Historic
STRUCTURES
REPORT

EDDON BOAT YARD

July 2006

PREPARED FOR :: The City of Gig Harbor

ARTIFACTS
Architectural Consulting
Eysaman & Company

Administrative Data

Historic Name

Anderson Boatyard

Eddon Boatyard

Current Name

Eddon Boatyard

Location

3805 Harborview Drive, Gig Harbor, Pierce County, WA 98335-1214

Section 05 Township 21 Range 02 Quarter 33: COM AT MC AT NW COR LOT 7 TH S 41 DEG 03 MIN E 75.21 FT ALG ML TH S 26 DEG 03 MIN E 200 FT TO TRUE POB TH CONT S 26 DEG 03 MIN E 125.5 FT TH S 19 DEG 49 MIN W 79 FT TH S 50 DEC 55 MIN W 162.65 FT TO HWY TH NLY ALG ELY LI HWY TO PT S 54 DEG 48 MIN W FROM POB TH N 54 DEG 48 MIN E 145 FT TO POB TOG/W TDLDS ABUTT.

Parcel No.

0221053074

Proposed Treatment

Rehabilitation

Owner

City of Gig Harbor, 3510 Grand View Street, Gig Harbor, WA 98335-1214

Historic Use

Boat building and repair.

Current Use

Boat building and repair.

Landmark Status

Listed as a local landmark to Gig Harbor's Registry of Historic Places in 2006, Case No.: HRN 05-1111. This listing does not include the brick residence.

Eligible for National Register Listing either individually or as a small district that includes the brick residence, site, marineways and dock.

Contemporary Related Studies

Eddon Boatyard Historic Registry Nomination Application, Gig Harbor, WA. (2005).

Cultural Resource Data

1920-1945, Anderson Boatyard use of site

1945-1946, Date of building construction by Art Glein

1950, Eddon Boatyard start of operations

1958, Launch of first Thunderbird at Eddon Boatyard

Historic Structures Report Commissioned By

This Historic Structures Report was commissioned by the City of Gig Harbor to guide planning and work in rehabilitating the Eddon Boatyard.

Table of Contents

Executive Summary

1.1 Introduction

The Eddon Boatyard:

- *Is listed on the Local Register of Historic Places (2006) and was the first resource listed to this registry;*
- *Would benefit from and is eligible for National Register listing as a resource type of a small, family-run, boat-building complex unique to Gig Harbor;*
- *National Register listing as a district including the brick residence, dock, and landscaping would strengthen the eligibility of the resource and increase the collective interpretive value of the site;*
- *Maintains strong associations with the boat building and water front industrial origins of Gig Harbor, as well as prominent local and national figures associated with boat design;*
- *Maintains strong associations with the residence built ca. 1946 and landscape features including marineways and dock, all built in conjunction with the Boatyard facilities. Collectively these typify a small, family-run, boatyard complex;*
- *Retains substantial intact original exterior and interior fabric and spaces despite modifications to the upper floor and south side lower floor additions;*
- *Is subject to the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995);*
- *Is subject to the Uniform Code for Building Conservation (1997) and would benefit from the application of the 2006 International Existing Building Code;*

The landmark status and seminal role of the Eddon Boatyard within the development of Gig Harbor's waterfront, and regional advances in boat design and construction should guide and inform decisions regarding proposed changes to the building.

1.2 What is a Historic Structures Report?

A Historic Structures Report (HSR) is a written and illustrated reference document that provides a thorough historic, architectural and engineering evaluation of a building, site or structure. It identifies significant original and subsequently added features and spaces, existing appearance and condition, and historic events associated with the structure. The purpose of this evaluation is to provide a basis to make decisions relating to maintenance, restoration or rehabilitation of the building or structure.

A HSR is usually prepared for buildings, structures, objects or sites that are on or eligible for listing on the National Register of Historic Places prior to planning any alterations, additions, rehabilitation, or restoration. The report is used to guide these contemporary modifications, reuse or restoration of the property.

The National Park Service, under the guidance of the United States Department of the Interior, establishes specific guidelines and contents for the creation of Historic Structures Reports, and provides advice on when they should be done (See Preservation Brief No. 43, April, 2005). These reports are required when performing work on federally-owned historic buildings or structures and recommended for other buildings and structures that have considerable historic significance and community value.

1.3 Purpose of This Report

This Historic Structures Report is primarily intended to provide basic information to guide stabilization, repairs, and rehabilitation of the Eddon Boatyard. The report establishes the Boatyard's role and importance as a cultural heritage structure associated with advances in maritime design and the early maritime related industrial development of Gig Harbor. Historical ties maintained between the Eddon Boatyard and its site, landscape and brick residence are identified.This document also serves as an extensive repository of information concerning the local, state and regional historic and architectural significance of the Eddon Boatyard.

This Historic Structures Report presents in narrative form the history and significance underpinning the treatment levels ascribed to the Boatyard's spaces, materials, structural systems, and view corridors. Identification of these architecturally and historically significant spaces and features facilitates their incorporation into the planning and development of a future comprehensive approach to the treatment and interpretive use of the Eddon Boatyard.

This report is anchored on a detailed survey and inventory of the Boatyard's architecturally significant features and spaces. The survey was performed to investigate the historic character of the Boatyard, identify original, intact significant elements of the original architecture and historically significant changes, and provide recommendations and direction for its rehabilitation. This will allow for the protection and preservation of the historic fabric of the Eddon Boatyard and provide standards for new construction as part of repairs, stabilization, and rehabilitation.

The survey was performed during April and May of 2006. At that time, the Eddon Boatyard was occupied but not fully operational. The Boatyard's features, spaces, site and setting were examined, photographed, and noted as to defining physical characteristics and existing conditions. Then each feature and space was categorized by architectural significance (these categories are described in section 4.2 Analysis of Significance).

As this document is employed in future planning and research related to the rehabilitation and interpretive use of the Eddon Boatyard, its content will guide decisions about maintenance, modification and conservation on a detailed level. The Decision-Making Matrix in Section 4.3 and the Prioritized Recommendations in Section 4.4 provide guidance for future decisions and work needed. The information in these two sections incorporates an understanding of historic preservation design guidelines (Secretary of the Interior's Standards for the Treatment of Historic Properties) and accepted practices in regard to architectural and engineering conservation methods. The content organization is intended to facilitate the use of this report as a development and conservation planning tool through the understanding of the Eddon Boatyard as a historic structure.

1.4 Summary of Report Contents

Brief History of the Eddon Boatyard: This thorough background statement on the Eddon Boatyard includes historical narratives, graphics (see appendix), and primary source materials. This body of information addresses the criteria for designation of historic sites and landmarks as applied by the National Park Service and the National Register of Historic Places. The historic narratives and background materials explore key events and associations and roles related to the original planning, construction, and use of the Eddon Boatyard within the broader function of Gig Harbor's maritime development. The subject matter comprises the central criterion in understanding and evaluating the local, regional, and national significance of the Eddon Boatyard.

Physical Information: This report includes a detailed record of features and spaces, identifying which are original or historic changes that embody the associations and meanings important to the Eddon Boatyard's cultural and architectural significance, and those features and spaces that are non-compatible contemporary additions. The catalogue includes of a schedule of character-defining elements. Each record consists of a systematic discussion of the existing state, assessment of condition, recognition of previous alterations, and level of significance. The purpose of this section is to identify which parts of the Eddon Boatyard are important to retain—particularly during its stabilization, repairs and rehabilitation. Identifying character-defining elements facilitates the protection and appreciation of the remaining original materials and spaces for their collective interpretive and heritage value.

Treatment Recommendations: With the original design elements of the Eddon Boatyard and their roles within the Boatyard's operation clearly delineated, and modern additions and subtractions distinguished, it is possible to develop a means of protecting those remaining historic aspects of the Boatyard so that they will remain for future generations to enjoy. To this end, this section provides the tools for guiding stabilization, repairs and further changes to the Boatyard in a compatible fashion that respects and balances the historical significance of the Boatyard's design, features and spaces with the need to maintain functionality, address ADA accessibility, and provide for life safety needs.

Supplemental Information: This section contains historical documentation gathered from local repositories including the Tacoma Public Library and personal collections. The As-Built drawings were prepared by Gerald Eysaman and Darryl Hall in April and May of 2006. Condition Photographs were taken by Gerald Eysaman and provide large reference images for current issues and assemblies. The Bibliography presents a detailed list of sources consulted.

1.5 Summary of Findings

Landmark Status

• *Listed individually on the local Gig Harbor Register of Historic Places;*
• *Eligible for listing to the National Register of Historic Places;*
• *National Register listing should pursue a small district nomination encompassing the Boatyard, brick residence, and site and landscape features. Consultation should be obtained from Michael Houser, Architectural Historian with the Washington State Department of Archaeology and Historic Preservation. The role of the brick residence is central to the story of the family-run boat-building operation. In addition, the marine-ways and dock stem directly from the original boat-building operations*

Degree of Extant Significant Fabric

• *Retains a significant amount of original exterior building fabric despite south facade additions;*
• *Retains a significant amount of original interior building fabric despite upper floor modifications;*
• *The site retains a significant amount of original layout, landscaping, and functional interrelations associated with the Boatyard's former operation;*
• *The Boatyard and site, including the brick residence, are visible from the public right-of-way and harbor.*

Significant Spatial Areas and Sequences

• *Significant spatial areas and sequences are tied directly to the original operation of the boatyard;*
• *Lower floor, water-side working spaces constitute an important sequence for conveying the design, component development, and final assembly of boats;*
• *Exterior carriage area and pier also served a secondary supporting function to the main boat design and building spaces of the first floor.*
• *Upper floor, street-level spaces serve a secondary supporting role to the first floor spaces, with a historic supportive maritime sundries storefront;*

Design Authenticity and Future Modifications

• *Design authenticity should constitute a central value in subsequent rehabilitation of the Eddon Boatyard;*
• *Elemental nature of the building and its components are central to the building's interpretive value;*

ADA Accessibility

• The goal of providing and improving existing accessibility according to the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) is to "provide the highest level of access with the lowest level of impact" to the character-defining elements identified in this Historic Structures Report;
• Accessibility with regards specifically to the Boatyard should prioritize barrier-free movements through the lower floor spaces accessible through the large sliding doors and public access to observe activities in the main boat-building spaces;
• Upper floor spaces are accessible from street level through the west end of the building.

Managing Change

• Steward new work to preserve to the greatest extent possible character-defining elements and spaces that define the character of the boatyard;
• Integrate new work in a manner that reinforces this character without diminishing or obfuscating original elements;
• High value must be placed on the retention of existing boatyard fabric and spaces, both interior and exterior, and functional operation during repairs, remodels, and rehabilitations;
• A long-term perspective must be employed towards implementing changes in a reversible manner and assessing the long-term value and relevancy of immediate alterations;
• A sound salvage and reuse policy must be implemented for safe handling and storage of any original elements removed from the boatyard during work in a manner allowing their inventory, tracking, and potential reincorporation;
• New finishes must be harmonized with the original design intent to reduce sharp contrasts in styles between the character of the original spaces and contemporary additions, while maintaining a clear distinction between historic and contemporary fabric;
• Adoption by the City of Gig Harbor of the International Existing Building Code (2006) must be advocated to enable greater use of applicable comparative ratings for historic building systems and components.

Brief History of the Eddon Boatyard

2.1 Significance Statement

Few historic buildings in the Pacific Northwest are more perfectly a product of their place that Eddon Boatyard. Constructed of native wood framing, the small industrial complex is carved into the protected shoreline of Gig Harbor and shaped entirely by its function as a boatbuilding shop constructed around a small marine railway. In a community named for a small wooden boat, the Eddon Boatyard typifies Gig Harbor's maritime connections to commercial fishing vessels, working boats and pleasure craft. Although its period of operation and historic significance does not date back to the pre World War II era of pioneer Croatian and Scandinavian gillnet fishermen and wooden boatbuilders, Eddon Boatyard does recall an important mid-century boom in small boat building on Puget Sound. The Eddon Boatyard is particularly notable as the place where owner Ed Hoppen and marine architect Ben Seaborn created hull number one of the Thunderbird class plywood with fiberglass overlay sailboat.

The site of Eddon Boatyard is nestled into a cove of docks and net houses on the southern edge of the harbor. The cluster of family-owned homes and working docks that surround the boatyard reinforces its sense of place and historical context. For generations, Gig Harbor was ringed with working docks and tied up gillnetters, barges, and a variety of other working boats. Between the floating docks were small repair yards, storage sheds, boatworks, chandleries and family houses, many of which remain today.

The group of structures that make up the Eddon Boatyard includes the main wood frame boatshop and attached sheds, a two track

winch-driven marine railway, a dock on pilings running parallel to the rail tracks, and a brick family home surrounded by a grass yard.

Well before the existing Boatyard structures were built, Conrad M. Anderson opened the Anderson Boatyard on the site in 1920. Early photos indicate that the site did not differ remarkably in appearance or orientation to the waterfront than the current structure. Records show that the yard was building vessels of considerable size, including a 74' fishing boat christened in 1927 the Gertrude S. With its deep water access, the well-protected location of the Anderson operation even came to the attention of the local Chamber of Commerce when they were looking for a new ferry landing site in 1929 to improve the auto ferry service that Pierce County began in 1917. In 1921, the Washington Navigation Company, organized by Mitchell Skansie, took over operation of the five vessel ferry service that ran between Titlow Beach near Point Definace Park in Tacoma and the ferry dock in what was called the New Town section of Gig Harbor. By then, the enterprise was called Anderson Ship Yard and his sons were growing into the business. In 1937, Conrad Anderson retired and his sons ran the operation until the Second World War.

Gig Harbor in the 1920s and 1930s contrasted sharply to the expanding industrial port of Tacoma just across the main shipping lane into southern Puget Sound. While Tacoma's expansive natural harbor of Commencement Bay bustled with ocean going freighters, steamships and barge-towing tugboats, Gig Harbor, with its narrow marine entrance, became a protected home base for more than thirty-five large purse seiners that followed fish runs from the waters off Mexico to the Arctic Sea. Although a few small sawmills operated on the harbor and there were a few farmers growing berries or raising chickens for eggs and poultry, virtually the entire community was supported by fishing and maritime commerce. No direct highway service or rail access into the steep sided little harbor existed, and the circuitous overland travel routes by road were a poor alternative to a quick boat or ferry ride over to Tacoma. During these decades, the Scandinavian-owned Anderson Boatyard ran as a family enterprise

somewhat in the shadow of the dominant Croatian Skansie Yard. However, the Boatyard followed the same seasonal work pattern as most of the shops—boat repair and rebuilding while the fishing fleet was in and new boat building during the high fishing season when the docks were empty.

In the late 1930s, federal Depression era work relief programs revived long-standing hopes for a bridge across the Tacoma Narrows, where in 1925 Tacoma Power had successfully run hydroelectric power lines across the channel. The steel and materials for the west towers of what was to become the world's longest span arrived by boat at Gig Harbor to be trucked overland to the construction site. In 1940, a graceful but short-lived twin towered suspension bridge was completed across the Narrows channel connecting Gig Harbor to the state's main road system. The spectacular collapse of this bridge in November of 1940, followed by the Second World War, kept Gig Harbor somewhat isolated. In the post war years, maritime activity on the harbor began to change.

On August 31, 1945, just days after the end of the war, Art P. Glein announced plans to reconstruct a modern boatyard on the newly purchased Anderson Boatyard site. Arthur Glein was an aviator and experienced pleasure boat builder, having achieved some notoriety in the local newspaper for building a 32' "streamlined" motor yacht, The Duchess of Tacoma, in his backyard. The launch of this all teak and mahogany motor yacht in 1937 was enthusiastically celebrated as a major addition to the growing Tacoma Yacht Club.

With the end of the war, Glein predicted Gig Harbor would become a natural hub for pleasure boats and recreational sailing on Puget Sound. His new boat building facility was constructed on the irregular parcel of land with 130' of waterfront and 220' of frontage on Harborview Drive. Glein is believed to have built the existing industrial structures, including the main 60' x 100' boathouse, joinery shops and office. The railways and adjacent dock were completed in 1946 to accommodate vessels up to 90'. He also constructed a small brick family

home with a back door that literally opened onto the dock and the entrance to the wood stove-warmed machine shop.

Today, this waterfront ensemble of structures typifies the working waterfront of Gig Harbor, where for more than a century families have lived and earned their living from the maritime trades.

Within a year of Art Glein's boatyard opening, two young veterans with the same idea opened their own pleasure boat shop on 6th Avenue in Tacoma, just up the hill from the ferry landing. They were Edward Hoppen and Don Harter. Hoppen trained at the Edison Boat School in Seattle and had worked there at Western Boat on Patrol Torpedo (PT) boats during the war. He also saw service as an aerial photographer, a talent that might have introduced him to fellow flyer and boatbuilder Art Glein. About the time the second Narrows Bridge was reopening highway access to Gig Harbor in October of 1950, Glein decided to sell his new boatbuilding facility at Gig Harbor and move to San Diego, California. When they bought the Glein property, Hoppen and Harter combined their first names to form the Eddon Boat Company, beginning their new business in Gig Harbor in 1950.

Don Harter was not long for the partnership. He left the business for the Korean War after just a few years, leaving Ed Hoppen and a young crew to run the shop. Ed's interest and energy attracted a skilled group of craftsmen and innovators, notably including Phil Manley and Herb Schuey. The small boatyard began to produce a variety of vessels including fishing boats, boom tugs and especially motor and sail pleasure boats. They built Ed Monk design cruisers that sometimes exceeded 50', a graceful 64' yawl designed by Bill Garden, and a fleet of custom made boats and dinghies. As Eddon boats became familiar in the harbors and yacht clubs around Puget Sound, Ed Hoppen's reputation developed steadily among marine architects.

The 1950s saw the greatest growth to date in pleasure boats and yachting on Puget Sound. In this wake, boating in Gig Harbor was rediscovered, particularly among serious yachtsmen and boat designers. The concentration of quality

boatbuilders and shipwrights in the harbor and the ubiquitous use of quality woodwork for the resident fleet of fishing boats attracted some of the leading developers in the pleasure boating industry. The nearly ideal protected waters and friendly docks of Gig Harbor established it as a destination for recreational sailors arriving by sea. The reconnection of the Tacoma Narrows Bridge highway access further introduced the previously ethnic fishing enclave to visitors.

Among the important marine architects who became familiar with Gig Harbor boatyards in general and Eddon Boatyard in particular was Ben Seaborn. In 1957, Ed Hoppen began building a Seaborn designed yacht NAUTILUS IV for noted Gig Harbor sailor Harbine Monroe. While working together on the construction details for the innovative lightweight 47' sailboat, Hoppen and Seaborn turned their interests to a recent boat design request from Tacoma sailor Tom Sias on behalf of his employer, the Douglas Fir Plywood Association. The industrial manufacturing organization hoped to spur the use of plywood in small sailboat making and offered a one-time fee for a standard design. The request for design called for a plywood sailboat that "must be both a racing and cruising boat…sleep four…[and be] capable of being built by reasonably-skilled amateurs…be powered by and outboard auxiliary…and out perform other sailboats in its class."

As luck would have it, Ben Seaborn was experimenting with methods of decreasing the overall weight of his designs. He had already developed a 26' sailboat, called a Sierra design, and was intrigued by the flexibility and strength of plywood as a material. Seaborn's life story is legendary, having designed the 1934 Swiftsure race winner CIRCE (54') at the age of seventeen. The son of a shipwright, Seaborn went on during the 1930s and 1940s to design some of the fastest and most beautiful wood sailboats ever made in the Pacific Northwest. He worked for Kaiser Shipyards and Boeing during the Second World War as a designer of ships, shipyards and aircraft. He returned to designing fast sailboats, and by the mid 1950s was among the elite of marine architects. Sadly, Seaborn would commit suicide in January 1960 following the death of his wife a month before.

But in the summer of 1957, Seaborn was at the Eddon Boatyard showing a cardboard model of a sailboat hull to Ed Hoppen. Hoppen and his shipwrights Manley and Schuey not only configured the new boat in plywood, they also devised a simple method for home construction that used upside-down ½“ plywood molds that converted into bulkheads. Over the molds, stringers and then marine plywood coated with fiberglass were applied to create the hull.

The combination of an inspired design, imaginative use of new materials and skilled craftsmanship more than met the expectations of the Plywood Association. The design became the revolutionary Thunderbird class sailboat, among the most popular and enduring small yachts ever made. Hulls number 1, 2 and 3 were all built by the Eddon Boat Company, and the first Thunderbird ever launched came down the railway at the Eddon Boatyard in November of 1958. Since then, more than 1,250 Thunderbirds have been made with twenty-seven worldwide fleets in places as distant as Perth, Australia, and Whitby, Ontario, Canada.

While it was the use of plywood that distinguished the Thunderbird design, it was another material used in the design—fiberglass—that would eventually bring to an end the livelihood of small boatbuilding yards like the Eddon Boatyard. Larger fiberglass-molded boat manufacturing plants began replacing wood boatyards in the 1960s, but Ed Hoppen and the crews at the Eddon Boatyard continued to push the design and construction of wood hulled boats. Perhaps the most successful sailboat Ed Hoppen created was the 40’ masthead sloop Diosa, an elegant plywood racer that Hoppen sailed to second place in the Swiftsure race. He also designed and built three 36’ hard chine plywood-hulled sailboats dubbed the Plimsol class. The light displacement racing boat used a fin keel and a blade type rudder much like the smaller Thunderbirds and pioneered many of the ultralight yacht design concepts in common use today.

From the late 1960s until 1978, Eddon Boat Company’s work at the Eddon Boatyard developed a proud, insider reputation among sailors and yacht racers. The Boatyard was kept busy

with major overhauls and refitting projects on some of the region's best known wooden sailboats. Ed Hoppen recognized the value of fiberglass as a durable sheathing material. Although he knew wood best, Hoppen innovated and designed a line of clinker-style, light fiberglass dinghies that were the first modern small dinghies to successfully mimic the clinker style of dinghy construction.

In 1978, Ed Hoppen retired and sold the Eddon Boat Company (including the works of the Eddon Boatyard) to Breck Adams who continued the tradition of building fast sailboats designed by the best regional marine architects. In 1983, Adams skippered Feeling, a 46' Peterson built at the Eddon Boatyard, to second place in the Swiftsure.

A frightening fire occurred at the Boatyard in February 1984, but no major damage was done. The next year, Adams sold the Boatyard and it continued to operate, primarily as a repair facility, until 2005.

The citizens of Gig Harbor initiated a bond measure in 2005 to purchase the Eddon Boatyard as a historical landmark and public park. The bond was passed and today the Eddon Boatyard awaits a new role as a protected part of Gig Harbor's past, present and future.

Physical Information

3.1 Narrative Description

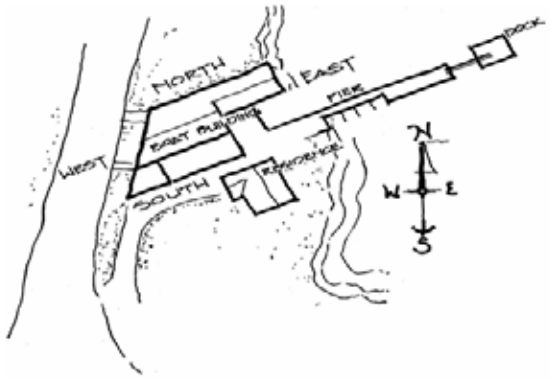
The Eddon Boatyard boatbuilding structure is the dominant element in a series of three structures that define the historical Eddon Boatyard family business. It is joined by a 1½-story brick residence and by a long wooden pier with a floating dock.

The boatbuilding structure, herein defined as the Eddon Boatyard building, is a simple rectangular, two-story, wood-framed structure with a series of single-story shed additions framed along its southern flank. The western end is angled to match the line of the adjacent Harborview Drive. Large, matching, multi-paned windows run in uniform bands along the upper and lower floors, providing substantial natural light to the interior spaces.

The overall character of the building is simple and utilitarian. The only significant decorative element is the western false front that flanks the sides of the street elevation. It returns on each side with a pair of rounded step-downs giving a deco-like/moderne appearance.

There is a large sliding service door at the west side of the south elevation and a single man door in the middle. The large, open-ended, Enclosed Way projects over the tidal zone, in-line with the main interior boatbuilding workspace. A pair of steel rails extends from it into the harbour with an adjacent outside pair parallel to the south.

The building sits at a near 45° angle to true east-west axis, with Harborview Drive to the Southwest and the waterside to the Northeast. For ease of future description, the southwest entry facade will be identified as the west, the



water as the east, the upper "back" elevation as the north, and the main elevation along the entry drive as the south elevation.

SETTING & SITE

The Eddon Boatyard building is tucked along a shallow cove off the main harbor at Gig Harbor, Washington. It sits on the gentle curve along the tidal mud flat. The cove was formed from the historical outfall of a natural ravine, which Stenson Road parallels as it descends to the water's edge. The boatyard is lodged between the base of the elevated Harborview Drive and the water. It sits at a slight angle to the shoreline, reaching out of the cove toward the main bay and deeper water. It is at an angle of approximately 45° to the road. As Harborview Drive makes its sweeping turn to follow the shoreline, it runs more-or-less level across the ravine elevated on an earth bank. A continuous steel bulkhead holds back the embankment as it passes by the Eddon Boatyard building. This roadway creates a dam to the natural flow of surface water and a significant amount passes underground today. Water seeps naturally and outfalls through a number of pipes and culverts along the base of the embankment. This is an ongoing concern along the base of the boatyard building.

On either side of the Eddon Boatyard building is an operational family fishing pier. Together they provide an invaluable link to the maritime history of Gig Harbor and contribute in establishing an important historical visual landscape. Immediately adjacent to the east of the boatyard building is a 1½ -story brick residence, formerly the boatyard family home. It is currently unoccupied and in some disrepair. Further to the east of the home is a recently created open space where two non-historic structures were removed, establishing the core of a new Waterfront Park.

The upper, Street Level Floor, is slightly above Harborview Drive and its continuous sidewalk. A non-historic, light wood-frame entry bridge spans the entire width of this facade, passing through a gap in the low concrete walls that extend north and south along the sidewalk. The street level facade incorporates a "storefront" and a secondary double entry door. The longer south elevation is the more dominant facade presented to motorists and pedestrians alike as they wind the bend in Harborview Drive or as they "T" into it descending Stetson Road.

A steep concrete access road exits Harborview just north of the Stetson Road intersection. It angles nearly parallel to Harborview Drive and turns sharply to parallel the boatyard building along its primary south facade. As the road cut into the adjacent lawn, it required the three to four foot concrete retaining wall. This access road functions as a driveway to the residence and squeezes between it and the boatyard building, ending in a concrete landing along the water's edge. Here it abuts a long wooden pier that extends out into the harbor, terminating with a floating dock.

This roadway replaced an earlier earth or gravel roadway, according to Mark Hoppen. Where the concrete roadway turns to the south elevation, it is approximately a foot above the building's finished floor. This suggests that the western shed may have been an addition. To maintain a uniform interior finished floor level it cut into the existing grade.

(Endnotes)

a In all likelihood, the elevated Harborview Drive was constructed around the current or former pre-existing boatyard building.

b See Correspondence: Response to Mitigated Letter of Non-Significance SEPA 03-25 prepared by Koler & Associates, Cultural Resources Consulting, 16 April 2004.

c To the south of the concrete wall a wooden stair, currently, non-extant, provided direct access from the lower level to a mailbox, currently non-extant, at the sidewalk, according to Guy Hoppen.

OVERALL BUILDING DESIGN

The overall building form is made from a series of very simple rectilinear volumes expressive of its wood frame construction. The entire building is painted in light beige and the trim is painted blue. The main element is a simple two-story gable roof structure. Responding to the oblique angle of Harborview Drive, it has a trapezoidal plan approximately 46 feet long on the north facade and 73 feet long across the south facade with a width of approximately 40 feet.

Along the south elevation are a series of simple, contiguous single-story shed extensions that expands the ground floor an additional 21 feet. Many of the support functions are housed here. The western third is taller, accommodating the taller service door. There is substantial physical evidence to suggest that the entire western half was added in two phases. In the opinion of Mark Hoppen, this would have been soon after the original construction.

Storefront

The west (Harborview Drive) facade has a western false front with a central six-panel glass storefront, a single door with side window to the south, and secondary double entry door and side window to the north. This upper floor storefront is at street level and accessed by a full-width wooden bridge. The rough fenestration is likely historic with non-historic infill. Below the bridge, the elevation is substantially without fenestration, save a blocked and wrapped historic opening.

The western front wraps along the north and south elevations, stepping down twice with bold radius caps creating a deco-like moderne effect.

Enclosed Way

Extending on the waterside, beyond the high tide line, is a narrower gable roofed, projecting wing along the north elevation. This is the open-ended main Enclosed Way. A series of multi-pane windows runs high along the south side and lower, aligning with others on the north elevation. Shallow sloped timber trusses with struts extending as brackets are visible from the open end. A foul weather plastic drape used to seal the way is secured to the south corner. Where it abuts the main building on the south side, it overlaps exterior trim and siding, suggesting it was added.

Ways

Two pairs of steel rails extend out across the mud flats beyond the low water tide level. One begins in the Enclosed Way and the adjacent is in open air, running parallel to the south. The northern rails are heavier and clear span cross ties. The southern rails are set on heavy wood timbers. Both have concrete bases. There is

considerable deterioration of the wood and in many sections, it has collapsed or members are missing.

Carriages

Wooden carriages sit on the rails. They are informal, jerry-rigged heavy timber and light frame constructions with a series of cabled wood blocks to support the boat's curvature. The carriages are weighted with concrete blocks. They are separately cabled through a series of pulleys and wheels to the motorized winch system. This is located above the high tide line under an open shed on the east elevation of the boat building. The sides of the carriages have narrow, very lightly framed catwalks on either side with ships ladders on the west ends.

Pier

The dock/pier extends out beyond the low tide perpendicular to the shore and parallel to the ways. It is constructed of heavy timber with bolted connections and sits on a number of creosoted piles in varying degrees of decay. They are substantially coated with barnacles in the lower, tidal, portions. At the end of the pier is a small floating dock and ramp. A number of deck boards on the pier are missing and access is currently restricted.

Land Side Foundations

The bulk of the Eddon Boatyard structure is slab on grade. Exterior walls typically return with shallow concrete curbs under interior and exterior walls. The extent of footings or foundation is not visible except in the middle of the northwest elevation where extensive erosion has undercut it. This suggests there is no footing below.

Roadside bulkhead

Retaining the elevated Harborview Drive is a series of terraced shorings. The upper section is a heavy corrugated steel bulkhead the full width of the building below. At the base, within two to three feet of the west elevation, is a shorter concrete retaining wall. This has concrete buttresses along the southern portion.

Where it is not buttressed, the northern half is seriously overturning. A concrete drainage channel runs the full width of this elevation.

Water Side Foundations

A number of individual concrete foundation bases support wood posts where the Enclosed Way extends over the tidelands. The two outermost were formed in 55-gallon drums that have substantial rusted away. The framed walls of the Enclosed Way terminate above the high tide line.

In the northernmost base a handprint of Guy Hoppen is still visible.

(Endnotes)

a The form is similar to that of boats contemporary to the building construction. Further research and investigation may reveal this is a historic modification. The variation of siding, between the western false front and that adjacent, suggests some part of it may have been an early alteration, though there is no photographic evidence.
b Per Guy Hoppen 02 may 2006

STRUCTURAL SYSTEM

The building super structure is typically 2x6 platform-framed wood construction with exterior wood siding only and no interior finish. Strategically placed within the frame are several 6"x 6" wood posts that provide addition vertical support for occasional point loads. Exterior walls, and several interior walls, typically rest on six-inch wide raised concrete curbs with minimal anchor bolt connections. The primary boat building structure is two stories; the lower floor is for wood fabrication and assembly with the upper floor predominately for lofting. A large, nominally 4 x 5-foot hatch interconnects the floors.

The floor above is nominally fourteen feet above the concrete slab and supported with 2x10 wood joists nominally at twenty-four inches o.c. They are decked with narrow fir boards. An intermediate post and beam heavy timber support line divides the main space by a third set approximately sixteen feet from the south side. This aligns with south side of the Enclosed Way. The joists span the full two-thirds width with diagonal wood blocking at third points. The northern half creates the large open volume where the majority of the boat assembly occurred. This is the most impressive space in the structure with all the

framing open to view clearly exposing its structural character. It takes on the appearance of the belly of a whale.

A mezzanine is tucked under the eastern half of the south third. It is currently accessed by a steep open wood stair but was originally accessed via ladder rungs secured directly to one of the major posts, evident by a regular pattern of discoloration. It was used historically for the storage of material while maintaining a long open shop floor for milling and dressing lumber where the added height was not required. A sliding service door to the south allowed long timbers being cut here to extend. Immediately adjacent, outside, is the steam boiler shed and steam bending cabinet.

The northern two-thirds is fully open to the Enclosed Way, sealed only by heavy clear plastic flaps that keep out foul weather. The entire slab slopes minimally to the opening where it drops off approximately three feet to the ground.

The upper floor is similarly divided one-third /two-thirds. The south portion, divided into a series of three rooms, two probably non-historic. A recent alteration to this upper floor in the historic Loft area included metal studs and gypsum wallboard. It has been removed, exposing the historic open framing similar to the lower floor. A large hatch to the floor below is centrally located in this space.

The original roof truss framing is minimal, incorporating 2x rafters with 2x web members nominally twenty-four inches on center. There is solid board decking above. Curiously, the bottom chords are not continuous, full span but break above an intermediate beam and post line. There is clear evidence of overloading occurred. Beam fibres are crushed at a pair of 4x4 wood posts and the beam has seriously deflected. A pair of recent 2x beams was placed above the older beam, at the point of greatest apparent failure. It is strapped structurally to the older member below providing support.

A historic, non-original, extension of the Loft extends across one truss bay into the Enclosed Way. The more elaborate trusses in the Enclosed Way are approximately ten feet on center. The timber and steel rod truss that historically formed the end of the loft remains. The typical bottom braced struts that extended below the horizontal chord of the truss appear to have been cut away.

The south elevation shed roof extensions at the lower level are of a similar construction. Half trusses of 2x lumber extend uniformly from the east end to just beyond the south man door. The members of these trusses appear to have been salvaged, as numerous ends are irregularly cut and there is a regularly spaced pattern of discoloration on some along with uniform nail holes.

The west wall of the office has a number of conditions that suggest it was once an exterior wall, including exterior drop siding, shadows and scarring similar to existing exterior sliding doors, and saw cuts to raised concrete curbs. There is also an apparent ridge in the roof along this line. This potential addition seems to have been rather narrow.

A second possible addition is the section of raised roof over the western service door. This extends the first floor across the full width of the south elevation matching the angled plane of the west elevation. A number of details beyond the change in roof plane suggest this was an addition, including the location of the concrete block chimney, a metal rod composite trussed beam, and an irregular transition in the slab. Details of the large interior service door that opens into the boatbuilding area suggest it was originally an exterior door.

(Endnotes)

a Noted by Guy Hoppen. This method for scaling the inside walls still exists in several locations in the Enclosed Way.

EXTERIOR DETAILS

Siding

All walls are clad with painted wood siding. It is a mix of clapboard and horizontal, bevelled, drop siding. There is no readily apparent rational which elevations received which siding. Across the south elevation both appeara. Occasionally a vertical trim board separates them, giving further suggestion to additions.

Roofing

The roof has multiple layers of asphalt composition roll roofing.

Drainage

Continuous contemporary style aluminium gutters run along all eaves. They are in serious disrepair along the north elevations where downspouts are missing. Metal downspouts on the south side cross the lower roof. Water is directed to a concrete base drainage channel. This concrete formed channel, at the base of the west and south elevation, directs water around the structure. It collects water from the gutters as well as the base of the embankment. Sub surface water is continuously pumped through a sump into the channel. The sump assembly is located in a small pit roughly drilled through the existing slab. It is located in the extreme southwest corner of the building and is heavily rusted. It is not original.

Chimneys

A pair of chimneys rise up several feet above the south side single story shed roofs. They are flush with the exterior wall. The eastern chimney is constructed in clay tile to just a few courses above the roof where it extends up in concrete masonry chimney units. The western chimney is constructed of concrete masonry chimney units in its entirety. Both are painted.

Windows

There is a uniform series of matching single sash, multi-paned, 4-over-3, wood windows below the eaves on the north and south elevations and across the north and south elevations at the lower floor level. The Enclosed Way has a series of similar single sash, 3-over-3, multi-

paned windows set above the interior catwalk along the south elevation. Two of these windows are blocked on the exterior as an exterior stair runs passes over them.

The east elevation has a pair single sash, 4-over-3, multi-paned windows, irregularly place. Another multi-paned window on this elevation is located below the exterior stair and opens under the main boatbuilding shop's mezzanine. The light from this window is substantially blocked by a panel, a workbench, and a refrigerator.

All windows typically have 1x4 wood casing trim jambs and head and an integral solid wood sill, cut to slope, with a 1x4 wood trim apron. Some windows are missing their apron trim boards. Occasionally, a pane is missing or broken and window putty is regularly cracked or missing.

The main storefront window has six, contiguous, fixed, single pane sash. They do not appear to be original, thought the rough opening may be. They are centered on the west facade.

Doors

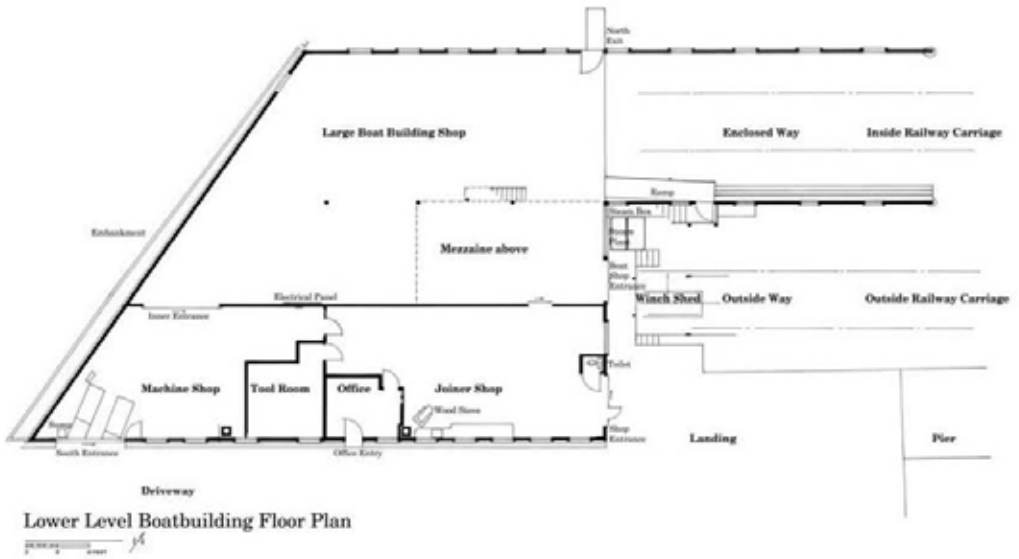
There is a wide variety of man doors and service doors scatter around the building.

A pair of historic rough openings symmetrically frame the storefront. The north one is infilled with a double door with a single sidelight. The south has a single, non-original man door with a possibly historic one-over-three paned fixed window.

Along the south facade, at the western end, is a large exterior sliding service door. A raised concrete sill/curb is nominally flush with the grade of the adjacent concrete driveway. The interior floor is approximately twelve inches lowerb. At the east of the sliding door is a full height, nominally four-foot wide, swing door that permits individual access and when open in combination with the sliding door expands the full opening width to over thirteen feet.

A single man door is in the present center of the south façade. It is likely this door was at the west corner of the original single story portion. It goes to the boatyard office. The west wall of the office has matching exterior wood drop siding and to the north is evidence of an original exterior sliding door, since removed and modified to two interior swing doors.

There are two exterior sliding service doors on the east elevation. The south door connects the joiners shop to the landing and Open Way area. Within this door is a smaller hatch-like man door. This door is the primary day-to-day access for entering the boatyard building. It has 1x4 wood jamb and head trim.



Lower Level Boatbuilding Floor Plan

The second exterior sliding door is adjacent to the north. It opens directly to the main boat assembly area and is situated under a canopy roof that extends to cover the winch. It allows longer, oversized wood members being cut inside to be extended outside and provides direct access to the exterior from the main boat building area.

An open wood stair connects the east end of the Street Level Floor down to the catwalk level of the Enclosed Way mid way along the south elevation. Inside a ramp runs back down to the main boat assembly area. There are simple wood swing doors at the top and bottom landing of the stair. The stair, while appearing sturdy, is lightly framed and has a handrail/guardrail with three equally space 2x4 wood rails. The stair has a simple shed roof. The stair and roof run across two windows giving the appearance of having been constructed subsequent to the Enclosed Way.

There is an access door in the north elevation from the boatbuilding area at the edge of the Enclosed Way. It was saw cut directly into the exterior siding. Three heavy metal hinges are surface mounted on the exterior. An irregular plywood ramp pitches from the sill steeply to grade.

Winch & Shed

At the top of the Open Way is the winch shed, a simple wood framed wood, shed roof structure that extends from the east facade of the main structure. Sitting slightly below the exterior apron slab on a series of raised curbs are a pair of motorized winch assemblies. Though rusted they are purportedly still operational and driven by a pair of circa 1950's truck engines. The southern winch is inline, on axis with the Open Way connected to the wooden carriage. The other winch assembly is connected through a more elaborate assembly of pulleys to the carriage in the Enclosed Way. The cable runs west then north into the enclosed way and back east to be on axis with that carriage.

Steam Plant and Steam Box

Directly adjacent to the winch shed and under the wooden stair, are a steam boiler and a long, insulated wooden box used to steam bend wooden members. The boiler is enclosed in a lightly framed, wood shed with a shallow pitched shed roof. The steam box is approximately twenty-four inches square and extends almost twenty-four feet, well beyond the stair landing just above. It is raised a few feet above the boat assembly floor and hangs from the south elevation of the Enclosed Way.

A small stair runs between the steam plant and the winch area. It provides the primary work access to grade and ground level circulation into the Enclosed Way and around the bottom of the carriages.

(Endnotes)

aThe variation of siding between the western, false front and that adjacent suggests some part of it may have been an early alteration; thought there is no further support for this suggestion.

bThis difference reinforces the idea that this portion was an addition that expanded into a pre-existing higher grade.

INTERIOR CONDITIONS

The Large Boat Building Shop is a single tall room with all structural elements fully exposed. Light framed of dimensional lumber; it is fully exposed on all sides. A post and beam line of support divides the space by one-third/two-thirds. A similarly framed historic mezzanine is located in the southeast corner accessed from a wood stair. The space is essentially open, save areas stacked with some building materials, fiberglass boat forms, and miscellaneous materials.

To the east under the mezzanine is a large multipaned window designed to provide light to this work area. It is substantially blocked by a wall panel, a workbench and a refrigerator. Adjacent to the south is a large sliding service door

From the Joiner Shop the Boatbuilding Shop is accessed through a sliding wood service door. The door is set in a sloping top track and is counterweighted with a concrete filled coffee can to automatically close. It has a dog door.

Along the south wall of the Boat Building Shop is a collection of electrical panel boxes and shut-off switches connected with a number of surface mounted metal conduits.

There are a series of smaller support rooms in the single story shed extension across the south elevation. The Joiner Shop (with added office) was likely the extent of the single story shed that was part of the initial construction.

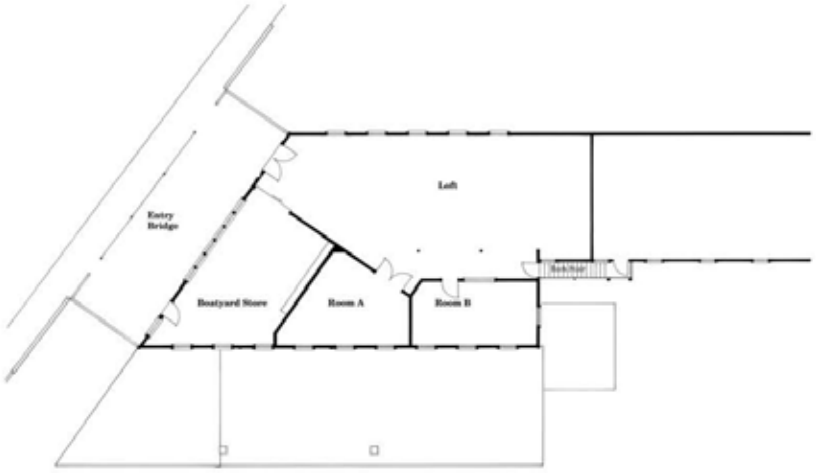
The Joiner Shop is the primary, detail workspace and functions as an important gathering space and respite spot for the workers, especially on cold damp winter days. It has a large worktable in the center and is surrounded by various pieces of standing power equipment and workbenches. All the light wood framing is fully exposed giving the room a very simple utilitarian appearance. The half trusses, fully exposed, appear to have been constructed from salvaged wood; evidenced by cuts visible at ends of some of the lumber used, by patterned discolorations of the wood, and by the regular spacing of nail holes on a number of members.

Hooks and hand made wood brackets scattered around support a varied collection of tools, supplies, cables, and other boatbuilding materials. It has a superficially cluttered appearance that gives the space its unique character. Industrial lights are located, where needed, and are a combination of exposed incandescent and fluorescent fixtures.

In the southwest corner of the Joiner Shop is a black 55-gallon drum and wood-burning stove. A flue pipe angles back extends into the clay tile chimney. There is charred wood roof deck above, from a minor firea. This is the only existing source of supplemental heat in the building, and during the colder windy winter days establishes the Joiner Shop as a haven to recuperate and warm up. Adjacent to the wood stove is the shop sink, coffeepot, microwave, and a small black and white television.

Behind the wood stove, in the southwest corner, an office was added. It is a small self-contained room within the bigger space. It has unpainted wallboard on the shop side and is lined inside with a decorative wood panelling and a lay-in acoustical tile ceiling. It functions as a small business office, with the existing exterior man door, and has a variety of drawings, charts, manuals, and other documents scattered around the space.

On the east side of the Joiner Shop is a compact single fixture toilet room. The interior is painted emergency orange and it is decorated with nautical charts and a marine supply poster.



Upper Street Level Floor Plan

The west wall of the Joiner Shop was originally constructed as an exterior wall. The original sliding service door was removed, the opening enlarged, and a pair of swing man-door incorporated. The south door opens to a Tool Room. It has a low framed ceiling that is used for storage above. The room has a number of simple wood framed shelving units. The north door opens to a small hall that bypasses the storage room and extends to a larger Machine Room. There is evidence in the Machine Room of a wall removed, along the line where the shed roof steps up. A number of metal rods are used in combination with dimensional lumber to created trusses. One supports the wall removed to open the space up and another was used to hoist engines and other heavy equipment. A pair of wood frame and plywood ramps provides wheeled access to the building, which is nominally a foot below exterior grade. Opposite the large exterior sliding service door is a similar sliding door between the Machine Room and the Main Boat Building Shop. The detailing of this door suggests this was originally an exterior opening.

On the upper floor, there are a series of three small rooms approximately along the southern third with a single Loft space in the northern two-thirds. The loft was historically extended by one bay into the upper level of the Enclosed Way.

The Loft was partially converted into a commercial space with a series of gypsum wallboard and metal studs partitions. The owner is in the process of removing these recent renovations revealing the original open frame structure. Single sash multi-pane wood windows run along both sides of the upper floor. They do not appear to have ever been operable. In the center of the loft is a large open hatch to the boat building assembly floor below.

The covered stair from the Enclosed Way provides direct access to the back of the loft and two of the small rooms. These small roomsb accommodated a series of different activities over time, including bookkeeping offices, boat designing, and small component spray painting.

The third and historic of these rooms, along the south side, extends across the majority of west facade opening. It opens directly to the street as. It currently has a display on the history of Eddon Boatyard and boat building. It is only visually accessible to the public through a series of six fixed glass storefront windows, which are not historic. According to the boatyards previous owners, this space last operated as marine chandlery, where small boat components and related nautical equipment were sold.

(Endnotes)

a A number of historic documents, including boat drawings, in the adjacent office were destroyed.
bAccording to Guy Hoppen the eastern room, Room B, was created more recently.

DECORATIVE ACCESSORIES

A number of enamelled metal advertisement placards, all for maritime products, are located around the building exterior.

Inside are a number of posters, decorative nautical crafts, and related equipment.

3.2 Catalogue of Character-Defining Features

This section identifies by form, detailing and materials those architectural features and spaces of the Eddon Boatyard that comprise and define its physical and visual character and that embody important historical associations and functions within boat design and construction. The setting, form, structural assembly, materials, finishes, original functional role, circulation patterns and spatial relationships comprise vital elements of architectural and historical significance of the Boatyard.

Each character-defining element is accompanied by a brief physical description, summary of existing condition, and level of significance. The level of significance identifies gradations within the features, spaces and systems as to their contributions towards defining the architectural and historic character of the Boatyard. Refer to Section 4.2, Analysis of Significance, for a detailed discussion of levels of significance and definitions of terms used such as Primary, Secondary, Minimal and None. All photographs within the following catalogue of character-defining elements are digital images taken in April and May of 2006 by architect Gerry Eysaman.

Measurements in the following text were obtained from the as-built drawings developed from measuring during field survey. All measurements are given for conceptual reference only and should be field verified prior to commencing any work on specific features.

Description & Alterations	Condition	Level	Images

FOUNDATION

Concrete

Board formed, poured-in-place concrete perimeter foundation wall. Exposed above grade. Painted on interior face.

Good condition. Limited spalling and material erosion.

Primary

Pilings

Round, wood.

Poor condition. Extensive deterioration and biological growth.

Secondary

Retaining Wall

Concrete and corrugated heavy gauge metal retaining walls along west side holding bank back from building face.

Good condition.

Minimal

EXTERIOR WALLS

Frame

Dimensional 2-by lumber.

Good condition.

Primary

Description & Alterations	Condition	Level	Images

EXTERIOR WALLS (CONT)

Exterior Cladding

Primary

Painted, drop siding clads majority of building. Added painted, clapboard siding at west end remodeled facade and east gable end. Siding at west end overlays previous material and diminishes window trim profile. Flush board seam at east gable end between lower drop siding.

Poor to fair condition. Extensive moisture damage including paint failure, material deterioration and biological growth along north and west sides. Added fasteners and patched sections on all facades.


Interior Finish

Primary

Exposed framing and back side of exterior siding. Painted sections.

Good condition.


Trim

Primary

Painted corner boards and molding along stepped west end parapet.

Fair to good condition. Some broken sections at west facade. General paint loss with added moisture accumulation on north and west facades.


WINDOWS

Type 1

Primary

Twelve-light, painted, wood sash, hopper windows along first and second stories. Total 36 (15 north, 19 south, 1 east, 1 west). Painted exterior wood trim and lug sills with aprons beneath sills.

Fair condition. Sound material. Moderate amount of missing and broken panes. Extensive putty failure. General paint failure through cracking and peeling and multiple paint layers. Some raised grain. Multiple upper story aprons missing beneath windows. Upper story aprons painted same color as wall rather than matching window trim. East facade lower story window trim missing. East addition partially covers east facade window trim.


Description & Alterations	Condition	Level	Images

WINDOWS (CONT)

Type 2

Added three-light, painted, wood sash, single-hung window at second story, west facade. Total 1 on west facade. Painted wood trim and lug sill. This window corresponds with window types in the adjacent brick residence.

Fair condition. Limited paint failure.

Minimal

Type 3

Added single-light, fixed, wood sash windows at second story, west facade. Total 6 on west facade. Painted wood trim and sill.

Fair condition.

None

Type 4

Twelve-light, fixed, wood sash windows at first story, east facade. Total 2 on east facade. Painted wood trim and sill.

Fair condition.

Primary

Type 5

Nine-light, fixed, wood sash windows at east end of south facade. Painted wood trim and sill. Total 5 in number.

Fair condition. Extensive glazing failure. Limited paint failure.

Primary

Description & Alterations	Condition	Level	Images

ROOF & DRAINAGE

Framing

Gable roofs over principal volumes. Shed roof over side south and rear east volumes.
Open soffit, exposed, painted rafter ends.
Crickets at roof slope transition with Stair Three shed roof.

Areas of exposed wood on rafter ends, biological growth on north side.

Primary


Cladding

Multiple cladding materials. Sheet asphalt roofing on south side with granular surface. Approximate 3' to 4' widths and lapped seams. Black asphalt sheet roofing on lower east shed roof. Composition asphalt roofing on all other slopes. Wood blocking along roof edges with slight (approximate 1" to 2" projection above roofing plane). Roofing laps around eave edges approximately 1" to 2".

Fair condition. Areas of material deterioration.

None


Trim

Slender, painted barge boards and verge moldings at gable ends.

Fair condition. Areas of paint deterioration.

Primary

FLASHING

Wall

Painted, sheet metal transition flashing (approximate 6' to 8' sections) between roof slope and vertical wall plane. Lapped behind wood siding and over roofing. Lapped seams. Mastic and metal flashing at chimneys. Metal caps along blocking at edges of roof slopes. Metal caps along top sides of projecting rafters.

Poor to fair condition. Areas of bent back flashing. Some paint loss and corrosion. Corrosion of flashing at chimneys. Mastic separation from roofing at chimneys. Seams at transition flashing between roof and walls rely upon sealants.

None


Description & Alterations	Condition	Level	Images

FLASHING (CONT)

Gutters

Painted metal gutters along eaves at upper and lower roof levels on north and south facades. Spike-and-ferrule mounted to eaves. Square backs and base with decorative molded outer face profile and rolled outer top edge.

Poor to fair condition. Debris accumulation. Bent, failed and missing gutter sections along north facade.

Minimal

Downspouts

Painted metal downspouts across lower roofs connect upper gutters to lower gutters. Downspouts from lower gutters connect at grade to storm line along the south side and discharge at grade on other facades. Mounted directly against siding with metal straps.

Good condition. Need to connect all downspouts to storm lines. Some anchors split corner boards. Downspouts across lower roof slope nailed through roofing for attachment. Sealant failed at these nails.

Minimal

Chimneys

Slender, hollow clay tile (lower portions) and added concrete masonry unit (upper portions) chimneys. Project through and above (approximately 5' to 6'+) south slope of lower roof. Total 2 in number. Added paint coating.

Poor condition. Extensive mortar failure and loss. Extensive paint failure.

Primary

ENTRANCES

North 1

Added, single-leaf personnel doorway saw cut through existing siding. Exterior hinges mounted on wood blocking. Short ramp ascends from grade to doorway.

Fair condition.

Minimal

Description & Alterations	Condition	Level	Images

ENTRANCES (CONT)

South 1

Sliding, top-hung wood frame door clad with painted, drop siding. Opens to east. Mounted on building exterior.

Fair condition. Limited paint failure. Some broken and missing boards along bottom edge of door.

Primary

South 2

Wood stile and rail door with stain finish. Lower recessed panel with large upper light.

Fair condition. Dry, slightly cracked wood.

Primary

South 3

Wood stile and rail door. Stained finish. Plastic sheeting inner panel. Diagonal bracing.

Poor condition. Dry, slightly cracked wood. Added plastic sheeting.

Secondary

East 1

Sliding, top-hung wood frame door clad with painted drop siding. Opens to north. Mounted on building exterior. Single-leaf personnel door placed in lower south portion. Painted wood trim outlines siding-clad personnel door. Contemporary exterior mounted spring hinges at personnel door.

Fair condition. Limited paint cracking.

Primary

Description & Alterations	Condition	Level	Images

ENTRANCES (CONT)

East 2

Level: Primary

Sliding, top-hung wood frame door clad with painted drop siding. Opens to north. Mounted on building exterior.

Fair condition. Limited paint cracking.

East 3

Level: Minimal

Contemporary, flush panel, single-leaf door with contemporary hardware. No trim. Accessed via Stair Three.

Fair condition.

West 1

Level: Minimal

Contemporary, flush panel, double doors with contemporary hardware. Painted wood trim. Painted, oriented strand board framing at contemporary side-light.

Fair condition.

West 2

Level: Minimal

Contemporary, flush panel door with contemporary hardware. Painted wood trim.

Fair condition.

Description & Alterations	Condition	Level	Images

STAIRWAYS

Stair 1 & 2

Primary

Exterior, painted, wood carriage stairways. Direct flights. Painted wood tread and risers. No railings.

Fair condition.

Stair 3

Minimal

Exterior, painted, wood carriage stairway. Direct flight. Painted wood tread and open risers. Painted wood posts carry asphalt roofing clad shed roof. Asphalt roofing used as transition flashing. Painted three-rail railings along outer south side. Angles across windows. No inner railing. Lower wood floor landing.

Poor condition. Assembly a composite of different additions.

Stair 4

Primary

Interior, wood carriage stairway. Direct flight. Wood tread.

Good condition.

Description & Alterations	Condition	Level	Images

LOWER FLOOR VOLUMES

Volume 1

Former Machine Shop located in southwest corner of floor. An addition to the original 1946 Main shop volume. Sliding doorway on north side to shop. Hallway connection to Joiner Shop to east. Concrete slab floor. Exposed framing along perimeter walls. Illuminated by south windows and artificial lighting.

Good condition.

Primary

Volume 2

Main shop along north side of building. Sliding door connection on south side to volume 1 with broad opening connection on east end to volume 7. Direct flight of stairs (stair 4) lead up to volume 3. Sliding door (east 2) in southeast corner to exterior. Added door (north 1) on north side to exterior. Illuminated by north and east windows and artificial lighting.

Good condition.

Primary

Volume 3

Loft space above southeast corner of main shop area. Illuminated by east window and artificial lighting.

Good condition.

Primary

Volume 4

Joiner Shop located in southeast corner of space. Sliding door on north side leads to main shop. Sliding door (east 1) on east end leads to exterior. Tool benches and work space along south wall. Small restroom with single toilet on east side adjacent to exterior doorway. Illuminated by south and east windows and artificial lighting.

Good condition.

Primary

Description & Alterations	Condition	Level	Images

LOWER FLOOR VOLUMES (CONT)

Volume 5

Level: Primary

Office located along south wall between Joiner Shop on east and Tool Room on west. Doorway (south 2) on south side leads to exterior. Doorway on north side leads to Joiner Shop. Relite through east wall into Joiner Shop. South window and artificial lighting provide illumination.

Condition: Good condition.

Volume 6

Level: Secondary

Tool Room located along south wall between Office on east and Machine Room on west added ca. 1970s within the Machine Shop addition. Irregular-shaped space features doorway on east side to Joiner Shop. South windows and artificial lighting provide illumination.

Condition: Good condition.

Volume 7

Level: Primary

Inside Carriage volume used for boat construction and repairs. Exposed trusses and interior framing along walls. Upper south and north window provide day lighting. East end open to and projecting into harbor. Elevated wood frame walkways along side walls. Narrow gauge tracks extend down along floor into bay.

Condition: Fair condition.

Volume 8

Level: Primary

Outside Carriage volume (unenclosed) located off east end of building south of enclosed Inside Carriage (volume 7). Used for working on boats out of the water. Piers carry elevated walkways and equipment at west end.

Condition: Poor to fair condition.

Description & Alterations	Condition	Level	Images

UPPER FLOOR VOLUMES

Volume 1

Secondary

Work space located in the southwest corner. Irregular-shaped space due to acute angle of outer building corner. Windows on west and south walls provide day lighting. Door (west 2) on west side leads to exterior. Sliding door on north end leads to volume 2. Counter along west partition wall.

Fair condition.

Volume 2

Secondary

Work space located in northwest corner. Irregular, triangular-shaped space due to obtuse angle of outer building corner. Window on north wall provides day lighting. Pair of west doors (west 2) leads to exterior.

Fair condition.

Volume 3

Secondary

Work space located along the north side of the floor. Windows along north wall provide day lighting. Door on south side leads to hallway. Open passage on west side leads to volume 2 and provides for service access into this space from the double doors on the west facade.

Fair condition.

Volume 4

Secondary

Work space located in the northeast corner of the floor. Windows on the north and south walls provide day lighting. Open passage to the west leads to volume 3 and provides for service access into this space from the double doors on the west facade.

Fair condition.

Description & Alterations	Condition	Level	Images

UPPER FLOOR VOLUMES (CONT)

Volume 5

Inner hallway providing interconnection between the upper floor work spaces and the exterior east stairway leading down to the Inside Carriage. A relite along the south side of this hallway opens into volume 6.

Fair condition.

Secondary

Volume 6

Work space located along the south wall. Windows on the south and east walls provide day lighting. A relite in the north wall opens onto the hallway. A single door on the north side provides access to the hallway.

Fair condition.

Secondary

Volume 7

Work space located along the south wall. A set of double doors leads to hallway off northeast side. Windows in the south wall provide day lighting.

Fair condition.

Secondary

Treatment Recommendations

4.1 Analysis Findings

The general conclusions that arise out of this report are organized under headings below. These conclusions address the specific historic preservation findings, conditions and issues that exist currently and that should shape plans and policies for stewardship and maintenance of the Eddon Boatyard. They should also be integrated into planning for the continued use and guide the rehabilitation of the Boatyard.

The overall recommended treatment for the Eddon Boatyard is rehabilitation. The 1946 date of construction for the Boatyard constitutes the primary period of significance for maintenance and repair work, and the target period for restoration or replacement of missing or extensively damaged elements.

Landmark Status: The Eddon Boatyard is listed individually on the local Gig Harbor Register of Historic Places. The Boatyard is eligible for listing to the National Register of Historic Places. Listing to the National Register would affirm the broader significance of this remarkable cultural resource and may be a prerequisite for some State and Federal funding opportunities.

National Register listing should also evaluate the interrelation between the Boatyard and the adjacent brick residence. Depending upon the extent of interconnection in the development of and significant associations held by these two structures, the residence may be eligible individually or as a contributing resource in conjunction with the Boatyard as part of a small district.

Degree of Extant Significant Fabric: The Eddon Boatyard maintains a significant amount of original building fabric to convey its original design and operation as a working boatyard, despite some interior modifications to the upper floor. The sparse, utilitarian character of the finishes, particularly on the interior, do not represent an absence of fabric. Rather, they convey the original working conditions and industrial character of an operating boatyard.

Exterior windows, trim, siding, carriages, and doors remain intact, presenting a unified exterior form visible from the public right-of-way and harbor.

Significant Spatial Areas and Sequences: Significant spatial areas and sequences are tied directly to the original operation of the Boatyard. As such, the first floor working spaces constitute an important sequence for conveying the design, component development, and final assembly of boats.

Upper floor spaces served as administrative support and development functions to the boat building operation, expanding as the operation grew. Modifications impacted the interior finishes, partitions, and access between these spaces. As such, these spaces serve a secondary supporting role to the first floor spaces. The exterior carriage area and pier also served a secondary supporting function to the main boat design and building spaces of the first floor.

Design Authenticity and Future Modifications: Design authenticity should constitute a central value in subsequent adaptive reuse of the Eddon Boatyard. The elemental nature of the building and its components are central to the building's interpretive value. These attributes will also facilitate adaptive reuse as building systems and structure are readily accessible rather than hidden behind delicate finishes. The interior space bears the patina of rough surfaces, dings, and scratches of industrial use that cannot be replicated.

ADA Accessibility: Universal accessibility to the Boatyard should be provided as part of capital improvements in keeping with the public interpretive use of the building. Accessibility with regards specifically to the Boatyard should prioritize barrier-free movements through the first floor spaces. The broad sliding doors, concrete slab floor, and wide interior doorways lend these spaces to universal access. Second floor spaces can be accessed from street level through the west end of the building.

The goal of providing and improving existing accessibility according to the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) is to "provide the highest level of access with the lowest level of impact" to the character-defining elements identified in this Historic Structures Report. The three federal laws directing accessibility standards are the Architectural Barriers Act of 1968, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990.

Managing Change: Managing change involves stewarding new work to preserve to the greatest extent possible character-defining elements and spaces that identify the character of the Boatyard. New work must be integrated in a manner that reinforces this character without diminishing or obfuscating original elements. Successfully managing change depends upon the following five key priorities:

1) High value must be placed on the retention of existing Boatyard fabric and spaces, both interior and exterior, during repairs, remodels, and rehabilitations. Existing original fabric contributes directly to the stature of the interior and exterior spaces and conveys the original level of craftsmanship and care given to the selection and installation of building elements. These spaces become a tangible tool in the narrative of boat building for interpreting these activities and the broader repercussions they held for the boating industry and the City of Gig Harbor. Without the original primary spaces or the level of original finishes, their legacy is one step further removed from the daily business of future occupants.

2) A long-term perspective must be employed towards implementing changes in a reversible manner and assessing the long-term value and relevancy of immediate alterations. Change will be a constant factor throughout the Boatyard's existence. Beneficial change maintains life safety, usability, and occupant comfort while retaining historic

fabric and spaces. Adverse change removes historic fabric and spaces at the expense of immediate goals and increases maintenance through the introduction of materials with short life spans. Many original materials and craftsmanship employed on the Boatyard are not readily available today or are often expensive to replicate in-kind.

3) A sound salvage and reuse policy must be implemented for safe handling and storage of any original elements removed from the Boatyard in a manner allowing their inventory, tracking, and reuse. This allows reversal of changes made to accommodate current situations. In addition, building and life safety code standards change, rendering conditions that previously were not compliant to be acceptable. This occurs through updated equivalency standards or new methods of upgrading existing fabric to meet code in ways that have minimal adverse impact to the historic feature or space. Technology also progresses. Adaptations made to accommodate current systems will be out-of-date in another fifty years.

4) New finishes must be harmonized with the original design intent to reduce sharp contrasts in styles between the character of the original spaces and contemporary additions.

5) Adoption by the City of Gig Harbor of the International Existing Building Code (2006) must be advocated to enable use of applicable comparative ratings for historic building systems and components. This will have a profound impact on decisions regarding what features meet code and can be kept and how to upgrade existing features to meet building, fire and life safety codes.

Code Requirements: Building Code enforcement is through the City of Gig Harbor Building Department. Applicable codes include:

Gig Harbor Municipal Code Title 17 ZONING
International Building Code 2003 with Washington State Amendments
International Existing Building Code 2003
Washington State Energy Code 2004
Washington Ventilation Code 2003

Land use zoning classification: WC – Waterfront Commercial Existing use permitted 17.50.020: C. Boat repair and sales facilities

Existing setbacks. The existing north side-yard setback varies from approximately 6 feet at Harborview Drive to 4 feet at the shoreline. The existing front yard setback, along Harborview Drive, varies from approximately 9.5 feet at the north to 13 feet at the south. The existing south side-yard setback to the open space of the Waterfront Park varies from approximately 101 feet along Harborview Drive to approximately 97feet at the shoreline. The existing west setback is at the shoreline.

Building use and occupancy:

Mixed Use Boatbuilding: Factory Group F-1 Moderate Hazard Occupancy
Storefront: Mercantile Group M Construction Type: Type VB

The entire structure is typically a light framed wood structure with no fire-protected materials or assemblies, save the two masonry chimneys. The lower floor finished floor is an industrial/utility concrete slab on grade.

Existing Occupancy Load:

Total Lower Floor: 5,410 SF 62 occupants
Enclosed Way: 1,220 SF
F1 Occupant Load Industrial Areas 100/SF = 13 occupants
Boatbuilding Shop: 2,457 SF
Mezzanine: 487 SF
F1Occupant Load Industrial Areas 100/ SF = 30 occupants
Joiner Shop & Office: 924 SF
F1 Occupant Load Industrial Areas 100/SF = 10 occupants
Tool Room & Machine Room: 819 SF
F1 Occupant Load Industrial Areas 100/SF = 9 occupants
Total Upper Floor: 2,457 SF
F1 1,872 SF Occupant Load Industrial Areas 100/SF = 19 occupants
[ALT A3 Occupant Load Assembly unconcentrated 15/SF = 125 occupants]
Historic Storefront Area: 585 SF
M Occupant Load Mercantile grade floor 30/SF = 20 occupants

The existing occupancies comply with a single means of egress from each use area. The Alternate, converting the Loft to assembly occupancy, would require a secondary means of egress from the Upper Floor.

Plumbing Fixtures Required:

F1 7,779 SF
2,000SF/min fixture = 4 fixtures / 2 = 2WC, 1 LAV per sex
[ALT A3 5,907 SF 2,000SF/min fixture = 4 fixtures / 2 =2WC, 1 LAV per sex 1,872 SF 15 SF/occupant = 125 occupants / 2 = 1WC/male, 3WC/female, 1 LAV per sex]
M 585 SF
200 SF/min fixture = 4 fixtures/2 = 2WC & 1 LAV per sex

Existing F1 Use, if approved as a pre-existing condition, would not require an upgrade of additional plumbing fixtures. The Mercantile Use, the maritime chandlery, although a historic use, it has not been operational and the preliminary determination by building officials will not approve it as pre-existing and will require new plumbing. The Alternate Assembly Use occupancy of the Upper Floor will require new plumbing.

The adjacent historic single-family residence, if retained and renovated, may be sufficient to accommodate the toilet requirements of the Mercantile and Assembly Use occupancies and provide improved toilet accommodation for the F1 occupancy.

Preliminary Goals:

1. To maintain the historical boatbuilding function and open it to small groups of apprentices; instructed in traditional wooden boatbuilding techniques.

2. To restore and operate a small commercial storefront chandlery, related to and able to financially help support the boatbuilding program.

3. Incorporate small assembly opportunities (meeting room(s)) in the existing upper floor for instruction, public education, and information.

4. Provide limited public access, fully ADA accessible, to observe the traditional boatbuilding process, without interfering with ongoing boatbuilding activities.

5. Achieve a LEED certification The Historic and existing boatbuilding areas function and operate well without need of significant renovation. Structural improvements to secure and stabilize it as is are minimal and addressed in the accompanying structural report.

1. Boatbuilding Function

• The main boatbuilding shop, the Joiner Shop, Office, Tool Room, Machine Room are to remain essentially in their historic character and fabric. The upper floor Loft, historically part of the boatbuilding operation, would change if renovated to incorporate assembly occupancy.

• The lateral capacity of the Enclosed Way is structurally deficiency. Its structural frame, the man-ramp, catwalk framing, and railings need to be improved.

• The existing floor slab, across the north elevation, has been undermined. It requires further investigation to determine the extent of additional reinforcement and underpinning.

• A serious structural deficiency in the post and beam support line in the loft requires immediate structural inspection and upgrade.

• A complete fire suppression system is needed throughout as an important upgrade to protect the structure and to mitigate required code improvements. It needs to be reviewed and coordinated with the City of Gig Harbor's fire marshal, to determine where additional heads are needed to mitigate existing conditions.

• A fire detection and warning system is needed throughout that includes smoke detectors, exit lighting, emergency lighting, pull station alarms, readily accessible fire extinguishers, and a fully monitored system to help mitigate existing historic conditions.

• Upgrade the entire electrical system to replace the archaic system. The existing electrical wiring, while appearing to be safe and secure, is old, patched together, and scattered around. Where possible, conduit

and the patchwork of electrical panels to be retained in situ as historic artifacts. Add lighting to improve the generally poor levels of interior work light.

• Storm windows are needed to improve the weather tightness of the interior while maintaining the original exterior detail.

• The man exit door and ramp from the north side of the boatbuilding shop needs to be renovated to improve egress.

• Repair and restore the building envelope to the Secretary of the Interior's Standards. This includes the roofing, flashing and gutters, wood windows and trim and the siding.

• Evaluate in detail and renovate various support systems and building components are to be. They should be restored to full functionality using the Secretary of the Interior's Standards. The piers, the rails and the way/rail winch assembly, the steam plant and steam bending box, the exterior wood stair way, the Enclosed Way ramp and catwalk, the perimeter building drainage channels and sump, roofing, the wood stove.

o Piers – the piers and decking should be individually inspected, evaluated, and where determined to be insufficient, replaced.

o Plumbing – The existing building supply plumbing and sanitary systems should be evaluated and improved/upgraded to a public sewer.

o Rails – Both pairs of rails need to be fully renovated.

o Winches – The existing winch engines, pulleys, cables and the associated shed area should be inspected and overhauled bring them up to current codes and provide sufficient building and equipment safety protections for workers and the public.

o Steam Plant – The steam plant and bending box should be evaluated and brought up to existing code.

o Mechanical - The only mechanical system currently in the building is the wood stove in the joiner shop. The fire resistive materials surrounding it need to be upgraded. No additional HAVC is anticipated for the boatbuilding assembly areas. A small supplementary heat source is anticipated to be added to the storefront. It needs to comply with the Washington Energy Code.

o Drainage Channels – The concrete drainage channels and the sump need to be inspected and repaired.

o Railings – Wooden walkways, stairs, ramps, handrails, and guardrails throughout need to be improved to meet minimum code requirements to the Secretary of the Interior's Standards.

2. Storefront Chandlery

• The Historic Storefront general marine chandlery has not been operating for several years and its renovation would require meeting all appropriate building codes. The commercial storefront remains a vitally important functional use and interpretative opportunity to the building.

• As a Historic Building, the IEBC 2003 may permit a number of existing conditions to remain without the alteration of historic fabric. The interior of the existing chandlery space is not primary historic fabric, however, its placement over the main boatbuilding shop area presents a potential impact on its primary historic fabric. It is expected that

the required fire separation and compliance with the code will be accommodated without undue impact on any historic fabric.

• If practicable, the existing upper floor spray room needs to be renovated and incorporated as a support office/storage area.

• This space to receive new HVAC system.

• The Mercantile use may require the addition of public toilets.

3. Assembly Occupancy

• The upper floor Loft, in part or in whole, could provide space for assembly occupancy to support the overall goals of the boatbuilding program.

• The IEBC 2003 may or may not provide sufficient support for allowing assembly uses on the upper floor. The interior of the upper floor loft space is not primary historic fabric. If a 3-hour fire separation is required between the assembly and boatbuilding occupancies, it could, along with a required secondary, rated means of egress, seriously impact the primary historic fabric below. This would cause it to be dropped from the program.

• The assembly use would require the addition of public toilets. This could also cause it to be dropped from the program.

• The adjacent historic residence, while not studied in detail as part of this HSR, may provide a far more convenient location for desired assembly use and for public toilets.

4. Public Access

• The upper floor is immediately accessible from Harborview Drive along a public sidewalk and across the wood bridge deck. The Boatyard Store/Chandlery needs to be fully accessible within.

• An existing sliding doorway between the store and the Loft provides an opportunity for public observation into the Loft boatbuilding activities. Additional limited access into this space may, or may not, be accommodated.

• If the Loft is renovated to assembly use, a secondary accessible exist or an area of refuge would need to be incorporated.

• Public access to the lower floor is complicated by the primary nature of the historic fabric and the need to separate functioning work areas from the public.

• There is a preliminary concept, providing full ADA compliant public access. It will minimally impact the historic fabric and provide significant observation of the majority of the critical boatbuilding activities.

• An exterior ramp would run parallel with Harborview Drive between the building and the embankment shoring. An exterior door would be added to the west end of the main boat building shop. A narrow elevated deck would run inside across the west end of the space.

• It would be elevated to provide views across the work area and out into the enclosed way and permit work activities or material storage to the work floor below.

5. LEED STANDARDS

• The very nature of preserving and restoring the Eddon Boatyard Building is in line with fundamental principals of sustainability. The continued use of this structure will reduce the demand on new resources and reuse a majority of the valuable resources extant in the structure. The goals of this project are to embrace Green design wherever practicable. The LEED standards will be the project's guidelines for efforts of sustainability. A Certified rating seems well within our reach, but our hopes are to be able to achieve a Silver rating.

• During all phases of the building's preservation, restoration, and rehabilitation preference will be given to materials that are locally available, sustainably harvested, renewable, or otherwise environmentally friendly. The basic, "raw", nature of most of this building and the requisite for contemporary modifications to historic structures to be distinct, affords the opportunity for the incorporation of a number of innovative, alternative Green materials.

• Site conditions need only be minimally upgraded to provide accessibility and opportunities for alternative transportation parking and storage. Native plantings will be used where possible to protect and stabilize portions of the site that are subject to erosion and potentially respond to subsurface water concerns.

• See Section 5.4 LEED Certification Declaration.

4.2 Analysis of Significance

Understanding the historical significance of the Eddon Boatyard for its role in the maritime activities and development of Gig Harbor, and then identifying existing character-defining elements, makes possible an overall future preservation approach that is sensitive to historically important features and spaces. The degree to which the historical and architectural significance is ingrained in and conveyed through each feature and space enables these individual elements to be treated differently. Thus, by establishing the level of historical and architectural significance and the existing condition of each element, a specific approach to its treatment can be developed.

This section prioritizes significant spaces and features by architectural and historical significance. The information is presented in this section as maps of architectural significance, and in Section 3.2 in the form of a Catalogue of Character-Defining Elements with individual levels of significance identified.

The following considerations should underlie the formulation of stabilization efforts, repairs and maintenance practices, steer a comprehensive rehabilitation program, and help to manage and guide changes to the Boatyard. They distinguish between the more significant categories of primary and secondary features and spaces, and the more amendable minimal and none elements.

As the Eddon Boatyard continues to serve a long-term role providing facilities for interpretive efforts related to historic maritime activities in Gig Harbor, it is both possible and optimal to retain the key defining elements and original components of the Boatyard's important historical character. These elements pro-

vide valuable tangible links to past construction materials, methods and design sensibilities. They embody associations with important roles within local and state maritime activities.

The Analysis of Significance designates features and spaces as primary, secondary, minimal and none according to the level of contribution each makes in defining the Boatyard's architectural character and historical significance. The basis for these four categories stems from:

1) the interpretive value of the feature or space relative to the construction and operation of the Boatyard, specific boat design and construction at the yard, and connection with broader maritime activities;
2) whether the feature or space is original, historically significant, or a contemporary change;
3) the extent of non-historic modifications and additions to the feature or space;
4) the compatibility with the original materials and the engineer's design intent of finishes and construction materials employed in historical and contemporary changes; and
5) the rarity of the resource as a historic boatyard.

Although the Boatyard has well-defined architectural composition and straightforward, cohesive form, it can be divided into areas of relative character-defining importance. The categorical significance of these areas ranges from "primary" being the most significant to "none" being the least. The intent is not to fragment the Boatyard into divisible parts that can individually be preserved, modified or discarded in future planning. Rather, the intent is to provide some direction to steer necessary treatments or alterations toward solutions permitting stabilization, life safety provisions and sustainable maintenance. The goal is to establish the Boatyard as a boat building facility providing a unique interpretive venue along the waterfront without eroding or obscuring the Boatyard's architectural authenticity or character.

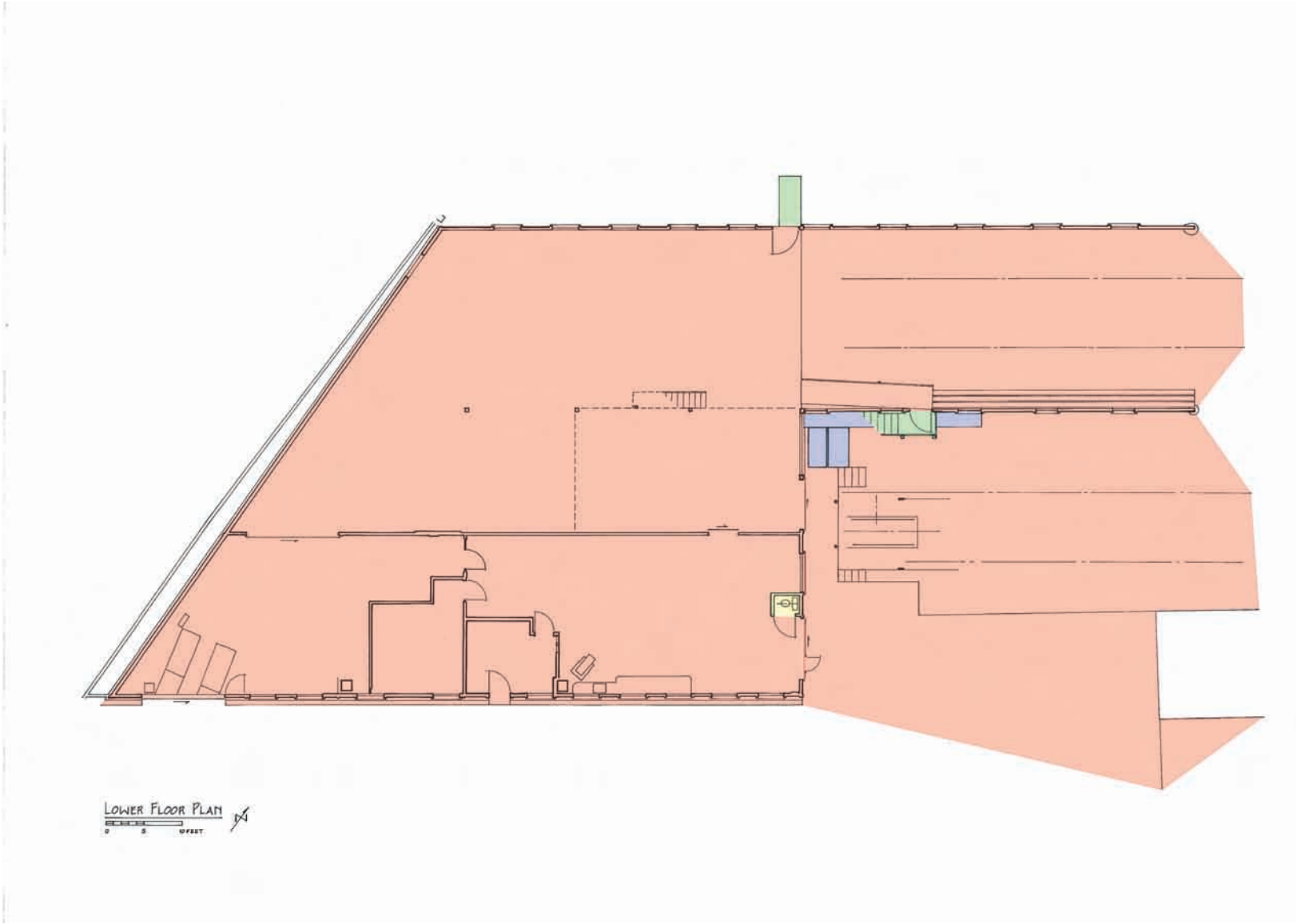
All aspects of the Boatyard landscape, interior and exterior and brick residence are within the public domain and view shed. As such, their treatment merits close attention to detail with a perspective towards the long-term preservation of the Boatyard's material and design authenticity and functional role as a city, county, state, and national cultural heritage asset.

"**Primary**" features and spaces are those original to the Boatyard, although possibly with minor changes or historically significant alterations designed to fit into the character of the original features or spaces. They convey the application of period architectural and engineering design and construction methods, and contribute directly to the original role of the structure. Their removal or extensive alteration would diminish the historic character of the structure. They may also be noted for associated historic events.

"**Secondary**" features and spaces are those original to the Boatyard, although likely to have undergone major changes and/or historically significant additions. They retain some historic character and significant elements. They exhibit utilitarian, well-crafted but not exceptional materials or architectural features. They provide important comparative context and setting for interpretation of the role of the primary elements and the design hierarchy of the overall composition.

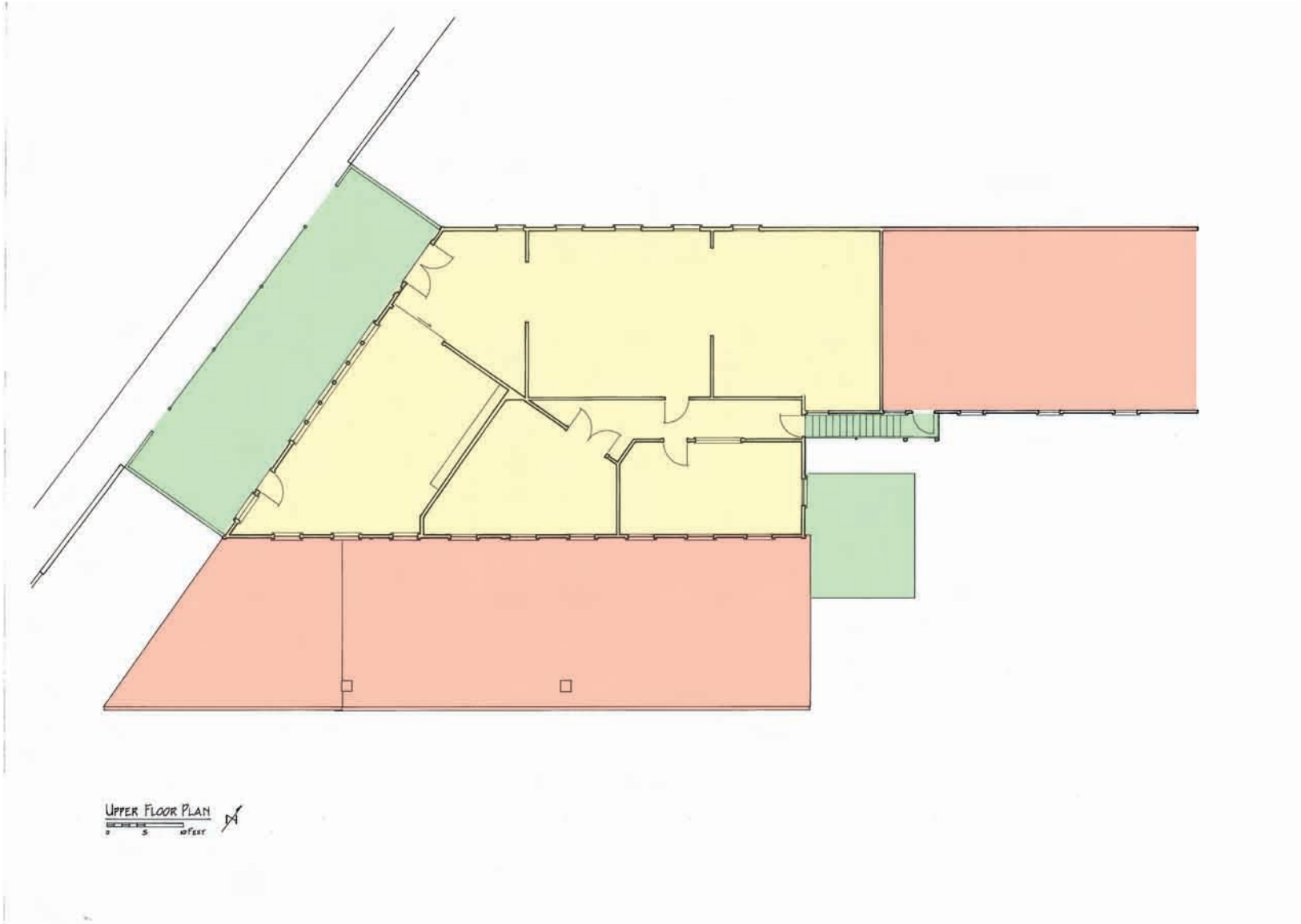
"**Minimal**" features and spaces of the boatyard have few distinguishing characteristics. An extensive, non-compatible contemporary remodel might have obliterated nearly all historically significant architectural features and spatial configurations through introduced contemporary features and spaces.

"**None**" features and spaces of the Boatyard have no remaining architectural features or spatial configurations dating to either original construction or significant historical modifications. They can also be contemporary features and spaces that are not compatible with the original design.



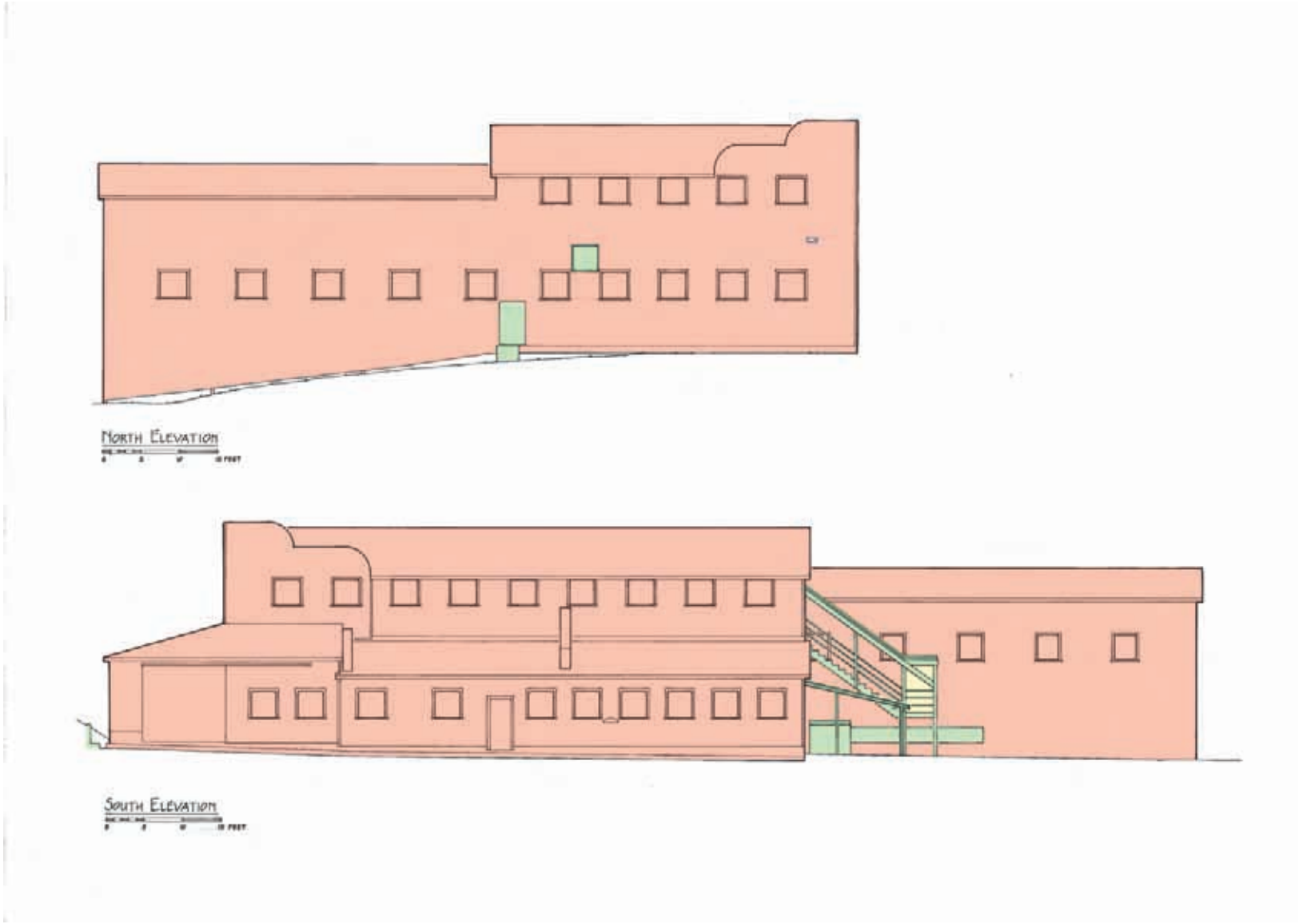
Significance Analysis Map

Primary Secondary Minimal None



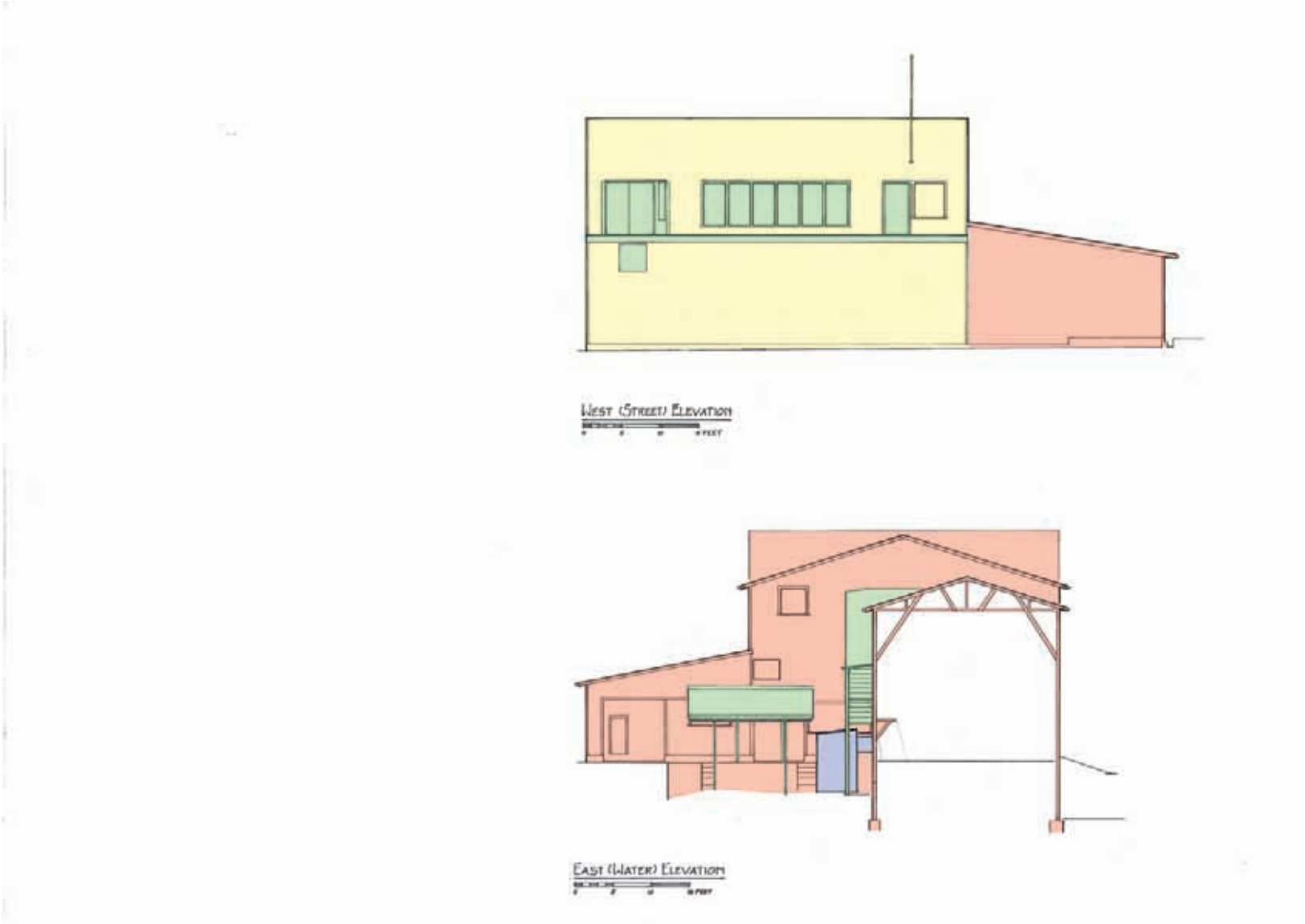
Significance Analysis Map

Primary Secondary Minimal None



Significance Analysis Map

Primary Secondary Minimal None



Significance Analysis Map

Primary Secondary Minimal None

4.3 Decision Making Matrix

The following decision-making matrix merges the elements of architectural and historical significance and current condition within an over-arching treatment recommendation of preservation along a pathway that results in a recommended approach to the future treatment of individual features, spaces and the overall appearance of the Eddon Boatyard.

The more important, significant and intact the space or feature, the more careful attention should be paid to its preservation and enhancement. Conversely, the more a space or feature has been previously altered in a non-compatible manner removing historic fabric, the more amenable this feature or space is to compatible new work. Thus, further changes should be concentrated on elements already altered, thereby reducing the need for and extent of modifications to intact, historically and architecturally significant elements.

Primary character-defining elements and spaces should be preserved in their existing conditions or restored to their original appearances at a specific pre-determined period in time in order to retain their values.

Secondary character-defining elements and spaces should be preserved in their existing states or rehabilitated to retain the original hierarchy of design elements within the composition and the supportive contextual setting for primary elements and spaces.

Minimal and **None** spaces and features with less important architectural elements that are not character-defining may be eligible for rehabilitation in which modifications to the features

and spaces or new additions to them will have less impact on the historic significance and authenticity of the Boatyard.

Existing significant primary and, to the greatest extent possible, secondary elements can be retained and reused while stabilizing and repairing the Boatyard, to allow ongoing public access for interpretive purposes.

The final element in the decision-making matrix is the treatment approach. As a general guide to the approaches and levels of treatment recommended, this Historic Structures Report utilizes the tools and terminology developed by the federal departments engaged in historic preservation policy and implementation. The historic preservation community in the United States broadly follows guidelines established by the Secretary of the Interior of the National Park Service for treating historic properties.

These guidelines delineate four different approaches that are generally accepted as standards for treating architectural spaces and elements. They are: Preservation, Rehabilitation, Restoration, and Reconstruction or Replication. These four standards can be applied to the development of interpretive programs for Eddon Boatyard and can guide its responsible stewardship and the continued interpretive role.

Preservation focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time. (Protection and stabilization are consolidated under this treatment). Preservation is defined in the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of life safety and other

code-required work to make properties functional is appropriate within a Preservation project.

Restoration depicts a property at a particular period of time in its history, while removing evidence of other periods. Restoration is defined by the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of life safety and other code-required work to make properties functional is appropriate within a Restoration project.

Rehabilitation (recommended approach) acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character. Rehabilitation is defined by the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

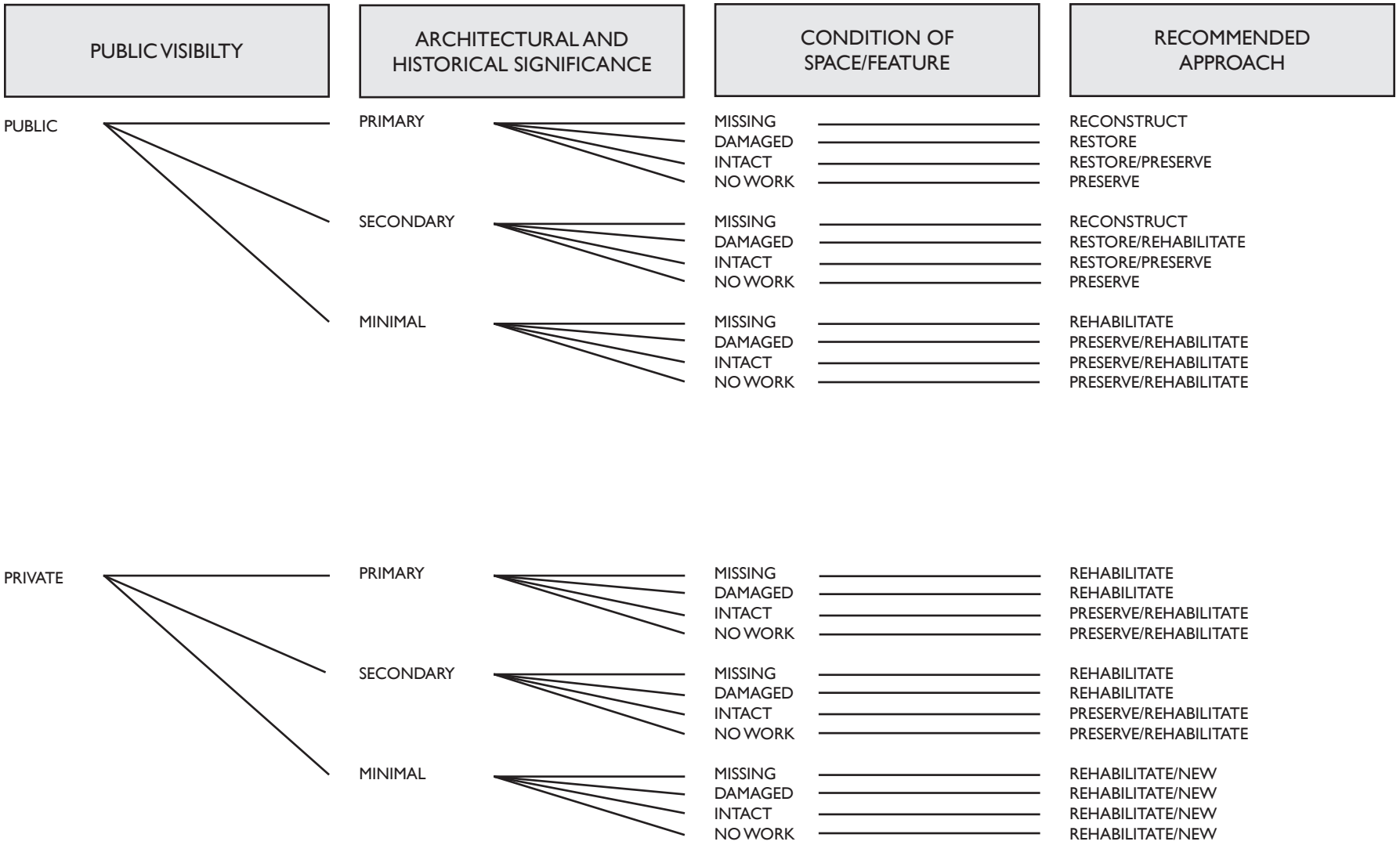
Reconstruction or **Replication** re-creates vanished or non-surviving portions of a property for interpretive purposes. Reconstruction is defined by the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

The following matrix was developed in order to determine the appropriate approach to the character-defining elements and individual spaces of the Eddon Boatyard and help match the building spaces with compatible future uses. Using the architectural and historic significance, and existing condition, this matrix shows which

approaches are most likely to retain the history and usefulness of the boatyard's spaces and features.

The spaces of the Eddon Boatyard have different levels of architectural design and details. These may be the result of the form and use of the space, the type of building materials, and/or the complexity or simplicity of the design. Primary spaces and character-defining features should be protected from damage or removal in future work. Existing significant elements in Secondary and Minimal spaces should be reused during modifications to these spaces. None or intrusive elements should be removed or the originals restored to facilitate interpretation of the original design intent of spaces and features. Existing condition is determined by the amount of original material left in the feature or space and the care that has been taken to maintain it. Missing materials may need replacement. Damaged materials may require stabilization and repair. Intact details should be retained.

Taking these criteria into consideration leads to suggested appropriate future treatments, which in turn will aid in guiding the formulation and design development for adaptive reuse of the Boatyard.


PUBLIC VISIBILTY
ARCHITECTURAL AND HISTORICAL SIGNIFICANCE
CONDITION OF SPACE/FEATURE
RECOMMENDED APPROACH
PUBLIC
PRIMARY
MISSING
RECONSTRUCT
DAMAGED
RESTORE
INTACT
RESTORE/PRESERVE
NO WORK
PRESERVE
SECONDARY
MISSING
RECONSTRUCT
DAMAGED
RESTORE/REHABILITATE
INTACT
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NO WORK
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NO WORK
REHABILITATE/NEW

ARCHITECTURAL AND HISTORICAL SIGNIFICANCE

PRIMARY
- Original to building or site, though possibly with minor changes or historically significant additions designed to fit in to the design or character of the space or setting
- Finishes and materials of a high quality and well crafted
- Convey consciousness of setting and preferences during period of construction
- Removal or extensive alteration would debase architectural and historical significance of building and detract from overall visual and physical unity of site
- May be noted for historic events or occupants

SECONDARY
- Original to building or site, though likely to have undergone major changes and/or historically significant additions
- Retain some historic character and significant elements
- Exhibit utilitarian, well-crafted but not lavish building materials or architectural features
- No important history may have been made in the spaces

MINIMAL
- Originally unused or constructed as service rooms with few distinguishing characteristics, or
- An extensive, non-compatible contemporary remodel obliterating original spatial configurations and nearly all significant architectural features through introduced contemporary spaces and elements

NONE
- Features and spaces have no remaining configurations dating to either original construction or significant historical modifications
- Contemporary features and spaces that are not compatible with the original design

CONDITION OF SPACE/FEATURE

NO WORK
- Material is intact and requires no work

INTACT
- Material still exists, but may require cleaning/ resurfacing

DAMAGED
- Material is damaged, deteriorated, altered/modified

MISSING
- Original features/spaces were removed or otherwise no longer exist

RECOMMENDED APPROACH

NO WORK
- No work is required. Repair or modify to meet user needs and maintain functions

NEW
- Add new material as needed to accomplish task

RECONSTRUCT
- Replicate the original form, features and details of missing spaces, features and materials with new materials and/or new construction

RESTORE
- Return the features and spaces to original condition at a particular period of time

REHABILITATE
- Repair, alter and add materials, features and spaces to make the item useful, while retaining its historic character

PRESERVE
- Apply measures necessary to sustain existing form, authenticity and extant materials to protect and stabilize the features and spaces

4.4 Prioritized Recommendations

The recommendations in this report cover a wide variety of future work necessary to stabilize, repair, maintain and rehabilitate the Eddon Boatyard. The work ranges in difficulty and expense. Recommendations are tailored toward the long-term goal of preservation of the Boatyard, site, landscaping, and brick residence to function as a publicly accessible interpretive maritime resource. Establishing this organized approach is necessary to facilitate coordinated fund-raising efforts, parse the collective work into manageable components that can be funded by grants, and ensure that work in each stage proceeds in a logical sequence of mutually supportive tasks rather than compounding future projects through repetition or reversal of previous work.

Tasks can be undertaken on an individual basis as funding permits or folded into a larger set of projects. It will also be necessary to match specific tasks with the available skills of local volunteers and contractors. All projects let out to bid should include a provision prioritizing contractor selection by skills and previous experience on preservation projects, not exclusively by the lowest bid. Contractors having prior experience with National Park Service certified rehabilitation projects utilizing Federal historic preservation tax credits are familiar with the attention to detail, adaptability needed to address potential changes during construction as previously unknown conditions are identified, the potential multi-agency review process often stipulated by public funding for projects, and the application of the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995).

The importance of skilled crafts persons to the success and timely, within-budget completion of projects involving the often complex and delicate work on historic structures cannot be overstated. Original building fabric is often irreplaceable if lost or damaged.

Organization of the recommendations prioritizes projects on a short-, mid-, and long-term basis according to the immediacy of stabilizing, repairing, and maintaining the Boatyard in anticipation of continued use.

- *Short-term projects are those immediate tasks that need to be done within the next one (1) to two (2) years in order to stabilize and protect the authenticity of the structure.*
- *Mid-term projects are those non-immediate preservation tasks that generally should be done within the next five (5) years to preserve the Boatyard, that relate to general weathering and maintenance, and that require planning and fund-raising to accomplish.*
- *Long-term projects are those non-immediate repairs and capital improvements for adaptive reuse that should be implemented within the next ten (10) to twenty (20) years as rehabilitation projects, and may be delayed that long to allow for thorough planning and fund raising.*

Conceptualization of projects within the short-term, mid-term, and long-term time frames organizes the tasks per the overall treatment approach of preservation under the categories of minor and major projects. This approach recognizes that the character-defining features of the Boatyard survived largely intact and that sustained maintenance of this facility exposed to maritime environmental conditions will be a substantial commitment. Therefore the emphasis of the work approach is to maintain in a sustainable manner the historic fabric that has survived for its invaluable interpretive role and to integrate adaptive new uses.

These groupings prioritize work based on the urgency of the work and its role relative to the broader treatment approach for the Boatyard. Minor projects are those that could be undertaken by local volunteers. Major projects will require specialized services, substantial funding and the intense time and resource commitment of a contractor.

It is extremely important that the staff of the City of Gig Harbor involved in planning work on the Boatyard take the necessary time to review the full scope of work involved in the short-, mid-, and long-term recommendations to gain familiarity with the broad patterns of work to be done. This will assist in the development and coordination of tasks pertaining to the stabilization and rehabilitation of the Boatyard, so that immediate needs are resolved in a timely manner, and long-term projects and future Boatyard uses are planned, funded, implemented and coordinated with surrounding land use and harbor activities.

Most funding agencies will require a preservation plan from their recipients to ensure that priorities are well understood as part of the overall scheme for the building's stewardship.

Utilization of federal funding would also result in application of Section 106 review to the proposed work to determine the effects of work on the character-defining features. To this end, recommendations were developed for compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995). This report was written with the concept in mind that certain expensive and complicated items could be put off for several years to allow time to determine the best solution, find funding sources, and hire competent and sensitive crafts persons to perform the work.

The following planning and project recommendations stem from archival research and site visits conducted in April and May of 2006. No destructive investigation was conducted.

Ellisport
Engineering, Inc.

Site Survey Report And Recommendations
May 5, 2006
Eddon Boatyard, Gig Harbor, WA

Introduction

Below, we have presented the results of our site survey of the Eddon Boatyard, conducted on April 11, 2006. We have broken our information out into different categories, and classed them as either "short term" or "long term". This refers to whether the recommendations should be implemented within the next 3 years (short term), or can maybe wait until between 5-10 years (long term). We have also presented rough order-of-magnitude (ROM) costs to assist in evaluation of the work and fundraising efforts.

Site

Short Term

- **Drainage** – Important drainage issues are maintenance of the existing drainage systems. This includes periodic observance of function and flow, along with cleaning out of debris.
- **Grading** – The site grading generally appears adequate.
- **Log Bulkhead** – The log bulkhead, off-property, on the north side of the building needs to be addressed. It is heavily rotted, and shore erosion will soon advance toward the building. Some sort of new protective bulkhead system should be installed to replace the old logs. Failing that, a sheetpile bulkhead wall should be installed on the property line, advancing a minimum of 30' west along the property line from the shore.

Long Term

- **Drainage –** Site drainage needs to be collected and controlled, especially on the north side of the building, where surface runoff has undermined the building's perimeter foundation and floor slab. There is much water draining from the west side of the site toward the building. This water is collected in a shallow channel and diverted to the south and under the building. Driveway and parking drainage runs off to the water, with no attempt at collection or treatment of the runoff water. Downspout drainage also needs to be collected and tightlined to the beach.
- **Grading** – An attempt should be made to address better site grading locally away from the building to a gentle swale located near the property line.

20501 81st Ave. S.W.
Vashon, WA 98070
(206) 463-5311 (phone)
(206) 463-2578 (fax)
email@ellisportengineering.com (email)

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Building

Short Term

- **Entry Ramp** – Some of the main floor entry ramp supports may be susceptible to failure in an earthquake. Their attachment to the concrete retaining wall should be improved with additional metal connections. The ramp guardrails need to be improved to current code, to mitigate a small child squeezing through the rails and falling.
- **Siding** – There is some siding damage that should be repaired to restore the buildings' exterior integrity.
- **Public Access and Safety** – Generally, the building is not designed to current codes for safety. Guardrails, stairs, and walkways may have to be improved and protected where public access is desired. ADA issues will also need to be addressed.

Long Term

- **Mezzanine** – The mezzanine in the boat construction high bay is likely illegal due to insufficient exiting, lack of sprinklers, and head height issues. Consideration should be given to the need for this platform and if it should be improved to accommodate tours and viewing of the boat construction areas.
- **Public Viewing Walkway** – There has been much discussion about having an elevated public access walkway throughout the boat manufacturing bays, to allow for public viewing. Though yet to be defined, we have included some ROM dollars for it.
- **Chimney** – The chimney should be braced back to the roof line to mitigate damage in an earthquake.
- **Foundation, North Side** – The foundation and floor slab have been undermined due to long term surface runoff. These should be shored and a new foundation constructed to bear on firm, undisturbed soil. Grout may have to be pumped under the concrete floor slab to fill voids.
- **Foundation, Boat Launch Shed** – The foundation for the boat launch shed is inadequate. The footings are too small, appear to be too shallow, and do not protect the posts from water damage. These footings will have to be replaced, most likely with piles or larger, deeper footings.

Building Seismic Retrofit Recommendations

- **General Building Issues** – There are many minor seismic strengthening considerations for the building, such as adding metal connectors at critical locations, anchor bolts, and metal connectors at floor-to-wall and roof-to-wall

20501 81st Ave. S.W.
Vashon, WA 98070
(206) 463-5311 (phone)
(206) 463-2578 (fax)
email@ellisportengineering.com (email)

connections. Generally, these connectors will be hidden from view to maintain the visual integrity of the building.

- **Inside Railway Carriage Structure** – This structure is poorly braced against both wind and seismic loads, and has very poor foundations. We have provided a conceptual sketch for 5 steel frames to be installed interior to the building on new foundations, to brace the building.

- **Railway Carriages/Rail System**

Short Term

- **Carriages** – The carriages are unsafe to traverse and should not be used.
- **Rails** – The rails are extensively deteriorated. Both the wood and steel comprising the rail systems are probably unusable for everything but small boats.

Long Term

- **Rails** – The rails are extensively deteriorated. They will have to be completely re-built with new materials.
- **Hoist & Cable System** – This system is beyond the scope of this study and should be evaluated by a qualified mechanic.

Dock/Float

Short Term

- **Ramp** – The entry ramp to the dock has no guardrail and is unsafe to traverse. This must be corrected.

Long Term

- **Dock** – The dock is constructed of deteriorating creosote-treated piles. These will eventually have to be replaced with something less toxic to the marine environment. Repair of the dock and replacement of the piles may need to be coordinated with the sea floor cleanup/mitigation efforts.

Residence

Short Term

- **NIC** – Out of scope.

Long Term

- **NIC** – Out of scope.

20501 81st Ave. S.W.
Vashon, WA 98070
(206) 463-5311 (phone)
(206) 463-2578 (fax)
email@ellisportengineering.com (email)

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Additional Studies

- **Geotechnical Survey** – A geotechnical engineer should be retained to investigate the site soils and water table issues. This engineer will provide recommendations for foundation suitability, soil and water issues, and recommendations for mitigating shoreline erosion.
- **Hazardous Materials Survey** – We are unclear how extensive the hazardous materials survey was for the site. Additional work may need to be done to check soil under the slab, in areas where solvents were used, and in any area where there was an underground oil tank.
- **Site Survey** – A surveyor should survey the property boundaries and produce information for both drawings and electronic files. It is likely that the CAD survey will be needed for numerous projects planned for the Eddon Boatyard.

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Vashon, WA 98070
(206) 463-5311 (phone)
(206) 463-2578 (fax)
email@ellisportengineering.com (email)

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ROM Cost Estimate

	ROM Cost
Site	
Short Term	
• **Drainage** –	$0.00 (maintenance)
• **Grading** –	$0.00 (maintenance)
• **Log Bulkhead** –	$5,000-$20,000
Long Term	
• **Drainage –**	$5,000-$15,000
• **Grading** –	$2,000
Building	
Short Term	
• **Entry Ramp** -	$500
• **Siding** –	$1,000
• **Public Access and Safety** – (depends upon public access)	$1,000-$5,000+
Long Term	
• **Mezzanine** –	$20,000
• **Public Viewing Walkway** -	$50,000-$70,000
• **Chimney** –	$1,000
• **Foundation, North Side** –	$5,000-$10,000
• **Foundation, Boat Launch Shed** –	$5,000-$10,000
Building Seismic Retrofit Recommendations	
• **General Building Issues**	$5,000-$10,000
• **Inside Railway Structure** – new steel frames/fndns.	$70,000-$100,000
Launch/Rail System	
Short Term	
• **Stand** –	$0.00 (maintenance)
• **Rails** –	$0.00 (maintenance)
Long Term	
• **Rails** –	$10,000-$20,000
• **Hoist & Cable System** –	$5,000-$10,000
Dock/Float	
Short Term	
• **Ramp** –	$5,000
Long Term	
• **Dock** –	$25,000

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Vashon, WA 98070
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email@ellisportengineering.com (email)

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Residence

Short Term

- **NIC** – Out of scope.

Long Term

- **NIC** – Out of scope.

Additional Studies

- **Geotechnical Survey** – $5,000-$10,000
- **Hazardous Materials Survey** – $5,000-$10,000
- **Property Survey** - $2,000-$5,000

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Vashon, WA 98070
(206) 463-5311 (phone)
(206) 463-2578 (fax)
email@ellisportengineering.com (email)

4.5 Cost Estimate

The intent and purpose of the following cost estimate is to provide preliminary figures with which to pursue funding and guide basic budgetary planning. No warranty is extended as to the applied accuracy of these figures. Prior to any work, the architect and/or engineer retained for each project should generate a specific new cost estimate for purposes of bidding and contracting. No adjustments were made to mid- and long-term cost projections to account for dollar value and material cost changes. The following table's sequence of tasks corresponds directly with sequencing of prioritized recommendations.

EYSAMAN & Company architecture

Opinion of Probable Cost **Revision 1: 30 June 2006**

Project: Eddon Boatyard Restoration Project

The information contained is preliminary to establish a project budget.

	Preliminary Estimate	Areas		SF Cost		Lump Sum Costs	Reduction	Opinion of Probable Cost Project Budget Concept Design Budget		
BLDG	Fire Sprinkler System	6,600	SF	$0	$/SF:	$ 100,000	100%	$ 100,000	Estimate	Fire Sprinkler System
	General building Electrical Upgrade	6,600	SF	$10	$/SF:	$ -	100%	$ 66,000	Estimate	Upgrade
	Perimeter Building Drainage		SF		$/SF:	$ 10,000	100%	$ 10,000	Estimate	Perimeter Building Drainage
	Exterior Painting & restoration		SF		$/SF:	$ 65,000	100%	$ 65,000	Estimate	Exterior Painting & restoration
	ReRoofing		SF		$/SF:	$ 25,000	100%	$ 25,000	Estimate	ReRoofing
	Interior Storm Windows		SF		$/SF:	$ 12,000	100%	$ 12,000	Estimate	Interior Storm Windows
	Entrance Bridge Improvements		SF		$/SF:	$ 5,000	100%	$ 5,000	Estimate	Entrance Bridge Improvements
	Restore Commercial Storefront		SF		$/SF:	$ 7,500	100%	$ 7,500	Estimate	Restore Commercial Storefront
	Renovate Store	600	SF	$100	$/SF:	$ -	100%	$ 60,000	Estimate	Renovate Store
		-	SF	$100	$/SF:	$ -	100%	$ -	Estimate	0
	Secondary Exit Stair		SF		$/SF:	$ 15,000	100%	$ 15,000	Estimate	Secondary Exit Stair
	Misc. Loft Improvements	1,300	SF		$/SF:	$ 5,000	100%	$ 5,000	Estimate	Misc. Loft Improvements
	Misc Restoration Machine Shop & Tool Room	750	SF		$/SF:	$ 9,000	100%	$ 9,000	Estimate	Misc Restoration Machine Shop & Tool Room
	Misc. Restoration Joiner Shop & Office Renovations	1,000	SF		$/SF:	$ 12,000	100%	$ 12,000	Estimate	Misc. Restoration Joiner Shop & Office Renovations
	Visitor Observation Platform/corridor w/ Full ADA Accessibility		SF		$/SF:	$ 80,000	100%	$ 80,000	Estimate	Visitor Observation Platform/corridor w/ Full ADA Accessibility
	HVAC & Domestic Hot Water	600	SF		$/SF:	$ 6,500	100%	$ 6,500	Estimate	HVAC & Domestic Hot Water
	Dust Collection System		SF		$/SF:	$ 19,800	100%	$ 19,800	Estimate	Dust Collection System
	Compressed Air System		SF		$/SF:	$ 15,375	100%	$ 15,375	Estimate	Compressed Air System
	Steam Box		SF		$/SF:	$ 12,150	100%	$ 12,150	Estimate	Steam Box
	Security System		SF		$/SF:	$ 3,000	100%	$ 3,000	Estimate	Security System
	Rainwater Collection & Storage		SF		$/SF:	$ 7,500	100%	$ 7,500	Estimate	Rainwater Collection & Storage
	Chimney Bracing		SF		$/SF:	$ 1,000	100%	$ 1,000	Estimate	Chimney Bracing
	North Side Fndn Repairs		SF		$/SF:	$ 15,000	100%	$ 15,000	Estimate	North Side Fndn Repairs
	General Bldg Struct Issues		SF		$/SF:	$ 15,000	100%	$ 15,000	Estimate	General Bldg Struct Issues
	Way Struct Frames		SF		$/SF:	$ 100,000	100%	$ 100,000	Estimate	Way Struct Frames
	Way Fndn Replacement		SF		$/SF:	$ 15,000	100%	$ 15,000	Estimate	Way Fndn Replacement
	Toilet Rooms	440	SF	$150	$/SF:	$ -	100%	$ 66,000	Estimate	Toilet Rooms
	Renovate Residence	1,400	SF	$125	$/SF:	$ -	100%	$ 175,000	Estimate	Renovate Residence
								$ 68,183	10%	Design Contingency
	Building Construction Budget:							**$ 991,008**		Building Construction Budget:
	Contractor OH & Profit:		15%	typical		100%		**$ 148,651**		
	Total Building Construction Budget:							**$ 1,139,659**		Total Building Construction Budget:
SITE	Paving & Parking	-		$0	$/SF:	$ 20,000		$ 20,000	Estimate	Paving & Parking
	Site Lighting	-		$0	$/SF:	$ 10,000		$ 10,000	Estimate	Site Lighting
	Planting	-	SF	$0	$/SF:	$ 5,000		$ 5,000	Estimate	Planting
	Site Drainage	-	SF	$0	$/SF:	$ 5,000		$ 5,000	Estimate	Site Drainage
								$ 3,500	10%	Design Contingency
	Site Construction Budget:							**$ 43,500**		Site Construction Budget:
	Contractor OH & Profit:		15%	typical		100%		**$ 6,525**		
	Total Site Construction Budget:							**$ 50,025**		Total Site Construction Budget:
	Total Construction Budget:							**$ 1,189,684**		Construction [Hard Costs]
	Owner provided work:		0.00%			$ -		**$ -**		

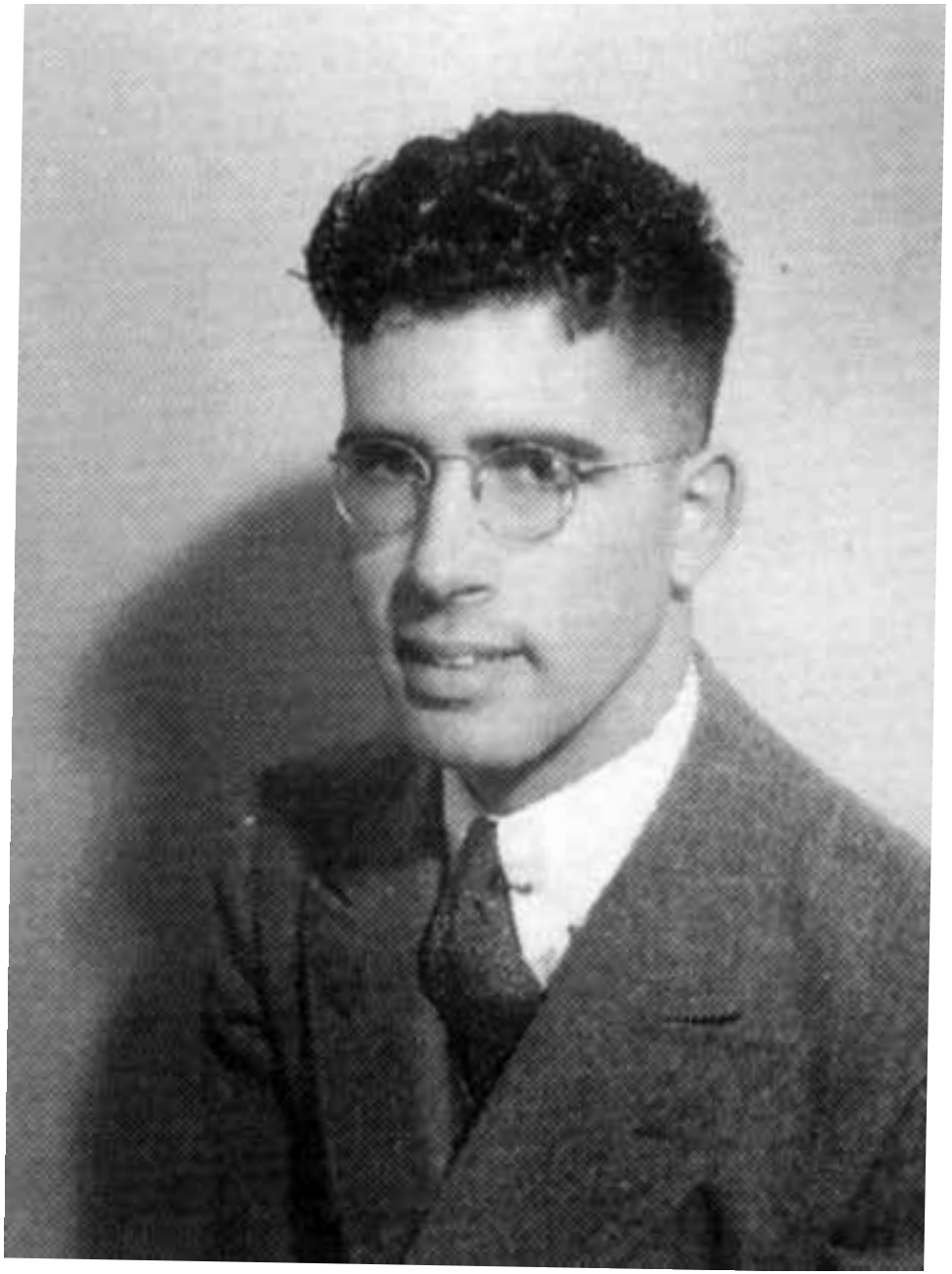
Soft Costs

$ 1,189,684			Taxable Construction Work
$ 104,692	8.80%		Construction Sales Tax:
$ 7,096	Estimate		Permit Fees:
$ 140,000	11.8%		Architectural / Engineering Fees & Expenses:
$ -	Estimate		Site Survey
$ 7,500	Estimate		Geotechnical Engineer
$ 7,500	Estimate		Civil Engineering
	Estimate		Hazardous Materials Survey
$ -	Estimate		Landscape Design
$ 2,500	Estimate		Independent Cost Estimate
$ 145,647	10.0%		Construction Contingency
$ -	0.0%		Additional mark-up
$ 1,604,619			**Today Project Budget:**
1.03	3.0%	1.0	Annual Escalation
$ 38,831			Construction costs escalation
$ 1,643,450	2.0		**Yr Project Budget:**
$ 1,643,450			

Page 1

Supplemental Information

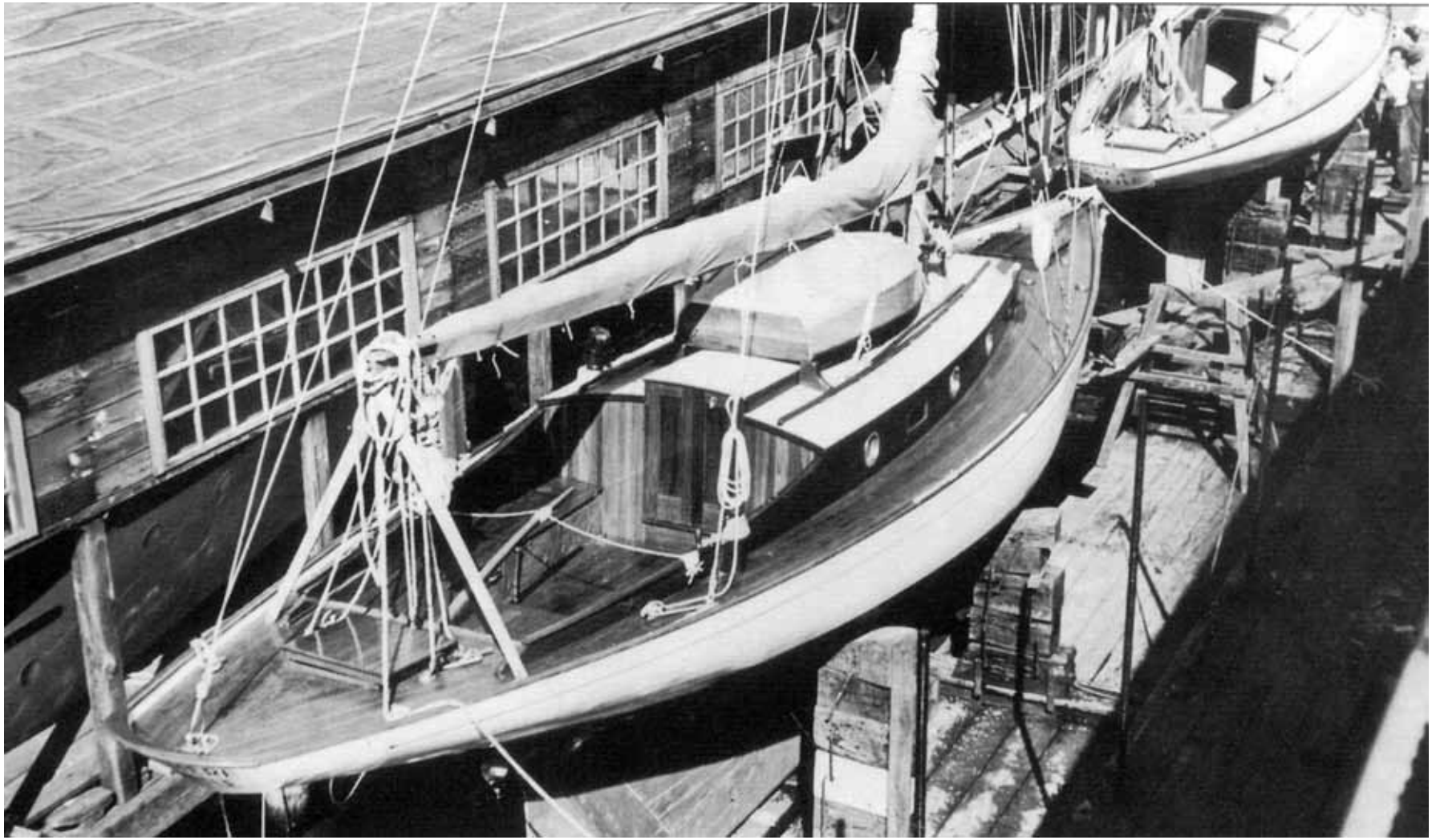
5.1 Early Views



Portrait of Ben Seaborn taken at age 24 in 1936. Photographer: Ray Krantz. Source: Bunnell, Steve. (May/June 1999). Wooden Boat, No. 148. "Shooting Star: The Tragically Short Career of Ben Seaborn," p. 76.

The CIRRUS II, later renamed the MISTRAL. Under the latter name, the boat twice received line honors in the Swiftsure Race. Photographer: Ray Krantz. Source: Bunnell, Steve. (May/June 1999). Wooden Boat, No. 148. "Shooting Star: The Tragically Short Career of Ben Seaborn," p. 77.

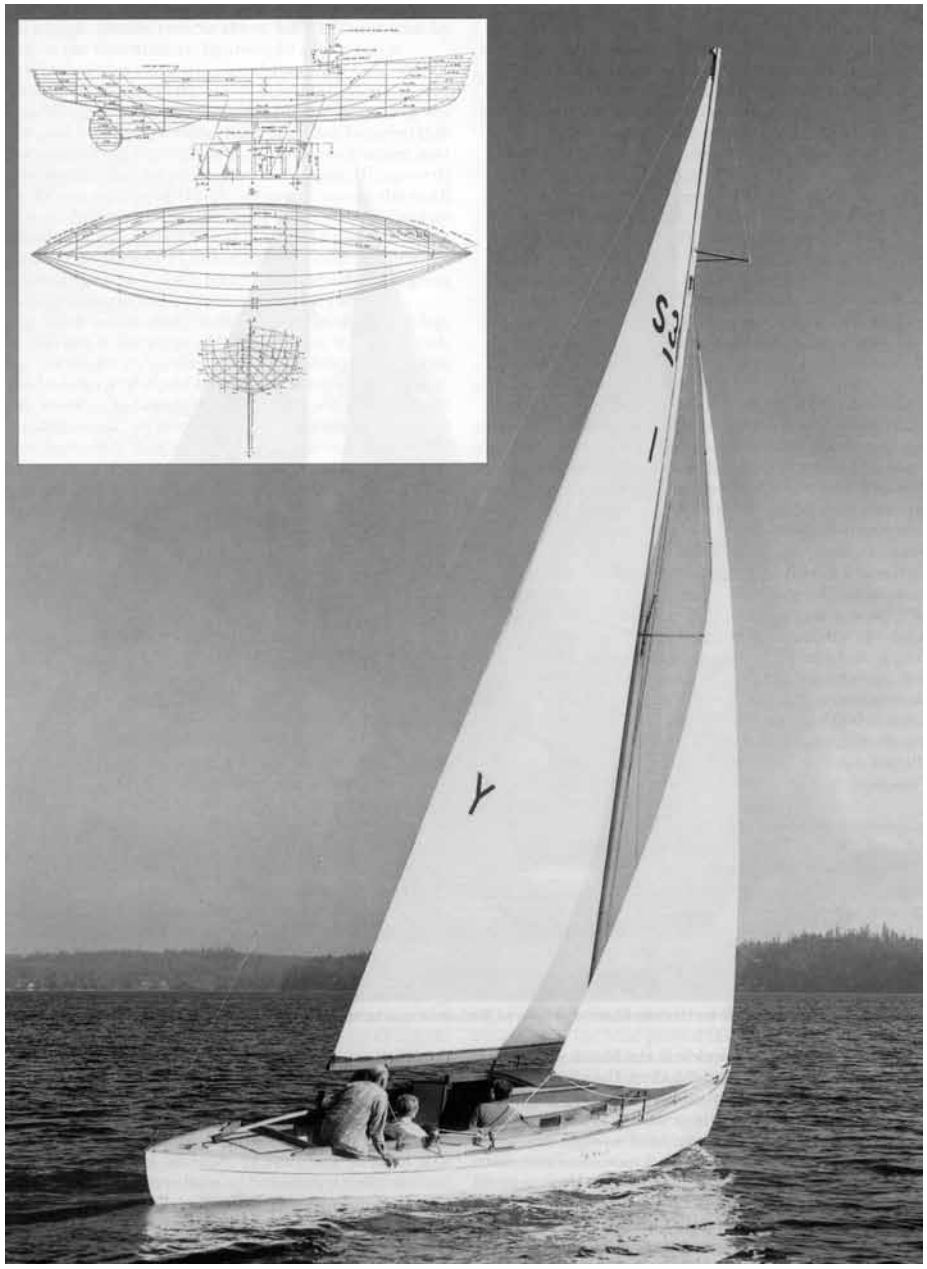
The CIRCE, launched by Ben Seaborn at age 17. The boat originally measured 54' and was later lengthened to 63'. Photographer: Ray Krantz. Source: Bunnell, Steve. (May/June 1999). Wooden Boat, No. 148. "Shooting Star: The Tragically Short Career of Ben Seaborn," p. 77.



WE'RE HERE (left) and the TOLA (right) at Blanchard Yard. Both were designed by Ben Seaborn as performance-oriented family cruisers. Photograph courtest of the Museum of History and Industry. Caption information source: Bunnell, Steve. (May/June 1999). Wooden Boat, No. 148. "Shooting Star: The Tragically Short Career of Ben Seaborn," p. 78.

Katherine, Ben Seaborn's wife, christening the liberty ship TERMINAL KNOT during Seaborn's wartime work at Kaiser Permanante Steamship Company. Photograph courtesy of Patricia Seaborn. Source: Bunnell, Steve. (May/June 1999). Wooden Boat, No. 148. "Shooting Star: The Tragically Short Career of Ben Seaborn," p. 79.

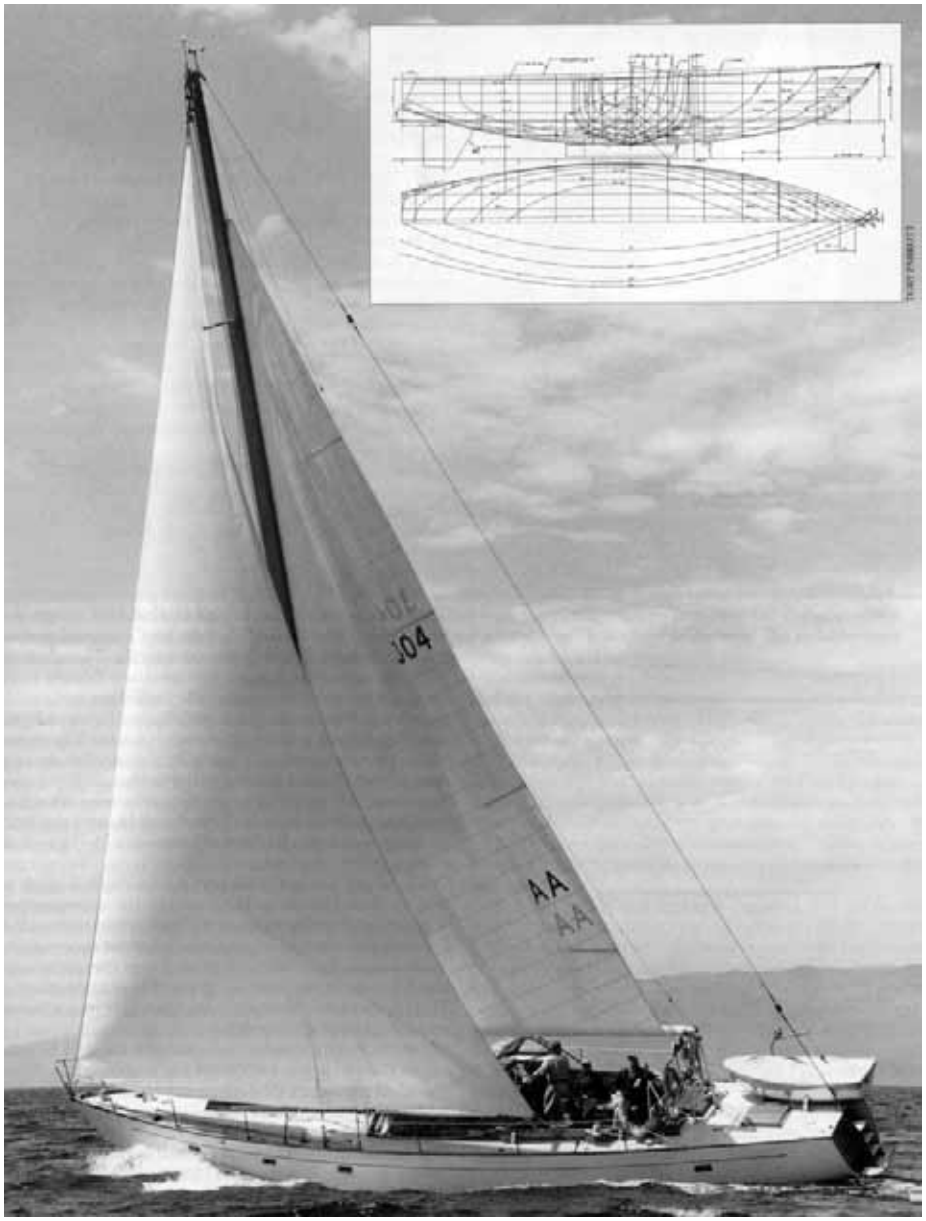
Seaborn's NAUTILUS II (front) built for Harbine Monroe. Photographer: Ken Ollar. Source: Bunnell, Steve. (May/June 1999). Wooden Boat, No. 148. "Shooting Star: The Tragically Short Career of Ben Seaborn," p. 81.



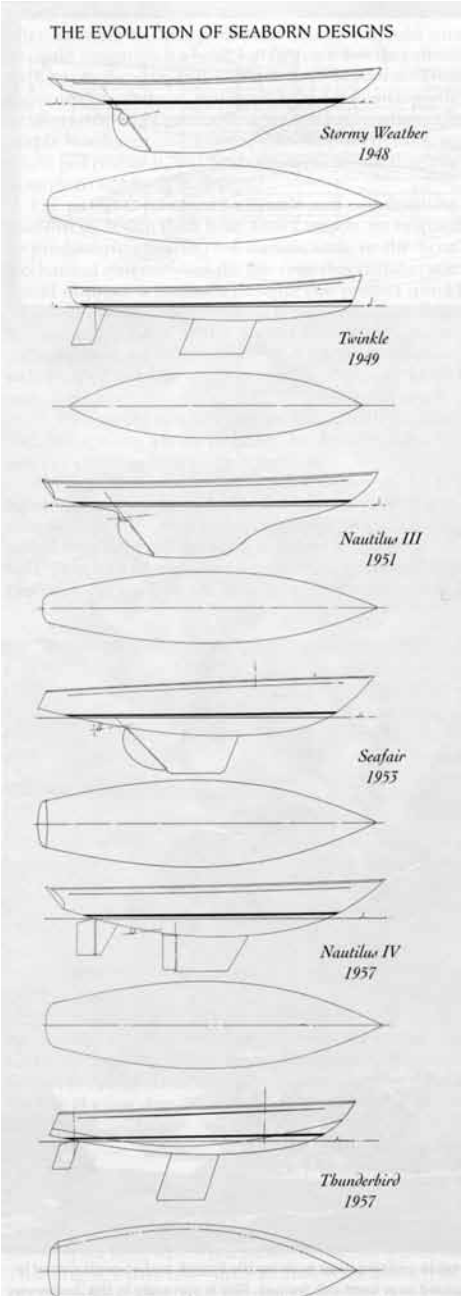
Seaborn's TWINKLE, launched in August of 1949. Photographer: Ken Ollar. Source: Bunnell, Steve. (May/June 1999). Wooden Boat, No. 148. "Shooting Star: The Tragically Short Career of Ben Seaborn," p. 82.

NAUTILUS III, designed by Seaborn. Completed in 1951, the boat won the Vashon Island Race the same year. Photographer: Ken Ollar. Source: Bunnell, Steve. (May/June 1999). Wooden Boat, No. 148. "Shooting Star: The Tragically Short Career of Ben Seaborn," p. 83.

ROMP, designed by Seaborn for his personal use and shown with him at the helm. Built in 1953 by Monson. Photograph courtesy of Patricia Seaborn. Source: Bunnell, Steve. (May/June 1999). Wooden Boat, No. 148. "Shooting Star: The Tragically Short Career of Ben Seaborn," p. 84.



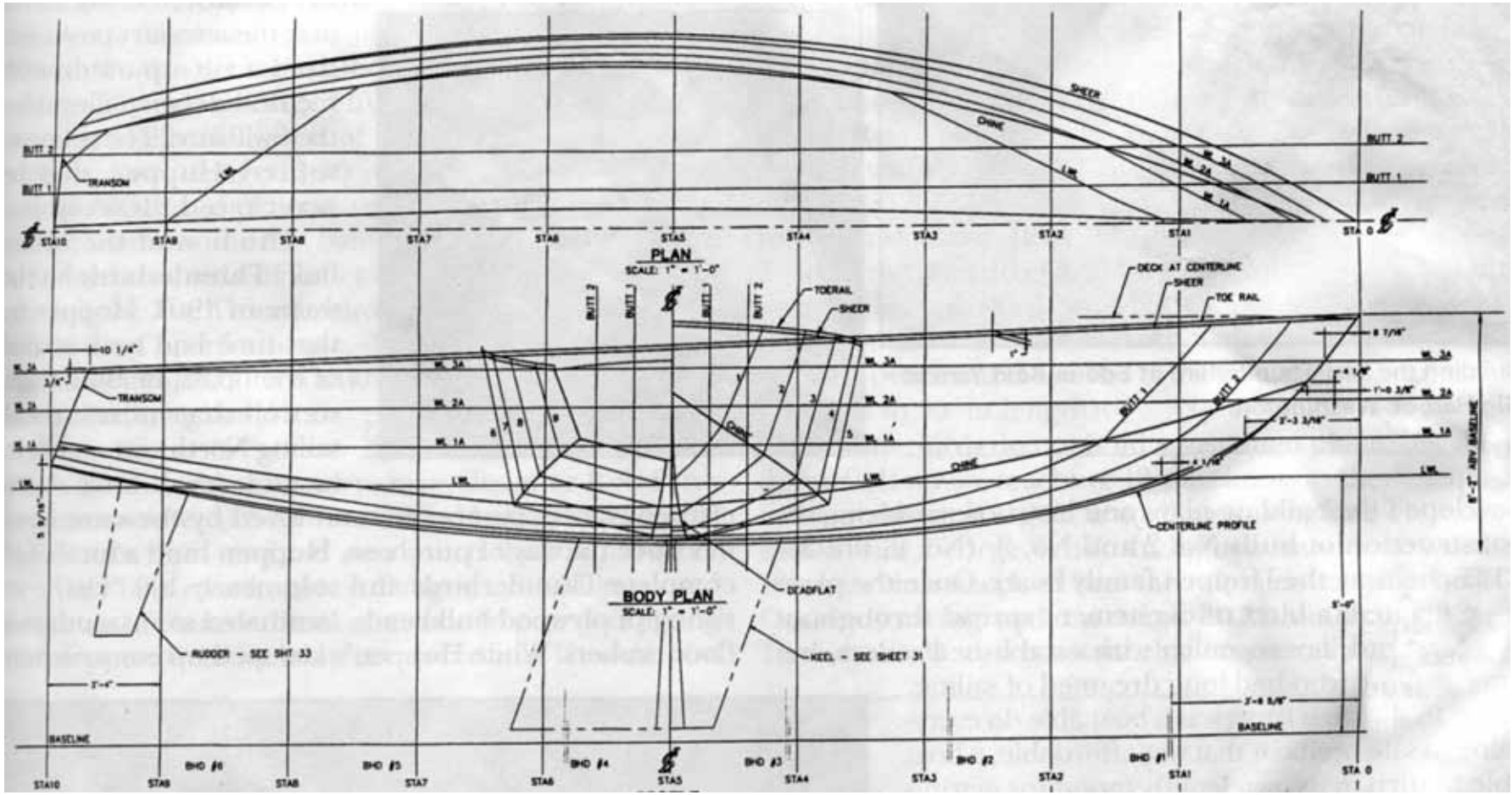
SEA FEVER, commissioned in 1956 and built by Vic Franck. Photographer: Ken Ollar. Source: Bunnell, Steve. (May/June 1999). Wooden Boat, No. 148. "Shooting Star: The Tragically Short Career of Ben Seaborn," p. 85.



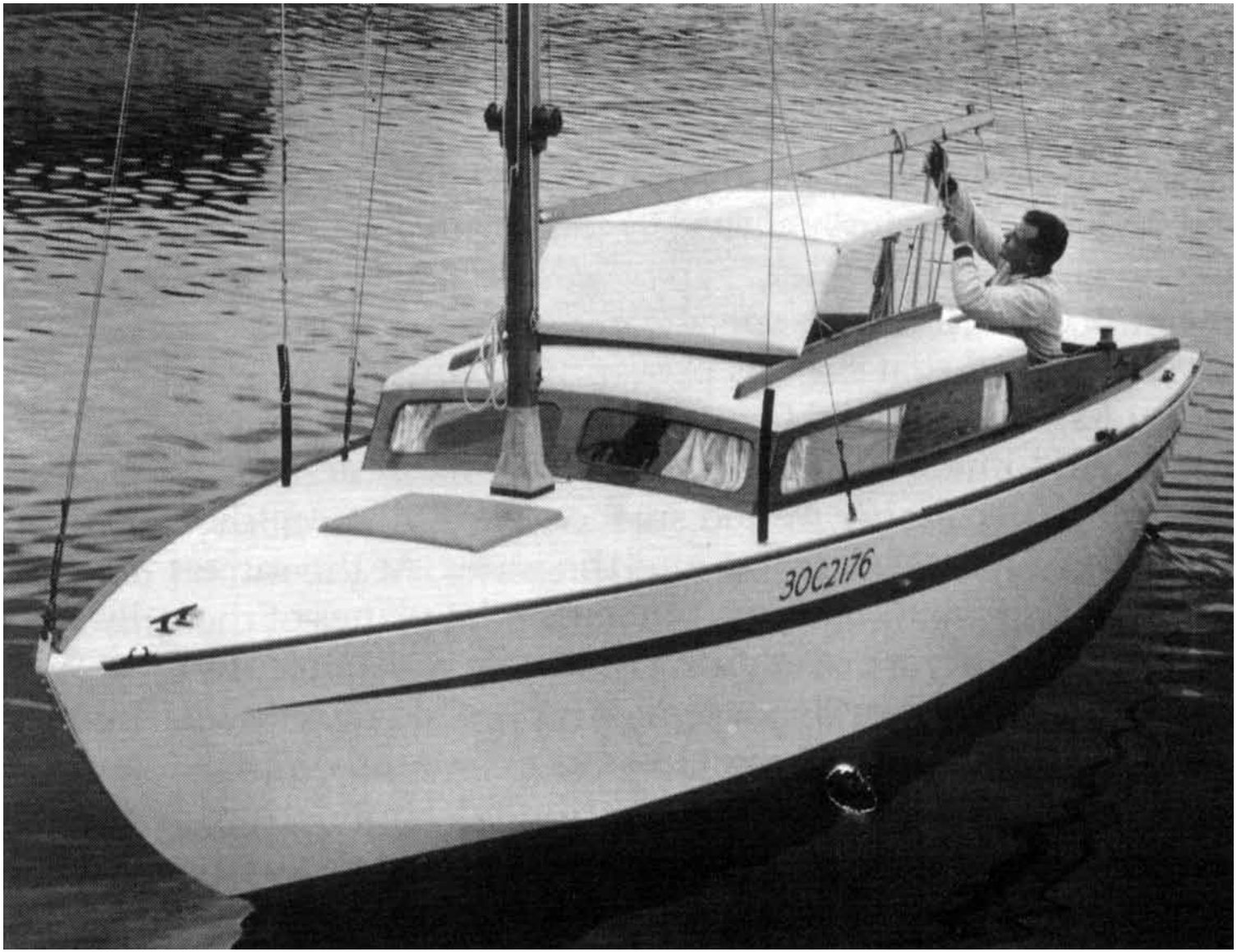
The progression of Ben Seaborn's designs. Drawings by Bob Perry. Source: Bunnell, Steve. (May/June 1999). Wooden Boat, No. 148. "Shooting Star: The Tragically Short Career of Ben Seaborn," p. 86.

TATOOSH in 1958 marked a change from Seaborn's typical designs. The owner had requested more comfort rather than performance. Seaborn died before the drawings were complete. Sparkman and Stephens completed the boat's interior. Photographer: Ken Ollar. Source: Bunnell, Steve. (May/June 1999). Wooden Boat, No. 148. "Shooting Star: The Tragically Short Career of Ben Seaborn," p. 87.

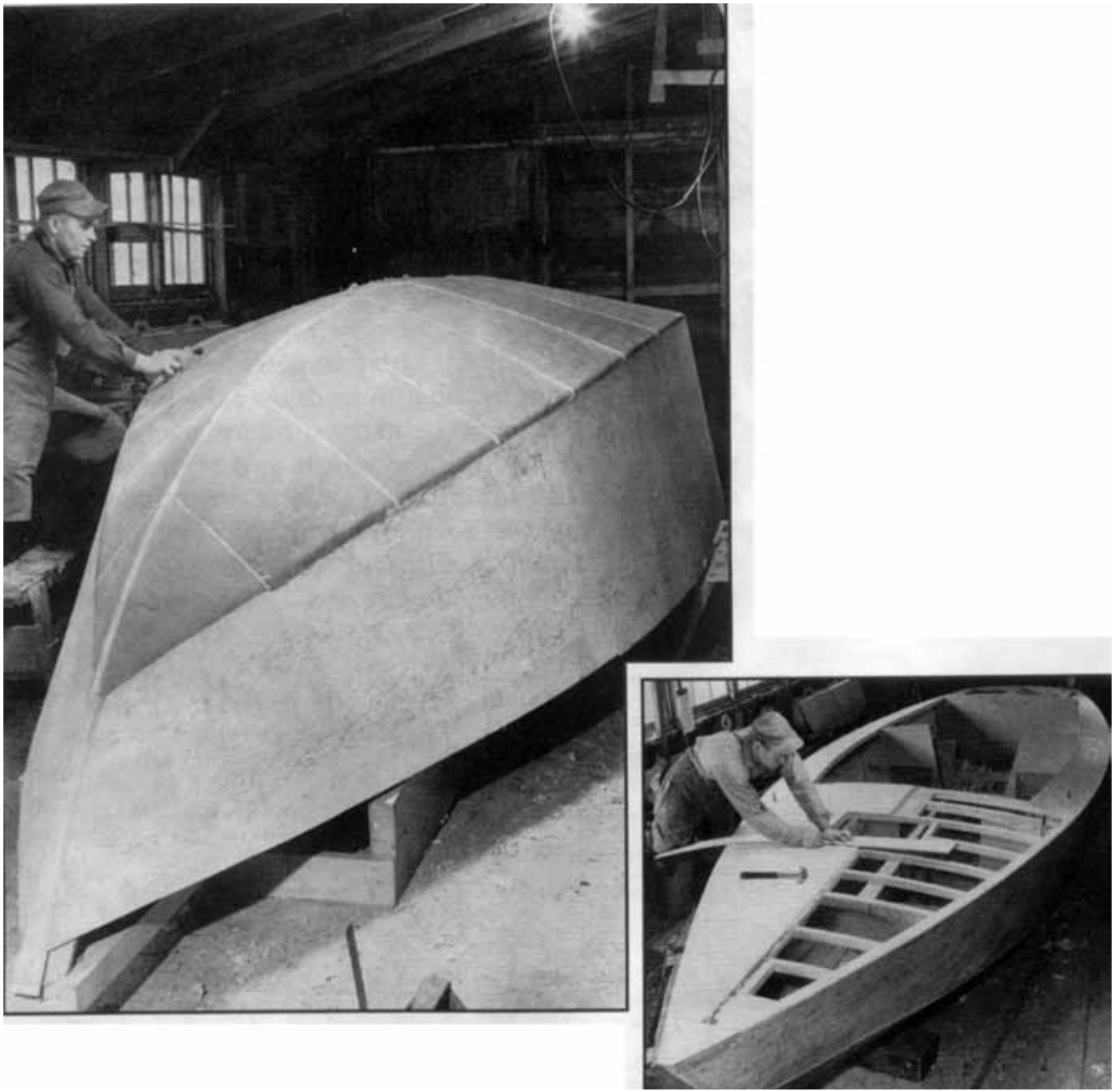
Thunderbird hull, conceived in 1957. The design differed markedly from standard sailboat designs. Photographers: Tom and Pat Norris. Source: Bunnell, Steve. (July/August 1999). Wooden Boat, No. 149. "The Thunderbird: Ben Seaborn's Enduring Legacy," p. 76.



The lines of the Thunderbird hull as distributed by the International Thunderbird Class Association (ITCA). Source: Bunnell, Steve. (July/August 1999). Wooden Boat, No. 149. "The Thunderbird: Ben Seaborn's Enduring Legacy," p. 77.



Thunderbird No. 1 after launching. Photograph courtesy of the ITCA. Source: Bunnell, Steve. (July/August 1999). Wooden Boat, No. 149. "The Thunderbird: Ben Seaborn's Enduring Legacy," p. 78.



Construction of Thunderbird No. 1 at the Eddon Boatyard. Photograph courtesy of the ITCA. Source: Bunnell, Steve. (July/August 1999). Wooden Boat, No. 149. "The Thunderbird: Ben Seaborn's Enduring Legacy," p. 78.

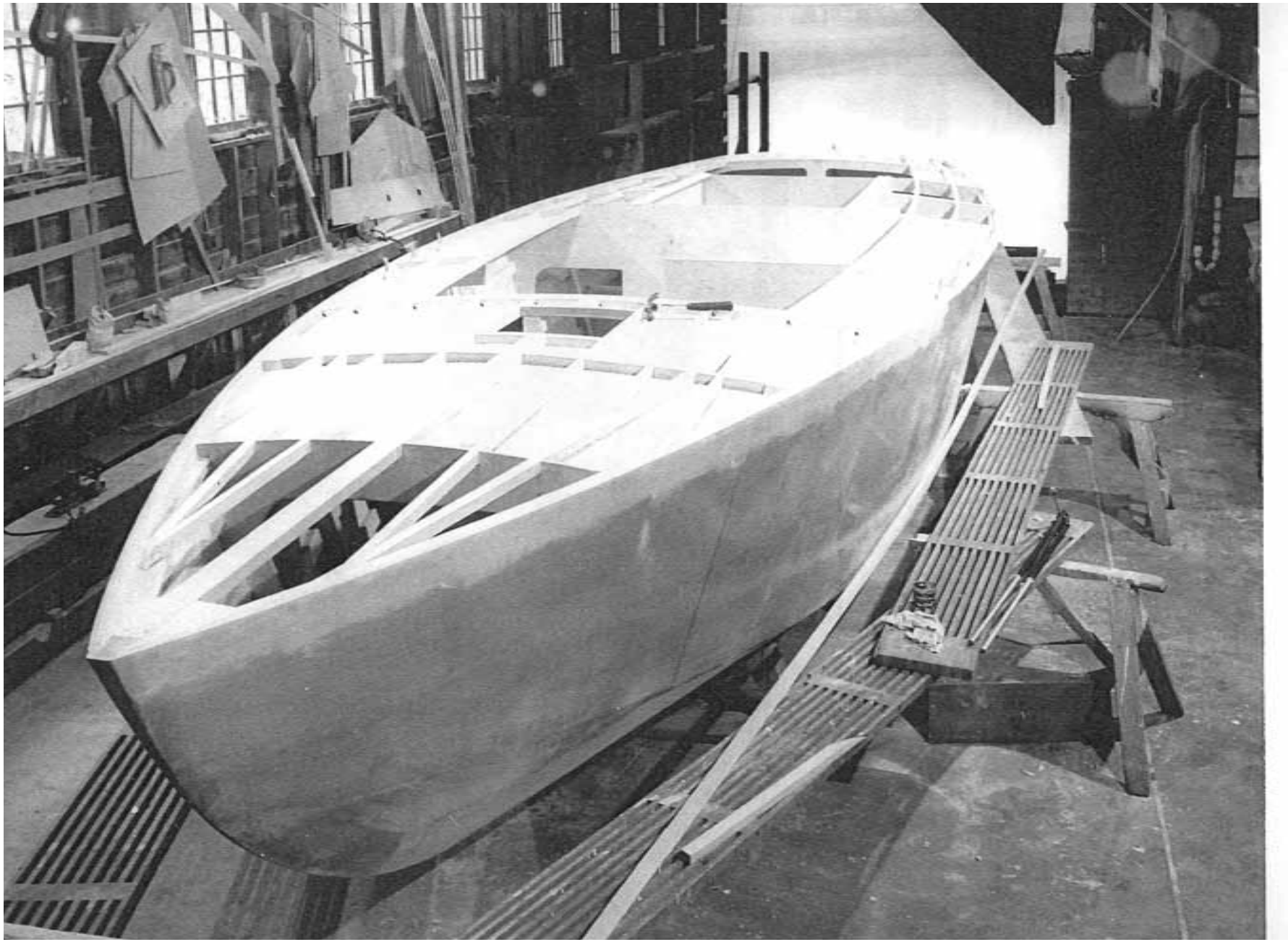
Thunderbirds at the start of the 1967 race of New South Wales, Australia. Photograph courtesy of the ITCA. Source: Bunnell, Steve. (July/August 1999). Wooden Boat, No. 149. "The Thunderbird: Ben Seaborn's Enduring Legacy," p. 79.

Racing on Lake Washington. No. 333 is former World Champion HULUJIMAMA. Photograph courtesy of the ITCA. Source: Bunnell, Steve. (July/August 1999). Wooden Boat, No. 149. "The Thunderbird: Ben Seaborn's Enduring Legacy," p. 80.

Wooden hulled Thunderbird at the front in the World in Seattle in 1992. Photographer: Neil Rabinow. Source: Bunnell, Steve. (July/August 1999). Wooden Boat, No. 149. "The Thunderbird: Ben Seaborn's Enduring Legacy," p. 81.

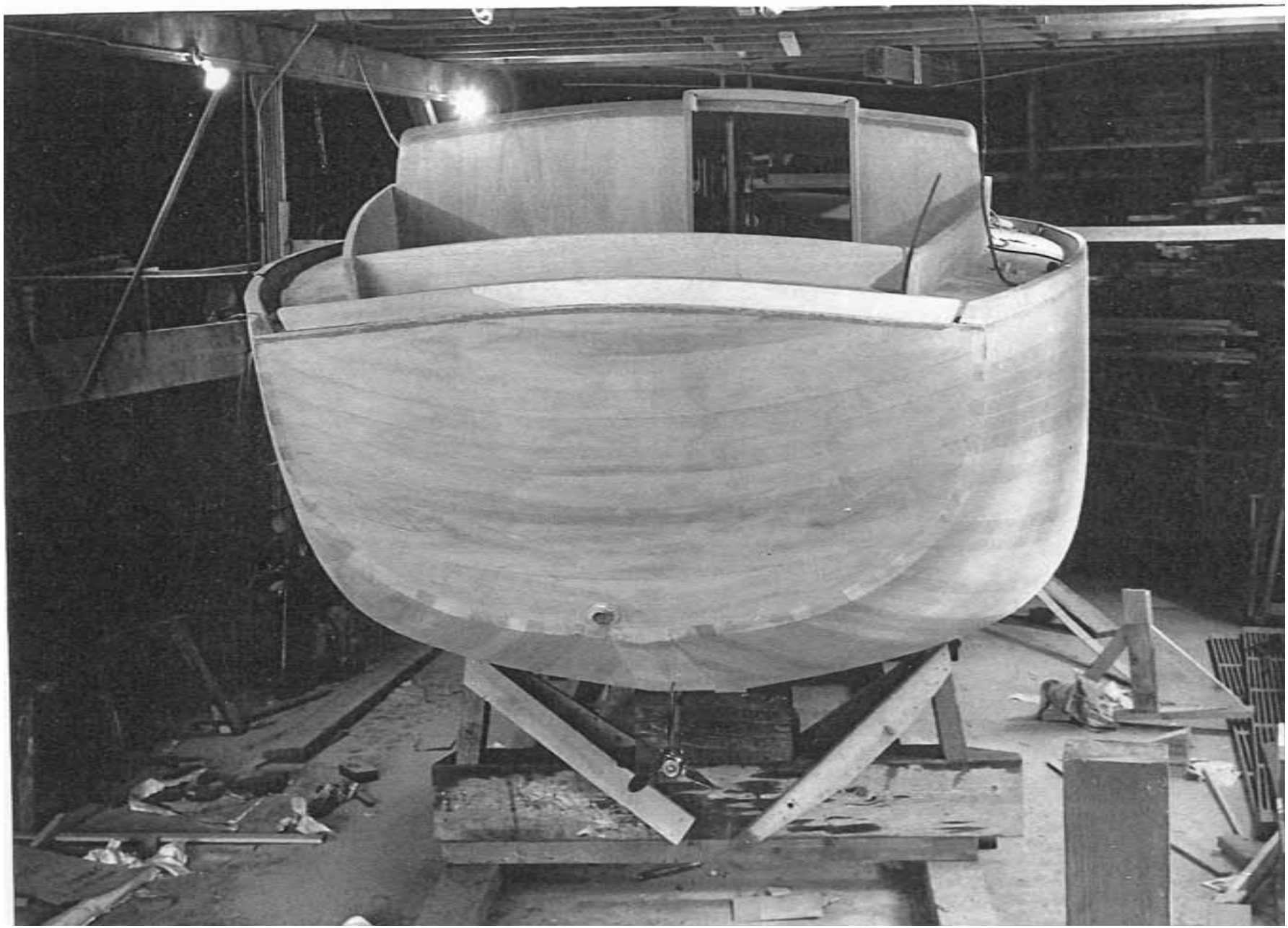
Ca. 1951. Source: Eddon Boatyard Historic Registry Nomination Application, Gig Harbor, Washington. (2005).

Don Harder and Ed Hoppen. Source: Eddon Boatyard Historic Registry Nomination Application, Gig Harbor, Washington. (2005).



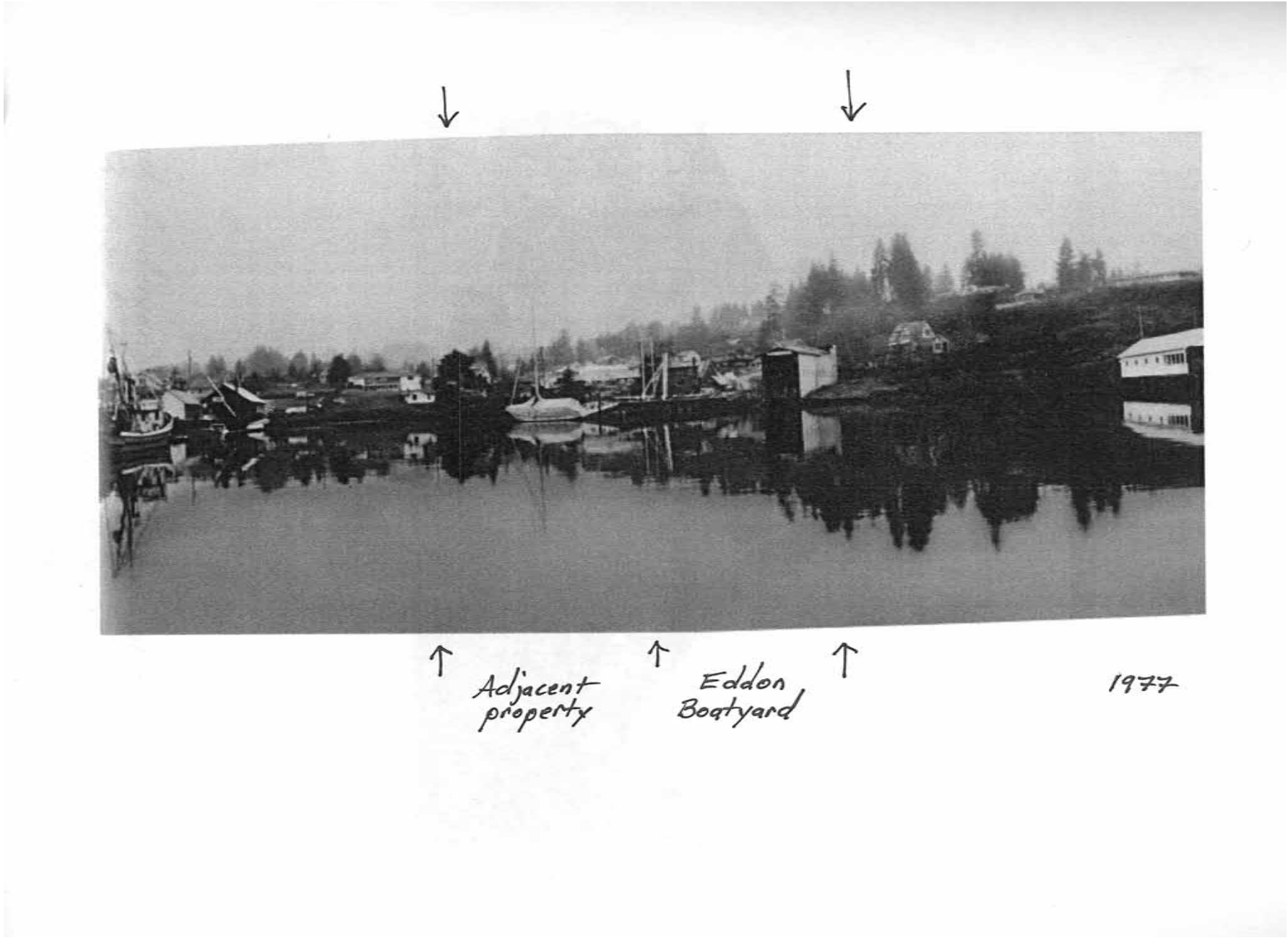
Eddon Boatyard. Source: Eddon Boatyard Historic Registry Nomination Application, Gig Harbor, Washington. (2005).

Monk Yacht. Source: Eddon Boatyard Historic Registry Nomination Application, Gig Harbor, Washington. (2005).



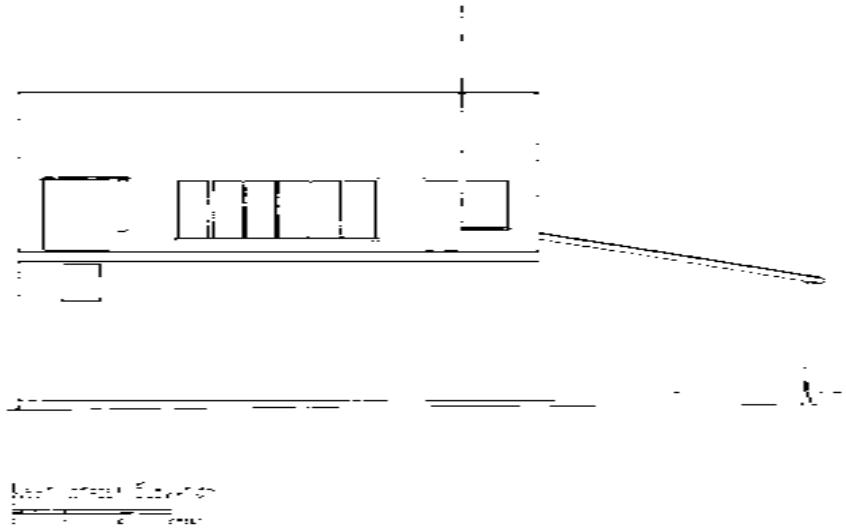
Seaborn. Source: Eddon Boatyard Historic Registry Nomination Application, Gig Harbor, Washington. (2005).

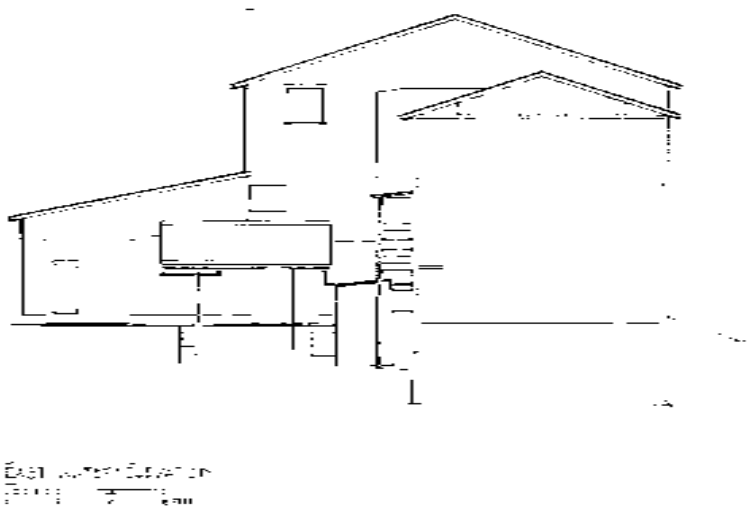
Ca. 1920s. Conrad Anderson, same site prior to Eddon Boatyard Building Source: Eddon Boatyard Historic Registry Nomination Application, Gig Harbor, Washington. (2005).



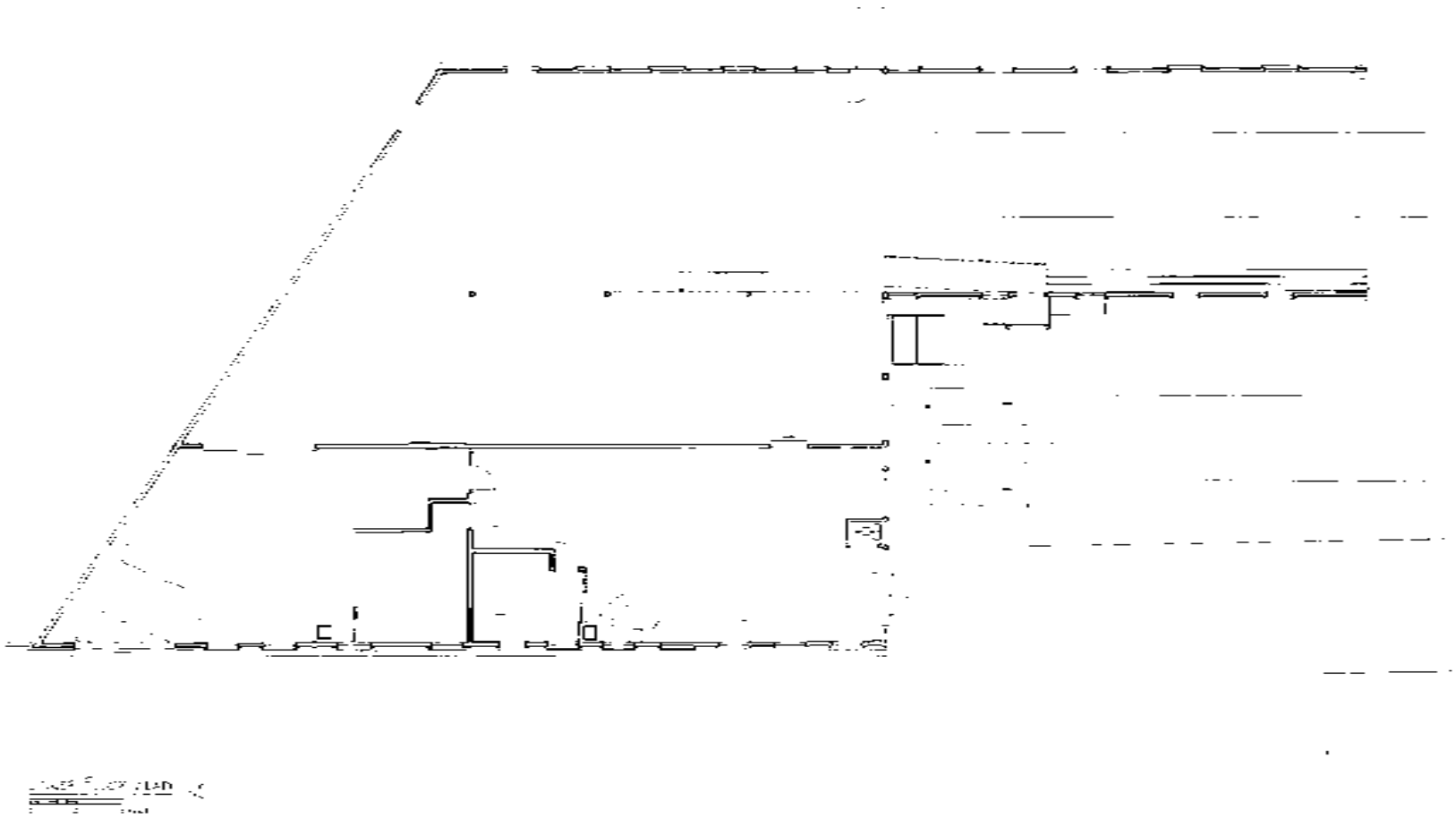
1977. Source: Eddon Boatyard Historic Registry Nomination Application, Gig Harbor, Washington. (2005).

5.2 As-Built Drawings



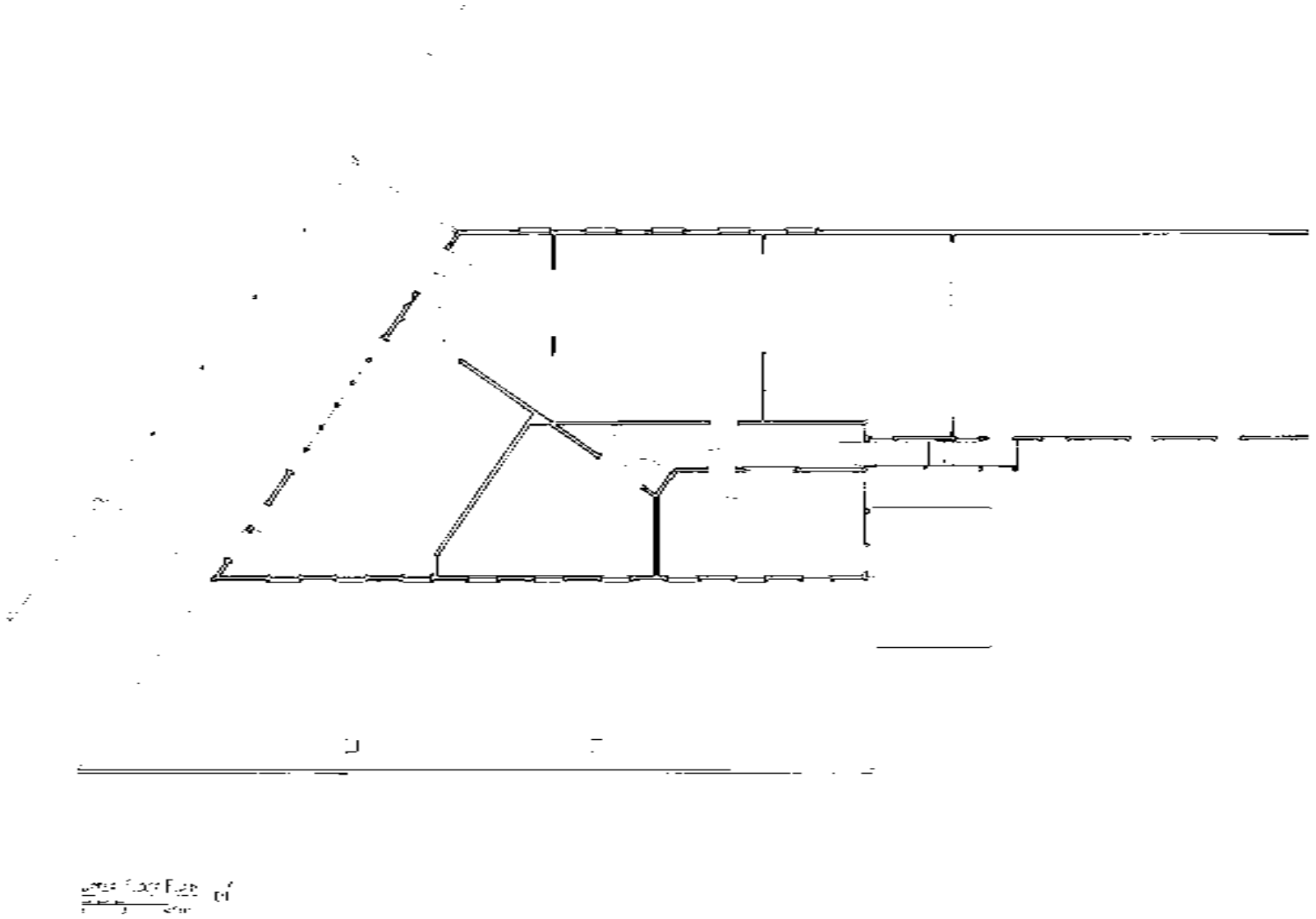


As-built drawing prepared by Eysaman & Company. May 2006.



As-built drawing prepared by Eysaman & Company. May 2006.

As-built drawing prepared by Eysaman & Company. May 2006.



As-built drawing prepared by Eysaman & Company. May 2006.

5.3 Condition Photographs

CP 1

Foundation pier condition beneath rails for carriage. April 2006. Source: Eysaman & Company.

CP 2

Foundation conditions. April 2006. Source: Eysaman & Company.

CP 3

Foundation detail. April 2006. Source: Eysaman & Company.

CP 4

Exterior carriage (left) and interior carriage (right), looking west. April 2006. Source: Eysaman & Company.

CP 5

South facade, looking west. April 2006. Source: Eysaman & Company.

CP 6

West and south facades. April 2006. Source: Eysaman & Company.

CP 7

North facade. April 2006. Source: Eysaman & Company.

CP 8

Exterior carriage space. April 2006. Source: Eysaman & Company.

CP 9

East facade. April 2006. Source: Eysaman & Company.

CP 10

Exterior stairway. April 2006. Source: Eysaman & Company.

CP 11

East end of building. April 2006. Source: Eysaman & Company.

CP 12

Exterior carriage rails. April 2006. Source: Eysaman & Company.

CP 13

Exterior carriage. April 2006. Source: Eysaman & Company.

CP 14

Winches for exterior carriage. April 2006. Source: Eysaman & Company.

CP 15

Pier conditions evident at low tide. April 2006. Source: Eysaman & Company.

CP 16

Exterior carriage conditions. April 2006. Source: Eysaman & Company.

CP 17

Siding transition. April 2006. Source: Eysaman & Company.

CP 18

North doorway cut into wall. April 2006. Source: Eysaman & Company.

CP 19

North wall conditions. April 2006. Source: Eysaman & Company.

CP 20

Wall and floor plate connection. April 2006. Source: Eysaman & Company.

CP 21
Typical window trim profiles. April 2006. Source: Eysaman & Company.

CP 22
Glass loss and material deterioration. April 2006. Source: Eysaman & Company.

CP 23
Exterior stairway cutting across window opening. April 2006. Source: Eysaman & Company.

CP 24
Interior window conditions. April 2006. Source: Eysaman & Company.

CP 25

Eave, gutter and downspout detail. April 2006. Source: Eysaman & Company.

CP 26

Roof framing over carriage space. April 2006. Source: Eysaman & Company.

CP 27

Failed gutter. April 2006. Source: Eysaman & Company.

CP 28

Eave conditions. Limited failed paint. April 2006. Source: Eysaman & Company.

CP 29

Downspout and gutter connection. April 2006. Source: Eysaman & Company.

CP 30

South roof slope, looking east. April 2006. Source: Eysaman & Company.

CP 31

Top of east shed roof, looking east over exterior carriage space. April 2006. Source: Eysaman & Company.

CP 32

Downspout attachments nailed through roofing. April 2006. Source: Eysaman & Company.

CP 33
Transition flashing. April 2006. Source: Eysaman & Company.

CP 34
Water damage behind downspout. April 2006. Source: Eysaman & Company.

CP 35
Framing conditions. April 2006. Source: Eysaman & Company.

CP 36
Attic conditions. April 2006. Source: Eysaman & Company.

CP 37

Ridge conditions. April 2006. Source: Eysaman & Company.

CP 38

Material loss at chimney. April 2006. Source: Eysaman & Company.

CP 39

Chimney mortar failure and flashing failure. April 2006. Source: Eysaman & Company.

CP 40

Failed chimney flashing. April 2006. Source: Eysaman & Company.

CP 41

Chimney and roof flashing. April 2006. Source: Eysaman & Company.

CP 42

Interior conditions along north wall. April 2006. Source: Eysaman & Company.

CP 43

Interior space conditions. April 2006. Source: Eysaman & Company.

CP 44

Interior space conditions. April 2006. Source: Eysaman & Company.

CP 45
Restroom conditions. April 2006. Source: Eysaman & Company.

5.4 LEED Certification Declaration

washington state department of community, trade and economic development

CTED Capital Programs / PO Box 42525, Olympia, WA 98504-2525 / Phone: 360/725-3019 / Fax: 360/586-4162

LEED Certification Declaration

Directions: *Please type your responses in the electronic version of this form (see www.cted.wa.gov/CapitalPrograms) and fax or mail it to us.* ***If you are entering the LEED certification process, you may submit this form with your grant application.*** *If you are applying for an exemption, you may do so at any time between now and when your grant application is due. We will attempt to respond within 10 working days, but will evaluate exemption requests on a first-come, first-served basis. Our workload is likely to increase as grant application deadlines approach.*

Project Name: Eddon Boatyard Restoration Project

Applicant Organization: City of Gig Harbor

Applicant Mailing Address: 3510 Grandview Street

Gig Harbor State: Wash Zip Code: 98335

Project location/address (if different from above): 3805 Harborview Drive

Gig Harbor, Washington 98335-1214

Submitted by (name): Lita Dawn Stanton Title: Certified Local Government (CLG), Project Manager

Phone: (253) 851.6170 E-mail: StantonL@CityofGigHarbor.com

Is your project: New construction Renovation

How many gross square feet of occupied or conditioned space* is your project? Occupied: 6,600 / Conditioned: 2,200

What is your facility's assessed value? $0

What is the total cost of your construction or renovation project? $1,000K

Has pre-design or design begun? Yes No If yes, what was date? _

Percentage of pre-design or design complete: 0 %

Has construction begun? Yes No If yes, date construction began _____

Percentage of construction complete: 0%

1. If your project is new construction, is it less than 5,000 gross square feet of occupied or conditioned space*?
   Yes No

2. If your project is a renovation, is it less than 50 percent of the facility's assessed value, and less than 5,000 gross square feet of occupied or conditioned space*? Yes No

3. Is your facility a:

Hospital	Yes	No	
Research facility**	Yes	No	
A similar building type	Yes	No	If yes, describe _____

If you answered yes to ANY of the above questions, your facility is exempt from the high-performance building law. **However, please fill out the rest of this form and sign it.**

* Gross square feet as defined by the state Energy Code.
** Primarily used for laboratory experimentation, laboratory research, or lab training in research methods.

_____

_____

1. Have you already entered the LEED certification process? Yes No As of what date?

2. Were you planning to enter the LEED certification process? Yes No

3. If you are entering the LEED process, what standard are you attempting to reach?
   Certified Silver Gold Platinum

_____

_____

CTED may exempt applicants who demonstrate that it would not be practicable to meet the LEED silver standard. We are not permitted to offer this exemption solely because of cost, but may for timing-related complications.

Would you like to apply for this exemption? Yes No If yes, please explain why.

_____

_____

Your architect must complete this section regardless of whether you, as the applicant, are applying for one of the above exemptions. This checklist corresponds to the LEED-NC Version 2.2 Project Checklist. We understand that many of the points your architect assigns may be estimates subject to change as design and/or construction progresses. Please note, however, that by signing this form (Step 5) you and your architect certify that the points assigned here are an accurate reflection of your project goals.

Yes	?	No		Sustainable Sites	14 Points
Y			Prereq 1	**Construction Activity Pollution Prevention**	Required
			Credit 1	**Site Selection**	1
			Credit 2	Development Density & Community Connectivity	1
			Credit 3	**Brownfield Redevelopment**	1
			Credit 4.1	Alternative Transportation, Public Transportation Access	1
			Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1
			Credit 4.3	Alternative Transportation, Low-Emitting and Fuel-Efficient Vehicles	1
			Credit 4.4	Alternative Transportation, Parking Capacity	1
			Credit 5.1	**Site Development,** Protect or Restore Habitat	1
			Credit 5.2	**Site Development,** Maximize Open Space	1
			Credit 6.1	**Stormwater Design,** Quantity Control	1
			Credit 6.2	**Stormwater Design,** Quality Control	1
			Credit 7.1	Heat Island Effect, Non-Roof	1
			Credit 7.2	Heat Island Effect, Roof	1
			Credit 8	**Light Pollution Reduction**	1

Yes	?	No		Water Efficiency	5 Points
			Credit 1.1	**Water Efficient Landscaping**, Reduce by 50%	1
			Credit 1.2	**Water Efficient Landscaping**, No Potable Use or No Irrigation	1
			Credit 2	Innovative Wastewater Technologies	1
			Credit 3.1	**Water Use Reduction**, 20% Reduction	1
			Credit 3.2	**Water Use Reduction**, 30% Reduction	1

Yes	?	No	Energy & Atmosphere	17 Points

Y		Prereq 1	**Fundamental Commissioning of the Building Energy Systems**	Required
Y		Prereq 2	**Minimum Energy Performance**	Required
Y		Prereq 3	**Fundamental Refrigerant Management**	Required
		Credit 1	**Optimize Energy Performance**	1 to 10
		Credit 2.1	**On-Site Renewable Energy**	1 to 3
		Credit 3	Enhanced Commissioning	1
		Credit 4	**Enhanced Refrigerant Management**	1
		Credit 5	**Measurement & Verification**	1
		Credit 6	**Green Power**	1

Yes	?	No	**Materials & Resources**	**13** Points
Y			Prereq 1 **Storage & Collection of Recyclables**	Required
			Credit 1.1 **Building Reuse**, Maintain 75% of Existing Walls, Floors & Roof	1
			Credit 1.2 **Building Reuse**, Maintain 100% of Existing Walls, Floors & Roof	1
			Credit 1.3 **Building Reuse**, Maintain 50% of Interior Non-Structural Elements	1
			Credit 2.1 Construction Waste Management, Divert 50% from Disposal	1
			Credit 2.2 Construction Waste Management, Divert 75% from Disposal	1
			Credit 3.1 **Materials Reuse**, 5%	1
			Credit 3.2 **Materials Reuse**,10%	1
			Credit 4.1 **Recycled Content**, 10% (post-consumer + ½ pre-consumer)	1
			Credit 4.2 **Recycled Content**, 20% (post-consumer + ½ pre-consumer)	1
			Credit 5.1 **Regional Materials**, 10% Extracted, Processed & Manufactured Regionally	1
			Credit 5.2 **Regional Materials**, 20% Extracted, Processed & Manufactured Regionally	1
			Credit 6 **Rapidly Renewable Materials**	1
			Credit 7 **Certified Wood**	1

Yes	?	No	**Indoor Environmental Quality**	**15** Points
Y			Prereq 1 **Minimum IAQ Performance**	Required
Y			Prereq 2 **Environmental Tobacco Smoke** (ETS) Control	Required
			Credit 1 Outdoor Air Delivery Monitoring	1
			Credit 2 Increased Ventilation	1
			Credit 3.1 **Construction IAQ Management Plan**, During Construction	1
			Credit 3.2 **Construction IAQ Management Plan**, Before Occupancy	1
			Credit 4.1 Low-Emitting Materials, Adhesives & Sealants	1
			Credit 4.2 Low-Emitting Materials, Paints & Coatings	1
			Credit 4.3 Low-Emitting Materials, Carpet Systems	1
			Credit 4.4 Low-Emitting Materials, Composite Wood & Agrifiber Products	1
			Credit 5 **Indoor Chemical & Pollutant Source Control**	1
			Credit 6.1 **Controllability of Systems**, Lighting	1
			Credit 6.2 **Controllability of Systems**, Thermal Comfort	1
			Credit 7.1 Thermal Comfort, Design	1
			Credit 7.2 Thermal Comfort, Verification	1
			Credit 8.1 Daylight & Views, Daylight 75% of Spaces	1
			Credit 8.2 Daylight & Views, Views for 90% of Spaces	1

Yes	?	No	Innovation & Design Process	5 Points
			Credit 1.1 Innovation in Design: Provide Specific Title	1
			Credit 1.2 Innovation in Design: Provide Specific Title	1
			Credit 1.3 Innovation in Design: Provide Specific Title	1
			Credit 1.4 Innovation in Design: Provide Specific Title	1
			Credit 2 LEED® **Accredited Professional**	1

PROJECT TOTALS (Pre-certification Estimates)	69 Points

Certified 26-32 points **Silver** 33-38 points **Gold** 39-51 points **Platinum** 52-69 points

Comments & Clarifications:

Applicant name Lita Dawn Stanton Title CLG, Project Manager Date 11 May 2006

Signature _____

Applicant architect's name Gerald KB Eysaman, AIA Title Principal Date 11 May 2006

Signature _____

The applicant and its architect, by the above signatures, certify that all of the information provided in this LEED certification declaration is accurate and complete to the best of their knowledge. The applicant understands that CTED Capital Programs staff may independently verify information provided, and that the discovery of incomplete, false, and/or misleading information is grounds for disqualification of a grant application or the withholding of awarded funds.

5.5 Secretary of the Interior's Standards

Preservation focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time. (Protection and Stabilization are consolidated under this treatment.) Preservation is defined in the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) as the act or process of applying measures necessary to sustain the existing form, authenticity, and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color, and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken. Restoration depicts a property at a particular period of time in its history, while removing evidence of other periods.

Restoration is defined by the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

1. A property will be used as it was historically or be given a new use which reflects the property's restoration period.
2. Materials and features from the restoration period will be retained and preserved. The removal of materials or alteration of features, spaces, and spatial relationships that characterize the period will not be undertaken.
3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.
4. Materials, features, spaces, and finishes that characterize other historical periods will be documented prior to their alteration or removal.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.
6. Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials.
7. Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties, or by combining features that never existed together historically.

8. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
9. Archeological resources affected by a project will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
10. Designs that were never executed historically will not be constructed.

Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character. Rehabilitation is defined by the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Reconstruction re-creates vanished or non-surviving portions of a property for interpretive purposes. Reconstruction is defined by the Secretary of the Interior's Standards for the Treatment of Historic Properties (1995) as the act or process of depicting, by means of new construction, the form, features, and detailing of a nonsurviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

1. Reconstruction will be used to depict vanished or nonsurviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture, and such reconstruction is essential to the public understanding of the property.
2. Reconstruction of a landscape, building, structure, or object in its historic location will be preceded by a thorough archeological investigation to identify and evaluate those features and artifacts which are essential to an accurate reconstruction. If such resources must be disturbed, mitigation measures will be undertaken.
3. Reconstruction will include measures to preserve any remaining historic materials, features, and spatial relationships.
4. Reconstruction will be based on the accurate duplication of historic features and elements substantiated by documentary or physical evidence rather than on conjectural designs or the availability of different features from other historic properties. A reconstructed property will re-create the appearance of the non-surviving historic property in materials, design, color, and texture.
5. A reconstruction will be clearly identified as a contemporary re-creation.
6. Designs that were never executed historically will not be constructed.

5.6 Bibliography

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