, 1892.
- . “The Navy, and the Charlestown Navy Yard,” *The Memorial History of Boston, Including Suffolk County, Massachusetts, 1630-1880*, Justin Winsor, ed. (Boston: James R. Osgood & Co.), 3:331-368.
- Rawn, William. *Architecture for the Public Realm*. New York: Edizioni Press, 2002.
- Reh, Louise M., and Helen Lou Ross. *Nipsic to Nimitz: A Centennial History of Puget Sound Naval Shipyard*. Bremerton, Wash.: Olympic Peninsula Chapter, Federally Employed Women, 1991.
- Rowe, John S., and Samuel L. Morison. *The Ships and Aircraft of the U.S. Fleet*. 9th ed. Annapolis: Naval Institute Press, 1972.
- Seasholes, Nancy S. *Gaining Ground: Boston Landmaking, 1630s-1980s*. Cambridge, Mass.: MIT Press, 2003.
- Seidman, Karl F. *Economic Development and Finance*. Thousand Oaks, Calif.: Sage Publications, 2004.
- Sharp, John G. *History of the Washington Navy Yard Civilian Workforce, 1799-1962*. Washington: Naval District Washington, Washington Navy Yard, 2005. 📄
- Silverstone, Paul H. *Civil War Navies, 1855-1883*. The U.S. Navy Warship Series. Annapolis: Naval Institute Press, 2001.
- . *The Navy of the Nuclear Age, 1947-2007*. The U.S. Navy Warship Series. New York: Routledge, 2008.
- . *The Navy of World War II, 1922-1947*. The U.S. Navy Warship Series. New York: Routledge, 2007.
- . *The New Navy, 1883-1922*. The U.S. Navy Warship Series. New York: Routledge, 2006.
- . *The Sailing Navy, 1775-1854*. The U.S. Navy Warship Series. Annapolis: Naval Institute Press, 2001.
- Small, Edwin W. *Early Wharf Building*. Rev. ed. Salem, Mass.: Eastern National Park & Monument Association, 1970.
- Original ed. (*Wharf Building of a Century and More Ago* [1941]) available on-line at http://www.nps.gov/history/history/online_books/popular/9/index.htm
- Society of Naval Architects and Marine Engineers. *Historical Transactions, 1893-1943*. New York: The Society, 1945.
- The Stranger's Guide and Conductor to the U.S. Navy Yard at Charlestown, Mass.* Charlestown, Mass.: A.B. Needham, 1852.
- Stuart, Charles B. *The Naval Dry Docks of the United States*. New York: Charles B. Norton, Irving House, 1852.
- U.S. National Park Service. Division of Publications. *Charlestown Navy Yard, Boston National Historical Park, Boston, Massachusetts*. Official National Park Handbook 152. Washington: U.S. Dept. of the Interior, 1995.
- Vanderwarker, Peter. *The Big Dig: Reshaping an American City*. Boston: Little, Brown, 2001.
- Veronico, Nicholas A. *World War II Shipyards By the Bay*. Images of America. Charleston, S.C.: Arcadia, 2007.
- Wardlow, Chester. *The Transportation Corps: Movements, Training, and Supply*. United States Army in World War II: The Technical Services. Washington: Office of the Chief of Military History, 1956.
- Weiss, Howard F. *The Preservation of Structural Timber*. 2nd ed. New York: McGraw-Hill, 1916.
- Whitaker, Robert H. *Portsmouth-Kittery Naval Shipyard in Old Photographs*. Stroud, Gloucestershire, England: Alan Sutton, 1993.
- Winklareth, Robert J. *Naval Shipbuilders of the World: From the Age of Sail to the Present Day*. London: Chatham Publishing, 2000.
- Winslow, Richard E., III. “Do Your Job!”: *An Illustrated Bicentennial History of the Portsmouth Naval Shipyard, 1800-2000*. Portsmouth Marine Society Publication No. 26. Portsmouth, N.H.: Randall, 2000.
- Young, Alfred F. *The Shoemaker and the Tea Party: Memory and the American Revolution*. Boston: Beacon Press, 1999.

Articles And Periodicals

- Adamiak, Stanley J. “A Naval Depot on the Western Waters: The Rise and Fall of the Memphis Navy Yard, 1844-1854,” *International Journal of Naval History*, 1 (Apr. 2002). 📄
- Belcher, Jonathan. “1995 MBTA Vehicle Inventory as of January 31, 1996 – Bus Route Notes,” *Rollsign: The Magazine of New England Transit News*, vol. 32, no. 1/2 (Jan./Feb. 1996).
- “Big Boston Terminal Will Promote Port Development,” *Marine Review*, vol. 50 (Mar. 1920).
- Boston Naval Shipyard News*. Vol. 10, no. 25 (Dec. 15, 1945)-vol. 38, no. 19 (Mar. 15, 1974).
- Boston Navy Yard News*. Vol. 1, no. 1 (Jan. 10, 1936)-vol. 10, no. 24 (Dec. 1, 1945).
- The Broadside/Boston National Historical Park*. Vol. 1, No. 1 (Summer 1975)-No. 1, 2009.
- Suspended 1981-1990, 2003.
- Cornfeld, B. A. “Long Beach Supports Ships and People,” *All Hands*, no. 796 (May 1983).
- Davis, H. F. D. “Building Major Combatant Ships in World War II,” U.S. Naval Institute *Proceedings*, vol. 73 (May 1947).
- Davis, Helen W., Edward M. Hatch, and David G. Wright. “Alexander Parris: Innovator in Naval Facility Architecture,” *IA: The Journal of the Society for Industrial Archeology*, vol. 2, no. 1 (1976).
- Formichella, Andrew. “Tensile Pavilion in Boston,” *Architecture Week*, no. 59 (July 25, 2001).
- Gordon, David L.A. “Implementing Urban Waterfront Redevelopment in an Historic Context: A Case Study of the Boston Naval Shipyard,” *Ocean & Coastal Management*, vol. 42 (1999). 📄
- Hattendorf, John B. “The Decision to Close Rhode Island Bases in 1973,” *Newport History: Journal of the Newport Historical Society*, vol. 79, no. 262 (Spring 2010). 📄
- Melhuish, Christopher Allan. “Will the Navy Unshackle Old Ironsides?,” *Naval History*, vol. 21, no. 3 (June 2007). 📄
- Morison, Samuel Loring. “A Matter of Class, Part III,” *Naval History*, vol. 9, no. 2 (Mar./Apr. 1995). 📄
- . “A Matter of Class, Part IV,” *Naval History*, vol. 9, no. 4 (July/Aug. 1995). 📄
- Morss, Stratford. “Drydocking ex-USS *Joseph P. Kennedy, Jr.* (DD-850): Stabilizing and Restoring a Museum Ship,” *Warship International*, vol. 27, no. 1 (1990).
- “New Wing Marks Museum’s First 20 Years: Board Secretary [Leon] Kaufman Reminisces,” *Constitution Chronicle*, Fall/Winter 1996/1997.
- O’Gorman, James F. “H. and J.E. Billings of Boston: From Classicism to the Picturesque,” *Journal of the Society of Architectural Historians*, vol. 42, no. 1 (Mar. 1983). 📄
- Primack, Phil. “You’ll Sink Our Battleship!,” *Boston Magazine*, vol. 45, no. 11 (Nov. 2007). 📄
- Roberts, Stephen S. “U.S. Navy Building Programs During World War II,” *Warship International*, vol. 18, no. 3 (1981).
- Updated version available on-line as *The United States Navy in*

Appendix E, Bibliography

- World War II: Shipbuilding Programs and Contracts, 1938-1945 [http://www.shipscribe.com/shiprefs/usnprog/index.html].
- Speelman, Jennifer. "Revitalizing a Neglected Past: U.S. Naval History," *Organization of American Historians Magazine of History*, vol. 22, no. 4 (Oct. 2008).
- Steele, Peter. "To Rehabilitate a Warship," *CRM Bulletin*, vol. 7, no. 2 (July 1984). 📄
- Travers, Robin. "Seaport's Boat Shop," *Seaport News* (New England Historic Seaport), Jan. 1988.

Internet Documents & Sites

- Adams, Don, and Arlene Goldbard. *New Deal Cultural Programs: Experiments in Cultural Democracy*. 1995. [http://www.wvcd.org/policy/US/newdeal.html] 📄
- American Society of Civil Engineers. *History & Heritage of Civil Engineering: Landmarks and Historic Works: Domestic Landmarks: Massachusetts*. [http://www.asce.org/history/landmarks/massachusetts.html]
- Anderson, Steve. *Ted Williams Tunnel Historic Overview*. [http://www.bostonroads.com/crossings/ted-williams]
- Belcher, Jonathan. *Changes to Transit Service in the MBTA District, 1964-2009*. Dec. 24, 2009. [http://mysite.verizon.net/rtspcc/MBTA/RouteHistory.pdf] 📄
- Boston HarborWalk*. [http://www.bostonharborwalk.com/index.php]
- Boston Redevelopment Authority. *Boston Redevelopment Authority*. [http://www.bostonredevelopmentauthority.org]
Includes board minutes of both the BRA and the EDIC and BRA press releases since 2002.
- Carlson, Stephen P. *Dry Dock No. 1, Charlestown Navy Yard*. Paper presented to Seventh Maritime Heritage Conference, Oct. 2004. [http://www.hnsa.org/conf2004/papers/carlson.htm] 📄
- Constellation Wharf. *Welcome to Constellation Wharf on Pier 7*. [http://constellationwharf.com]
- Federation of American Scientists. *Military Analysis Network: Shipyards*. [http://www.fas.org/man/company/shipyards]
- Friends of the Charlestown Navy Yard. *Friends of the Charlestown Navy Yard*. [http://friendscny.org]
- Gibson, Charles Dana. *Ships and Men of the Army Transport Service (ATS)*. 1999. [http://www.usmm.org/atshistory.html] 📄
- HarborView at the Navy Yard. *HarborView at the Navy Yard*. [http://www.harborviewnavyyard.com]
- HyperWar: A Hypertext History of the Second World War*. [http://www.ibiblio.org/hyperwar]
Provides on-line access to numerous official histories, including *Building the Navy's Bases in World War II*.
- Library of Congress. *A Century of Lawmaking for a New Nation: U.S. Congressional Documents and Debates, 1774-1875*. [http://memory.loc.gov/ammem/amlaw/lawhome.html]
Provides on-line access to *American State Papers* and *Statutes at Large*, vol. 1-18.
- Massachusetts Port Authority. *Port of Boston*. [http://www.massport.com/ports/]
- MGH Institute of Health Professions. *About Us*. [http://www.mghihp.edu/about-us/default.aspx]
- Morss, Stafford. *Underwater Hull Preservation: Case Studies of Five Historic Steel Vessels in Saltwater*. 2002. [http://www.hnsa.org/handbook/morss1.htm] 📄
- Naval Historical Center. *Dictionary of American Naval Fighting Ships*. [http://www.history.navy.mil/danfs/index.html]
Provides on-line access to and updated versions of entries in the printed *Dictionary of American Naval Fighting Ships*.
- . *Officers of the Continental and U.S. Navy and Marine Corps, 1775-1900*. [http://www.history.navy.mil/books/callahan/index.htm]
Provides on-line access to and updated versions of entries in Edward A. Callahan, ed. *List of Officers of the Navy of the United States and of the Marine Corps from 1775 to 1900*.
- Naval Sea Systems Command. *Naval Vessel Register*. [http://www.nvr.navy.mil]
- Navy Yard 33. [http://www.navyyard33.com]
- Norfolk Naval Shipyard. *NNSY History: How Did the Navy's Oldest and Most Successful Shipyard Come to be Called Norfolk Naval Shipyard?*. [http://www.nnsy1.navy.mil/History/NAME.HTM] 📄
- Otton, Patrick. *USS Constitution Rehabilitation and Restoration*. Naval Historical Center Detachment Boston, Mar. 1997. [http://www.history.navy.mil/constitution/restore.htm] 📄
- Parris Landing at the Navy Yard. *Welcome to Parris Landing*. [http://www.parrislanding.com]
- Reserve Training Boats of the US Submarine Service*. [http://www.submarinesailor.com/Boats/Reserve/Reserve.asp]
- Roberts, Stephen S. *The United States Navy in World War II: Shipbuilding Programs and Contracts, 1938-1945*. [http://www.shipscribe.com/shiprefs/usnprog/index.html] 📄
Updated version of his article "U.S. Navy Building Programs During World War II."
- Seaport Campus. *School History*. [http://www.sfcinc.org/seaport/history.html]
- Shipways Condominium. *Shipways Condominium*. [http://www.shipwayplace.com]
- Shipyard Quarters Marina. *Shipyard Quarters Marina*. [http://www.shipyardquartersmarina.com]
- Stobo, John R. *The Brooklyn Navy Yard: Civil Servants Building Warships*. [http://www.columbia.edu/%7Ejrs9/BNY.html]
- Troops and Cargo Transported During World War II Under U.S. Army Control*. [http://www.usmm.net/armycargo.html]
- U.S. Dept. of Defense. *Defense Environmental Programs Annual Report to Congress*. Fiscal Year 2004-2007. [https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC]
———. *Defense Environmental Restoration Program (DERP) Annual Report to Congress*. Fiscal Year 1994-2003. [https://www.denix.osd.mil/portal/page/portal/denix/environment/ARC]
- U.S. National Park Service. *Park Histories*. [http://www.nps.gov/history/history/park_histories/index.htm]
Provides access to books, reports, and other documents relating to the National Park System.

Audiovisual Materials

- The Story of a Transport: The Wartime Career of the USS Wakefield* [DVD]. Chicago: International Historic Films, 2005.
- USS Cassin Young: A Video Tour* [DVD]. Boston: Boston National Historical Park, 2006.