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The Bulkheads Along the Bay: Rehabilitating San Francisco's Historic Waterfront Resources

Kellie Anne Phipps
University of Pennsylvania

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THE BULKHEADS ALONG THE BAY
REHABILITATING SAN FRANCISCO'S HISTORIC WATERFRONT RESOURCES

Kellie Anne Phipps

A THESIS

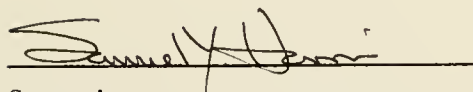
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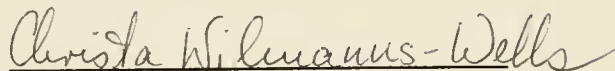
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Requirements for the Degree of

MASTER OF SCIENCE

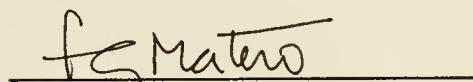
1997



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*What might have been and what has been
Point to one end, which is always present*

-T.S. Eliot

*This thesis is for my father, who left me
architecture;
and for my mother,
who makes it possible for me to never
have to wonder
what might have been.*

I would like to thank Christa Wilmanns-Wells for the knowledge, guidance, and encouragement that she shared with me throughout this past year.

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There are few cities whose histories are as distinctly associated to their waterfront regions as San Francisco. At its inception, San Francisco was a city where the streets were deep in mud, and long piers, old warehouses, and hundreds of shacks, office buildings and saloons were built on top of ships as the bay was gradually filled in. The city owes its existence, and much of its identity to the trade that was conducted through the Port. Yet, the physical zone of the waterfront edge, where the fabric of the city meets the edge of the bay, was transformed into an urban void as a result of the urban renewal projects of the 1950's and 1960's. Only very recently, strengthened by the passing of legislation in 1990, which required a land use plan for the waterfront, has there been an interest in revitalizing the waterfront. The historic bulkhead buildings that define the built edge between the city and the bay are subject to this plan.

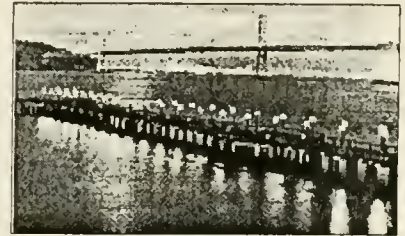


Fig. 1, Identifying features of the San Francisco Bay.

This thesis focuses on the question of how to preserve the bulkhead buildings on the piers directly north of the historic Ferry Building along the San Francisco waterfront. Although the most recent draft of the Waterfront Land Use Plan states an appreciation for maintaining the historic character of the bulkheads as a group, the issue of the Northeast Waterfront character, and to what extent it is or is not defined by the bulkhead buildings, is currently being questioned by the Port of San Francisco. The conventional planning perspective for the waterfront has been to remove the bulkhead buildings in order to open up the waterfront

to views of the bay. The Mission Revival style bulkheads directly south of the Ferry Buildings were removed for this purpose as recently as a decade ago. Creating views to the bay remains a primary focus of the Waterfront Land Use Plan. The Waterfront Advisory Board has not yet decided how these views will be created and how the bulkheads will be affected. Therefore, it is imperative that a preservation plan for the bulkheads be created before development plans are proposed which could threaten the historic significance of the buildings.

The bulkheads symbolize two important aspects of San Francisco's history. After years of an unstable shoreline, they represented a modern era for the waterfront by solidifying the built edge of the city. Secondly, in the architectural genre of a modest, more industrial version of the City Beautiful movement's Beaux Arts style, they marked the historic entry and departure point for the city--not unlike the great train stations built at the turn of the century. The preservation of the buildings as a group is important in conveying this aspect of San Francisco's past.

The legislation which currently determines development of the piers, prohibits the piers from being redeveloped with non-maritime activities. These laws were enacted to protect the bay from unnecessary new fill, but consequently have discouraged the productive reuse of surplus maritime piers. The Port of San Francisco is aware that the laws inhibiting the redevelopment of the piers need to be changed and is working towards reversing the

relevant amendments. When this obstacle is overcome, the Port would like to redevelop the buildings on the piers and bulkhead for public use.

The Waterfront Land Use Plan which is currently being developed by the Port, states that the waterfront should be reunited with the city.¹ The plan outlines how this goal will be accomplished through its proposals for mixed use opportunities along the waterfront that include hotel, residential, commercial, and recreational developments. However, the plan has not yet addressed how these developments will affect the preservation of the waterfront's historic resources. The Port is currently preparing a component of the Waterfront Land Use Plan that will determine the planning guidelines for the historic bulkhead buildings. None of the drafts of this plan underscore the educative value inherent in the preservation of the bulkheads. In addition, although the Waterfront Land Use Plan declares that the revitalization of the waterfront should integrate the activities of the waterfront with those of the city, the plan does not describe a perspective that views the historic buildings as urban resources.

This thesis will review the plan and make a recommendation for a preservation plan for the bulkhead and pierhead buildings along the Northeast Waterfront. The recommendation will consider the contextual history of the development and decline of the waterfront as circumstances that are responsible for the present condition of the bulkhead and pierhead buildings. In addition,

the thesis will review the proposals that the Waterfront Land Use Plan has made in terms of their effects on the historic character of the bulkhead buildings, and compare these proposals with the redevelopments that have successfully revitalized waterfronts in other cities. The conclusions that will be drawn from the analysis of these waterfront plans, and the rationale for the recommendation for San Francisco's waterfront are that the most productive rehabilitations of waterfront historic resources are the ones that incorporate an educative aspect to the plan which highlights an appreciation of historic landscapes as part of a larger urban context.

In order to develop a proposal for the future of the bulkhead buildings, it is essential to understand the evolution of the waterfront. Therefore, this chapter will outline the development of San Francisco's Port as it paralleled the origins of the bulkhead sea wall and bulkhead buildings. In addition, understanding the historic character of the waterfront will allow for the formulation of development proposals that will preserve the maritime history associated with the bulkhead buildings.

History of the Waterfront

Early development of the San Francisco waterfront centered around Yerba Buena Cove because it was the best anchorage area for sailing vessels. The cove was a crescent shape with the highest point of the shoreline in the center of what is today the middle of the financial district. The life and development of the waterfront and the city were inseparable until after the Gold Rush, and a strong dependence on maritime commerce and waterfront activity continued throughout the 19th century.

Although California would not become a state for another two years, the Spanish era ended when Captain Montgomery of the war sloop, *Portsmouth*, raised the American flag over the Mexican Custom House in 1846.² Steps toward developing the harbor's facilities for the accommo-

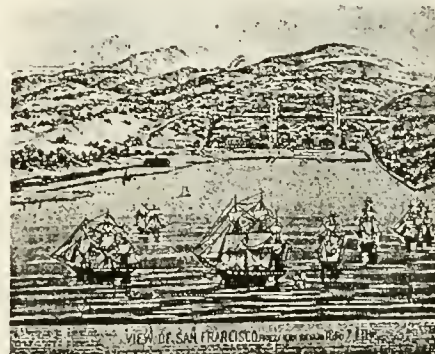


Fig.2. Early development of the waterfront.



Fig.3. Yerba Buena Cove

dation of trading vessels were taken as early as 1847.³ At the time, there were only two landing places for vessels along the shore at Yerba Buena Cove – one a seventy foot landing for rowboats, and the other built over rocks at the north point of the cove known as Clarke’s Point.⁴ The Broadway Wharf built in 1848, later the site of Pier 9, was reported to be the only Pacific Coast wharf built on piles north of Panama. The completion of this wharf greatly facilitated cargo handling through the use of gang-planks. Previously, all cargo was brought ashore by lighters, small boats which would taxi goods to shore from the larger ships anchored in deeper water.



Fig.4. Before the wharves were built, ships had to anchor in deep water.

The city at that time was almost entirely limited to the waterfront. Living quarters and storage space was scarce. Ships were often deliberately run aground, or anchored in shallow water and put to a variety of uses. The English brig *Euphemia* was used as the city’s first prison, and New York’s *Apollo* became a saloon.⁵ The landside of the city was largely covered in knee deep mud. The waterfront was not solely a place for work. A Sunday activity of San Franciscans around the turn of the century was to stroll along the waterfront to buy fruit from vendors, or to fish off the piers. But, for the most part, the waterfront was a dangerous place, nicknamed the Barbary Coast, where young men were kidnapped in the middle of the night for the

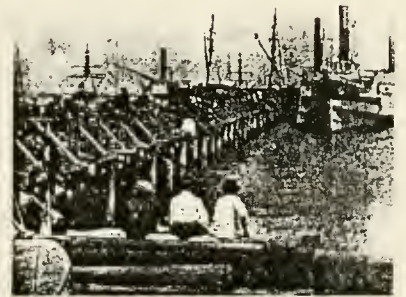


Fig.5. The waterfront was also a place for recreation.

ship's crews, and lawless gamblers made the waterfront their headquarters. It would take an influx of pioneers to build the city that was to come.

News of the discovery of gold in California reached the East Coast at the end of 1849 when President Polk confirmed the rumors in his annual message to Congress. The rush to book passage to California ensued, and in the winter of 1850, William Heath Davis, a sailor and merchant recorded, "the Central Wharf, being the only one in the City, was the thoroughfare for communication with vessels, and was crowded from morning till [sic.] night with drays and wagons coming and going. Sailors, miners...speaking a great variety of tongues, moved busily about..."⁶. That year, between 800 and 900 ships from all over the world were recorded anchored in the bay.⁷

One wharf could not service the vast number of ships that resulted from the gold rush. The Central Wharf had to turn ships away because there was not enough space on either side or at the pier end to accommodate them. Wharfage fees were expensive, and ships which could not pay the fees were either sold, broken up for the timber, or abandoned. Approximately 6,000 feet of new wharves were built at a cost of around one million dollars.⁸ By 1856, the entrance to the cove was criss-crossed by wharves.

This was the actual beginning of the development of San Francisco as an American port city. As soon as the wharves were



Fig.6. A view of the bay as seen from the young city in 1853.

built, streets were graded and filled to make the wharves more easily accessible. Whole new sections of the city were built on wooden piles covered by planks over the water. The process was called cribbing, and it consisted of constructing heavy wooden, criss-crossed racks to hold rocks in place as the base for fill. Sand and earth from the city's hills were then dumped on top of the rock piled cribs in an effort to halt the erosion of the newly created land by the tides. One observer at the time noted, "At present some seventy-five hands are employed in working into the cliff and carting the rock and dirt to the beach below. Laborers are industriously engaged in cribbing the waterfront lots and filling the water lots whilst the shallowness of the water permits the powerful steam engines to keep otherwise submerged lands dry."⁹ Until technology permitted the construction of a permanent seawall, the San Francisco shoreline was ever-changing by the building of new wharves and bay fill which was counteracted by the erosion of the tidal sweeps.

It had become evident that a seawall needed to be built to stop the bay from reclaiming the land. The Bulkhead was built to provide deep water close to the shore for the tall-masted ships, to prevent any erosion of sand and silt into the bay, and to allow the City to fill the low-lying lots in Yerba Buena Cove for future construction.¹⁰ The first scheme was proposed by Levi Parson who headed a group of wharf owners. Parson, in turn, offered to build

a sea wall, or “bulkhead” in exchange for the exclusive rights to build and operate all the wharves on the waterfront. The proposed legislation which would grant Parsons and his partners, “the entire and exclusive rights of wharfage, dockage, anchorage, and tolls within the city limits, with the sole right to regulate wharves, dockage, and tolls, and the rates thereof forever,” was also known as the “Parson’s Bulkhead Monopoly.” Among the items of the bill was:

...no buildings shall be erected upon the bulkhead except wharf offices, toll-houses, and ‘sheds’...but the wharves and piers will be only appurtenant to the sea wall- not a part of it- so that buildings of any size or for any purpose may be erected upon them....the piers may be virtually immense streets, projecting into the bay with narrow strips of water between them and lined with solid and permanent buildings. Thus the bill discloses a grand scheme to extend the whole waterfront of the city 600 feet.¹¹

Parsons tried to impress San Franciscans into voting for the bill by comparing the future of San Francisco’s Port to Boston’s, New York’s, London’s, and Liverpool’s. The bill failed due to the monopoly that it would have created, but it was ultimately responsible for the election of the first harbor commissioner in 1863. From then onward, the piers and wharves were controlled as a group by the State Harbor Commission, rather than by individual private owners.

The Harbor Commissioners began work on the bulkhead by offering a prize of one thousand dollars for the best design for

a sea wall for San Francisco. In 1872, plans were prepared by William J. Lewis, a civil engineer who was appointed Engineer-in-Chief of the sea wall construction, for a slightly curving sea wall extending the whole length of the approximately seven mile waterfront.¹² By the end of the seventies, three hundred and twenty acres



Fig.7. Looking North, from just South of the old Ferry Building before the sea wall was built.

of land, once the anchorage of Yerba Buena Cove was constructed on fill in the bay.¹³ Between 1867 and 1870, the first sections of the sea wall and the bulkhead wharves north of Market Street were mostly filled. It took forty-eight years, but by 1915, the present sea wall was finally completed. In the early years of the 20th century, the old sailing ships and wharves were south of the new Ferry Building, whereas to the north was the modern port with regular finger piers and the uniform, classical fronts of the pier sheds along the Embarcadero. Adding to this new sense of permanence was the completion of the Ferry Building in 1898.

The completion of sections 8 through 13 of the seawall south of Market Street by May of 1915, decisively marked the beginning of the modern maritime era in San Francisco. Once the seawall was in place, the piers, bulkhead buildings, and the Embarcadero roadway could be built along each completed section. With the exception of Pier 1, the Bulkhead Buildings on Piers 1 1/2 through 15



Fig.8. The regular spacing of the piers indicate the completion of the sea wall

were all built around 1916. The Bulkhead Wharf of Pier 1 was built in 1908, but the Bulkhead building was not constructed until 1930. The piers were constructed according to plans of the State Department of Engineering for the

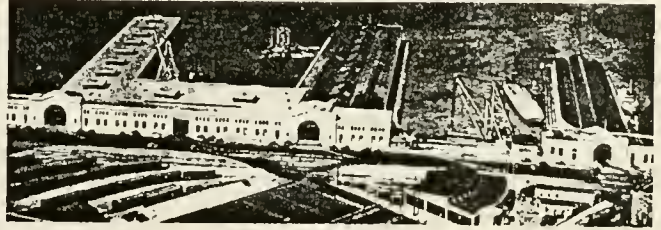


Fig.9. The bulkhead and connector buildings operating in 1941.

State Board of Harbor Commissioners. They were constructed of either concrete jacketed timber piers, or concrete piers and reinforced concrete decks.¹⁴ As a general rule, between the larger bulkhead wharf building were lower buildings which housed launch offices, offices for the small tugs, and other service boats required by the port's business. By about 1916, the entire bulkhead, which covered a distance of approximately three miles, was one continuous wall of similarly styled, large and small buildings, and connecting fences and gates.¹⁵ The continuous facade of the seawall and bulkheads signified a permanence to the city's edge after decades of an unstable waterfront.

Before the great sea wall, the present bulkhead, was built, the pier at the present location of Pier 9 was the Broadway Wharf. There were actually two Broadway Wharves: Broadway Wharf No.1 and Broadway Wharf No.2. The 1887 Sanborn Insurance map depicts the two wharves and identifies that the freight sheds on these piers were used by the Pacific Coast Steamship Company. Steamships had made the great sailing ships of the past obsolete. The shed on the two wharves were different sizes, and

the one on Broadway Wharf No. 2 was bigger than the one on Broadway Wharf No.1. In 1887, there were no individual owners of the wharves since the State Harbor Commissioners gained control of the waterfront in 1863. Therefore, by the next survey in 1913, after the bulkhead was built, the pier is simply identified as Pier 9. At this time, the Embarcadero was still called East Street, and the bulkhead was complete up to Folsom Street, three blocks south of Market Street and the Ferry Building.

The 1913 Sanborn Map shows the completed modern pier with a shed on it that had a truss roof. Also on this map, the beltline rail road had one track running along the south side of the pier, and East Street had by then been renamed The Embarcadero. The buildings on the bulkhead in front of the pier were labeled offices, repair shops, store rooms, and blacksmith. At this time, the beaux-arts bulkhead buildings had not been built. The bulkhead buildings on Pier 9 were constructed around 1915.¹⁶ By the 1941 survey, the buildings are shown at the front of the pier with a facade that is divided into three parts: a middle section dimensioned at 30 feet flanked by two 26 foot sides. Although Pier 9 was built in 1915, the bulkhead building in front of the pier was not completed until 1936, and was designed by architects H.B. Fisher, G.A. Wood, and A.W. Nordwell.¹⁷ Also on the 1941 map, an additional track had been added since the 1913 survey, on the north side of the pier.

The Sanborn Maps do not illustrate any changes in own-

ership since the 1887 survey because the piers were not individually owned. However, the pier sheds were used by various shipping companies for the purpose of unloading and storing cargo until World War II when all of the waterfront was mobilized for the Pacific war effort.

The cargo that was unloaded from the ships is in part what makes the history of the waterfront so colorful. Goods and ships came from all over the world and made San Francisco an international port. But San Francisco's prominence as a working port may have been the very reason for the northern waterfront's decline as a working port. The State Board of Commissioners, perhaps grown complacent in its role as overseer of the premier West Coast shipping port, was slow to respond to the evolution of cargo shipping from break bulk to containerization.¹⁸ While San Francisco operated as it had for the past one hundred years, the Port of Oakland obtained federal grants to help convert its mud flats to modern container terminals.¹⁹ Today, Oakland is the dominant port in the Bay Area with 92% of the market share recorded in 1993.

The advent of containerization as the primary means of transporting cargo, and the decline in the ship repair industry resulted in the piers along the northern waterfront becoming surplus to maritime industrial activities. There are several reasons for this decline. First, it is faster for cargo carriers to deliver cargo



Fig.10. Unloading break bulk cargo from sailing ships

to Oakland than San Francisco due to San Francisco's location on a peninsula. Second, shipping companies like to locate where two or more railroads intersect; San Francisco is serviced by only one railroad. Third, most cargo exports are produced in the East Bay, and so are exported from Oakland. Fourth, all of the ports in the Bay area struggle to compete with other west coast ports – primarily Long Beach and Seattle. As a result of these factors, the working Port of San Francisco shifted to the southern waterfront, opening the northern waterfront up for other uses. However, the transformation of the northern waterfront has been hindered by restrictive waterfront policies and legislation.

The Harbor Commission's plans for redevelopment in the early 1950's and 1960's were the last blow to the economic vitality of the northern waterfront. Fearing that surface level transportation improvements to the Embarcadero would interfere with what was then already defunct break bulk shipping piers, the Commissioner permitted the construction of the elevated Embarcadero Freeway. The freeway was built in 1956, and both visually and symbolically cut off the waterfront from the city.

The Embarcadero Freeway facilitated movement to other parts of the city at the expense of local access to the waterfront.²⁰ The freeway would remain for another thirty three years until it was demolished due to irreparable structural damages incurred in the 1989 Loma Prieta earthquake. In that time, the piers



Fig.11. The freeway was an emotional, as well as physical barrier.

and bulkhead buildings along the waterfront north of the Ferry Building were subject to deterioration due to a lack of use. Only when the freeway was finally removed did San Franciscans realize the revitalization potential of the bulkhead buildings.

In addition to the Embarcadero freeway, the State Board of Harbor Commissioner's proposals for redevelopment of the Embarcadero would have further exacerbated the city's segregation from the waterfront. Two of the biggest development proposals were the construction of a seven story building between Pier 1 and the Ferry Building – with a thirty story building planned to replace the Ferry Building, and a 1959 plan for an "Embarcadero City." This 1959 plan would have converted the Port's property north of the Ferry Building to non-maritime uses in high rise structures on massive amounts of new bay fill. In the spirit of the big urban renewal projects of the fifties and sixties, none of the redevelopment proposals considered the economic potential available in the reuse of the bulkhead buildings, or the historic value the bulkheads contributed to the city's sense of place.

These projects illustrated a lack of foresight on the behalf of the State Harbor Commissioners which ultimately resulted in the State losing control of the waterfront to the City of San Francisco. This transfer of authority was determined by the Burton Act of 1968. This act required the creation of the Port Commission to regulate the operations of the Port. The waterfront lands and piers are held in a public trust by the city because they were

constructed by the State in order to support maritime commerce.

When the Port Commission gained control of the waterfront, it was obligated by the Burton Act to assume \$55 million in state general bonds which were issued for improving port facilities. Commercial development was expected to generate the revenues necessary to repay the bonds, and to invest \$50 million towards harbor improvements. To achieve this, the port proposed the development of a fifty story U.S. Steel office building on new fill between the Ferry Building and the Bay Bridge.²¹ In response to public opposition to this proposal, the City Planning Commission imposed a 40 foot height limit on most Port properties north of the Ferry Building, and the State Attorney General issued an opinion interpreting the then newly enacted McAteer Petris Act.

The McAteer Petris Act of 1969 created the San Francisco Conservation and Development Commission (BCDC) to control excessive filling of the San Francisco Bay. In October 1970, the state ruled that BCDC did not have the authority to approve bay fill for non-water oriented uses. This ruling continues to have far reaching implications for the reuse of the bulkhead buildings. In 1986, the Attorney General opined that the structural reinforcement of a pier should be considered bay fill and therefore any new use must be water oriented.²² Before this ruling, BCDC had approved office uses on Pier 1 and Pier 3. These rulings have excluded all non-water oriented developments which are the only feasible developments for the piers at this time. Seismic struc-

tural reinforcements will be necessary to bring the pier structures up to building code requirements, and these structural renovations are considered fill. The buildings need tenants for ongoing maintenance and repairs, yet it is not possible to redevelop the piers since renovating them to satisfy the building code would prohibit the development. Clearly the legislation needs to be reversed if there is to be any non-maritime development on the piers. The Port is aware of the dilemma, and is in the process of reversing the necessary legislation.

The future of the bulkhead buildings, however, may be improving with the voters' passage of Proposition H in 1990. Proposition H required the preparation of a comprehensive waterfront land use plan with a maximum public input, and minimum requirements.²³ One of the emphasized goals of the plan is "an evolving waterfront mindful of its past and future." The stated objective of the plan regarding the historic resources is that improvements to the waterfront should respect and enhance the waterfront's historic character, while also creating new opportunities for San Franciscans to intergrate Port activities into their daily lives. The plan does not, at this time, outline specific details as to building programs that should be proposed other than that they should be mixed use developments, and the plan has not yet developed design guidelines for the renovation of the bulkhead buildings. These unresolved issues will be key factors in maintaining the historic character of the buildings, and integrating the buildings into the city's urban fabric.

There are three categories of proposals that will affect the future development of the bulkhead and pierhead buildings along the northern waterfront: the Waterfront Land Use Plan, the nomination of the buildings for the National Register of Historic Places, and the architectural and urban design competitions. The nomination of the buildings for the National Register of Historic Places is being considered in terms of how register status for the buildings is compatible with the objectives of the Waterfront Land Use Plan. The Port has identified potential conflicts between the preservation of the buildings, and the plan's goal to create unobstructed views to the bay. The third proposal to be considered is the design competitions that were held in order to aid in the development of urban waterfronts. This chapter will examine the reoccurring revitalization themes identified by the winning entries in comparison with the Waterfront Land Use Plan's areas of focus. The first proposal to be examined is the Waterfront Land Use Plan which is being prepared by the Port of San Francisco because this plan, which is currently being written, will be the ultimate determinant of all future development along San Francisco's waterfront.

The Draft Waterfront Plan is the product of an over four year public planning process to determine the future of the waterfront. The preparation of a land use plan was a requirement of Proposition H, enacted by San Franciscans in 1990. When this land use plan is finally approved, it will be incorporated into the

City Planning Department's Master Plan. This comprehensive city master plan governs land use policy for San Francisco.

The Waterfront Land Use Plan is organized by the goals that the Port has identified for the waterfront, and by the acceptable land use policies which will physically manifest these goals. The land use policies are generally described, and then specifically appropriated for the five subarea plans which have been identified by the Waterfront Land Use Plan. The last division of the plan details the legislative issues that will need to be addressed in order to carry out the objectives of the plan.

There are two prevalent problems to address regarding the historic preservation of the bulkhead and pierhead buildings along the northern waterfront. Legislation is one of the main obstacles which could prevent the rehabilitation of the bulkheads. The laws which dictate the replacement and restoration of the piers currently prevent any redevelopments of the piers that would allow the Waterfront Plan to intergrate the piers with the city; reuniting the waterfront with the city is a stated objective of the Waterfront Land Use Plan.²⁴ The Port has identified the specific areas of the laws that need to be reinterpreted and is working towards resolving these issues. The other factor, which must be resolved in order to responsibly preserve the bulkheads and pierhead buildings, is the Port's desire to "open up the Embarcadero to views of the water."²⁵ The Port is presently debating how this objective will be accomplished.

At the top of the Waterfront Advisory Board's land use goals is the continuation of the area as a working waterfront. The plan states that Port land should continue to be reserved to meet the current and expansion needs of water-dependent activities — those which require a waterfront location in order to serve their basic function.²⁶ These waterfront activities include cargo shipping and ship repair, modernized fishing operations in Fisherman's Wharf, expanded ferry boat and water taxi operations, and recreational boating and cruise ship operations. The non-maritime land uses allowed on the piers along the northern waterfront are entertainment facilities, offices, museums, parking, and retail. Other goals identified by the Waterfront Land Use Plan are public access to the waterfront, insuring that new development is compatible with the character of the waterfront by establishing urban design guidelines, and the preservation of the waterfront's historic resources.

Public access is defined by the Waterfront Land Use Plan as both physical and visual. The physical access will be achieved by creating a Bay Trail that extends the length of the waterfront, and a Port Walk which will run along the cityside and waterside of the bulkhead. The visual access to the water, another emphasized goal of the plan, will be achieved by the removal of some of the piers, and by reconfiguring or removing parts of the connector buildings between the bulkhead buildings.²⁷ If the bulkhead buildings are nominated as an historic district, then the connector

buildings between each bulkhead facade building may also assume register status. If this occurs, then guidelines for the connector buildings will need to be developed. Nominating the bulkhead and pierhead buildings to the National Register will require the Port to reconsider the reconfiguration of the bulkhead facade if such



Fig.12. The bulkhead, with arched entrance, and connector buildings create an architectural rhythm.

changes call for large scale removals of historic materials. The Waterfront Land Use Plan's goal for preservation of the historic resources is currently being created as part of the Urban Design and Public Access element of the plan. This component of the plan will be examined later in the chapter with the issues regarding potential National Register status for the buildings.

The physical translation of the goals will be determined by the land use and development standards specified for each sub-area. The general categories for land uses are maritime, open spaces or public access, residential, and commercial. The site specific standards are provided in each subarea plan. The five waterfront planning areas determined by the waterfront plan are the Southern Waterfront, South Beach/China Basin, the Ferry Building Waterfront, the Northeast Waterfront, and Fisherman's Wharf. This thesis is concerned with the Northeast Waterfront because that sub-area encompasses the recommendation proposal for Pier 9.

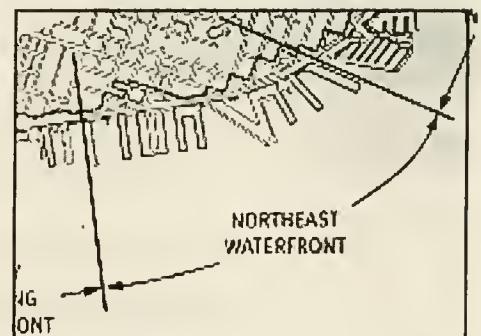


Fig.13. Divisions of sub-area plans

The Northeast Waterfront extends from Pier 35 to Pier 7 at

the foot of Broadway. The main objective expressed by the Waterfront Land Use Plan for this subarea is to maximize opportunities for the retention of maritime operations. Currently, the only three piers in the northern waterfront which continue to function exclusively as cargo-shipping related facilities are Piers 27-29, 15-17, and 19-23. According to the plan, the remaining piers should become docks for excursion boats, passenger cruises, water taxis, historic and ceremonial ships, and recreational, pilot, and tug boats.²⁸ The Port believes that, "Unlike cargo operations, these commercial and recreation oriented maritime activities are compatible with waterside public access improvements, and would therefore be enjoyed by all people of the City and State."²⁹

The Broadway Pier Mixed Use Opportunity Area which is outlined by the plan, includes Pier 9 and four seawall lots which are located on the city side of the Embarcadero roadway. The plan proposes a sailing center for Pier 9. The Advisory Board envisions boating services, boat rentals, and transient boat berthing to be located on the south, nearest to the city, side of the pier. Opposite this pier, the Waterfront Plan would like to see new commercial uses, specifically a hotel, and residential uses on the inland seawall lots. The proposal is calling for water oriented recreation on Pier 9 in the form of boat rentals, temporary boat slips, and sailing events, and new hotels and residential developments on the adjacent seawall lots.

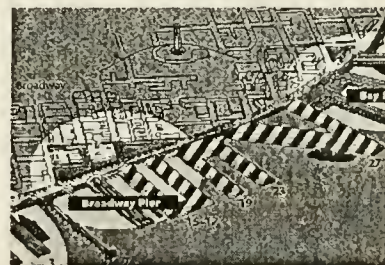


Fig.14. The Broadway Pier Opportunity Area at Pier 9

The main underlying objective of the Waterfront Land Use Plan is to create a comprehensive plan for the waterfront that will reunite the waterfront with the city while preserving the maritime character of the waterfront. This is a difficult task considering the lack of industry demand for maritime facilities along this part of the waterfront. It is therefore necessary to question how the proposed activities for Pier 9 and the Northeast Waterfront will reunite the waterfront with the city.

Jane Jacobs wrote in her book, *The Death and Life of Great American Cities*, "Waterfronts, too, can be made to act much more like seams than they ordinarily do today...the usual form of rescue for a decayed waterfront vacuum is to replace it with a park, which in turn becomes a border element..."³⁰ The waterfront is no longer decaying; the street improvements along the Embarcadero, and the development of a long term vision for the waterfront have improved the future of the Embarcadero. But what environment will the policies which are being proposed for the waterfront create,



and how will this environment affect the preservation of the historic bulkhead and pierhead buildings?

Many of the activities that the Port is planning to put on the piers will only appeal to a small number of local residents, and then not on a regular basis. The sailing center and transitory boat slips planned for Pier 9 will not attract, particularly at night, the majority of local residents to the waterfront. Therefore, it is

Fig.15. Improvements to the Embarcadero signal the recovery of the waterfront

likely that these activities will be supported primarily by tourists, and a tourist environment will be created around Pier 9. Many cities developed hotels near, or at their waterfronts in order to economically invigorate dilapidated sections of the waterfront. But this step isn't necessary for San Francisco's Northeast Waterfront. A more urban oriented use should be proposed for the lot opposite Pier 9, so that the land side and water side of the Embarcadero will together create an environment that will draw both tourists and residents to the waterfront.

Although the plan does not specifically determine the amount, there may potentially be too much open space proposed for the piers. Within the discussion of the Broadway Pier Mixed-Use Opportunity Area, the plan calls for the, "expansion of public access onto the piers themselves, including places for people to relax and enjoy the views..."³¹ It is a good idea to require public access on the piers, and around the pier sheds, regardless of what specific program is proposed for the redevelopment of the buildings. However, too much open space may result in the loss of historic fabric, and cause the historic buildings to lose their definition and context. Pier 7, the original pier destroyed by fire, is now a public fishing pier. The pier is a wonderful place to take a walk out into the bay, but it is also a good example of how a large expanse of space in between the bulkheads can cause the historic character of the area to lose its definition.

It is understandable that the Port is striving to maintain

water oriented activities for this area, being that the character of these activities complements the historical origins of the area. However, many of these proposed programs do not reflect the historic, variegated character of the waterfront, nor do they have the ability to attract large numbers of people to the waterfront. An emphasis on preserving the overall character of the Northeast waterfront versus reinstating too many maritime activities would best serve the restoration of the waterfront buildings. If people are drawn to the buildings by some desirable activity, then they will appreciate them as part of the city and part of the city's past.

The Port has expressed a desire to direct the development of the northern waterfront away from the patterns of the more tourist oriented Pier 39 or Fisherman's wharf. Yet, the acceptable land uses and development standards for the Broadway Pier Mixed Use Opportunity Area may recreate a similar environment that will not attract the local population, and subsequently become the border that Jacobs is referring to between the city and the waterfront. The building programs proposed for the bulkhead and pierhead buildings and sea wall lots should attract residents to the edge of the water by providing an activity that is relevant to their lives.

However, before any of these developments can be implemented, the Port must address the unresolved legislative issues. Many of the activities that the public has expressed a desire and the plan makes proposals for, currently are not permitted under

existing waterfront regulations. Even given the Waterfront Plan's relatively modest proposals, implementation of the Plan will be impossible without refinement of certain policies of the BCDC.³² The most inhibitive issues arise from the McAteer-Petris Act. BCDC was created by the McAteer-Petris Act to protect the Bay from inappropriate fill. The act, however, was enacted to regulate new fill in the Bay and is silent as to changes on existing fill, such as the Port's existing piers.³³ The policies of the legislation that are the most restrictive to the plan are the ones regarding replacement piers. As discussed in Chapter One, the reuse of pier facilities must be redeveloped with water dependent uses. According to the legislation, replacement piers fall in "the over the water" jurisdiction which requires replacement fill to cover an area smaller than the area of the existing pier. Only 50% of area of the pier may be used for Bay oriented public assembly. The remainder must be devoted to public recreation, open space or public access. No non-maritime uses (such as commercial office, housing, etc.) are permitted whatsoever.³⁴

The Port has struggled with the implications of this requirement since it was issued in 1986. The key policy issues pertaining to the McAteer-Petris Act that need to be reversed are, in part, the policies that would allow the seismic retrofitting of pier structures without triggering the water oriented requirements and allow policies which encourage non-maritime mixed uses on the piers. Although there are many reasons why the bulkhead build-

ings have deteriorated, the policies of the McAteer-Petris Act may be the primary determinant of the future development of the waterfront.³⁵

If the McAteer-Petris Act needs to be changed in order to implement the Waterfront Plan, then amendments should be proposed for the public, BCDC and the Legislature to consider. When these policies are amended, the plans currently being drawn for the waterfront will be in place to guide its rehabilitation.

The plan that the Port is currently preparing for the final approval of the Waterfront Land Use Plan concerns the preservation of the waterfront historic resources. In 1996, the Port and the Bay Conservation and Development Commission (BCDC) entered into a "Memorandum of Agreement to guide finalization and implementation of the Draft Waterfront Land Use Plan, including an Urban Design and Public Access element."³⁶ The Waterfront Land Use Plan defines a "Waterfront Historic Resource" as a resource that is either listed on or potentially eligible for the National Register of Historic Places. The Port states that it acknowledges the concentration, interconnectedness, and collective form of the waterfront historic resources in the Urban Design and Public Access element of the Waterfront Plan which is currently being written.³⁷ However, the Port regards the preservation of the buildings as a competing goal with public access and the creation of waterfront views. The Port is considering nominating some of the bulkhead buildings and pier buildings along the entire water-

front for the National Register of Historic Places as a discontinuous historic district. But before the Port decides which buildings will be considered contributing or non-contributing to the district, it wants to know how the nomination will effect the Waterfront Land Use Plan's desire for open space and views to the bay. More specifically, the Port would like to know how much of the bulkhead facade will the National Park Service require the Port to preserve, and would they be able to remove any of the connector buildings for the purpose of opening the Embarcadero promenade to views of the water.

In November 1996, the Port commissioned the architectural firm Architectural Resource Group to conduct a survey of the Port's historic resources. From this survey, and the consolidation of earlier reports, ARG compiled an Historic Resources Data Base. This report also made a preliminary recommendation for which resources may be eligible for listing on the National Register. In regards to nominating historic waterfront resources, ARG suggested four options which they felt should be considered individually or in combination. First, ARG recommends that the resources which would meet National Register criteria for individual nomination be identified which the report does in the form of a data base. The second option recommended by ARG is to identify specified areas containing a number of resources which together may be nominated as an historic district. The third option is to define guidelines for the adaptive reuse of historic resources

that would permit changes in a manner which preserves historic integrity consistent with the Secretary of the Interior's Standards for Rehabilitation of Historic Buildings. Lastly, ARG suggests developing standards for documenting historic resources if, "demolition is necessary, whether due to desired waterfront improvements or to maintain public safety by removing deteriorated or condemned structures."³⁸ The conclusions of the report which pertain to the northern waterfront are that more than fifty resources appear eligible for the National Register as contributors to a potential discontinuous National Register historic district from Fisherman's Wharf to Pier 48. Pier 9, its shed, and bulkhead buildings are classified in the report as potentially eligible as contributing buildings for the district. This finding is a preliminary assessment, and it does not clarify requirements for nomination such as a delineation of the potential district's boundaries, historic documentation, or architectural character defining features. In addition, three of the piers in the northern waterfront, Pier 1 bulkhead and bulkhead connector, Pier 3 bulkhead, and Pier 5 bulkhead, are currently listed on the California Register of Historic Resources. Unfortunately, in spite of this recognition, the Pier 5 bulkhead has been condemned due to the poor condition of the pier.



Fig.16. The bulkhead at Pier 5.

The draft agreement between the Port, the Save the Bay Association, and the San Francisco Bay Conservation and Devel-

opment Commission (BCDC), which is guiding the development of the Urban Design and Public Access element of the Waterfront Plan, will serve as the policy direction for the Port's historic resources. The agencies involved with the agreement drafted a "Concept Agreement" which outlines the goals of the Urban Design and Public Access plan. Among the goals of this specific part of the Waterfront Plan are locating waterfront views and vistas, new public access concepts, and new public plazas.³⁹ The implications of these objectives are the removal of piers and connector buildings to create more open water views, improve the amount of public access on existing piers, and develop new rules for replacement piers and land uses. Many of these goals conflict with the Secretary of the Interior's guidelines for Rehabilitation of Historic Buildings and the Port's stated objective of preserving the historic character of the waterfront.

A Special Planning Study is slated to be conducted by the Port, the City, and BCDC with public participation to determine the location of additional open water between Piers 15 and 29.⁴⁰ The Concept Agreement identifies a new public plaza, to be named, "Wharf 25," in the vicinity of the bases of Pier 19 through 27 just north of Pier 9 in the northern waterfront. The details of this plaza are not specified in the agreement. This plaza contributes to the Port's desire for more open water visual access, but could potentially alter the historic configuration of the bulkhead and connector buildings for these piers. The Port is struggling

with creating more visual access to the water by way of removing some of the connector buildings between the bulkheads, and considering ways to introduce transparency to the bulkhead facade. In an illustrated diagram which is part of the Draft Agreement, the shed at Pier 1, the bulkheads and connectors at Piers 1 through Pier 5, and the bulkheads and sheds at Piers 9, 15, and 19 through 23 are called out as eligible for listing on the National Register (Figure 1). The Port recognizes the significance of the bulkhead buildings, but not the importance of preserving, intact, the historic facade wall. A contextual piece of the bulkhead facade along the northern waterfront should be preserved intact as a reminder of how the entire waterfront originally appeared.

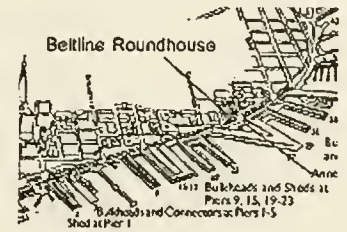


Fig.17. The historic resources identified by the Public Access and Urban Design Plan

There are several areas along the waterfront which offer expansive views to the bay. Many of these areas exist because the bulkheads which were once there have been removed. The Waterfront Plan should concentrate visual access to the Bay in these parts of the waterfront, and maintain the unique perspectival views created by the narrow openings between the pier sheds by preserving, as the Plan states, “the ribbon of pierhead and bulkhead buildings along the Embarcadero.”⁴¹ Because of the available existing open space, it is not necessary to remove pieces of the connector buildings or walls for the purpose of creating openings to the bay. However, it may be possible to heighten



Fig.18. The open space in the bottom left of this image represents the location of the demolished bulkheads

the views to the water through the buildings where there are existing openings in the buildings (i.e., windows and doors), on the Embarcadero street elevation. These design interventions can be accomplished with minimal loss of historic materials as is consistent with the Secretary of the Interior's standards for the treatment of historic properties.

If the Port decides to nominate the proposed buildings for listing on the National Register, then the restoration and rehabilitation of the buildings should conform with the Secretary of the Interior's standards. Although the adaption of the buildings is only required to conform with the Secretary's standards if the projects are funded with federal monies, even if the redevelopments are privately funded, the Port as acting in public trust should recommend that future development adheres to the Secretary's guidelines.

The Secretary of the Interior is responsible for establishing standards for all programs under Departmental authority and for advising Federal agencies on the preservation of historic properties listed in or eligible for listing in the National Register of Historic Places.⁴² There are separate standards for protection, stabilization, preservation, rehabilitation, restoration, and reconstruction. Rehabilitating Pier 9 is the most suitable preservation approach since the bulkhead and pier are in good condition, and because a new use is possible without too much alteration to the original structure. Rehabilitation is defined as "the process of

returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values.”⁴³ Rehabilitation begins with recommendations to identify the form and detailing of those architectural materials and features that are important in defining the building’s historic character. The next step in rehabilitating buildings addresses protection and maintenance of historic materials. This rehabilitation evaluation involves a survey of the building’s overall physical condition, and makes recommendations for repair and/or replacement of historic materials. The guidelines recommended by the Department of the Interior always emphasize repair over replacement, and limited change rather than wholesale change to accommodate new uses.⁴⁴

One of the most difficult tasks in preserving historic structures is changing them so that they can adapt to a new use. Preserving the architectural integrity of the building with respect to changes and additions to the original structure requires identifying what are the building’s significant features. In *Preservation Brief 14*, Kay Weeks describes the National Park Service’s interest in new additions as primarily that, “a new addition to a historic building has the potential to damage and destroy significant historic material and features and to change its historic character.”⁴⁵ A project involving a new addition to a historic building is considered acceptable if it preserves the historic character, preserves

significant historic materials and features, and protects the historical significance by making a visual distinction between new and old.⁴⁶

In the case of the bulkhead facade buildings and the pierhead buildings along the San Francisco Waterfront, focusing on Pier 9 as a specific study, the significant historic character of the physical form of the buildings resides in their interconnectedness and the repetition of the facades' architectural details. It is the solidity of the facade wall created by the continuous buildings between the piers, and the Bulkhead facades that contributes to the historical context of the area. It is for this reason that the bulkhead buildings should be preserved by maintaining the solidity of the wall.

This built wall was intended to serve as a sort of theatrical scrim which would hide the messy industrial activities of the piers from the city. This historical feature provides a unique preservation approach— any new additions to the piers can easily assume a secondary perspective to the facade wall simply by the distance away from the bulkhead, provided by the length of the piers, that the additions can be located, and by the screening of the new addition by the bulkhead facade wall itself. In the case of Pier 9, where the pier shed building is in good condition, a new use can be adaptively designed to fit within the existing pier shed. But, on other piers, where the pier shed buildings are not in as good physical condition, there is an opportunity to design an entirely

new structure without detracting from the historically significant bulkhead buildings. This condition satisfies two of the Secretary's standards: the preservation of the historic character of the building and the making of a visual distinction between old and new.

This solution applies to the preservation of the exterior qualities of the buildings, but the experience of interior spaces is equally pertinent to the historical character of the buildings. The two architecturally most significant features of the pier shed buildings are the structural system and the qualities of the interior space.

The structural system of the shed on Pier 9 is a light steel frame with a regular column grid. The structure of the shed defines the interior spaces. The large roll up doors and the clerestory windows along both long sides of the buildings, and the light monitors which run down the center of the entire length of the roof contribute to these interior qualities. The character of



Fig. 19. The open plan interior of the shed on Pier 9.

the building's form and materials are simple and industrial.⁴⁷ Adaptions to these spaces should emphasize the spaces created by the existing structure, by respecting the height of the space, and the existing divisions of space defined by the existing structure and its light qualities.

The last category of visions for the waterfront are the architectural and urban design competitions which have been held in recent years. The 1993 San Francisco Embarcadero Waterfront Competition which was sponsored by the Center for Critical Ar-

chitecture was an “ideas competition” which took as its point of departure the collapse of the Embarcadero freeway.⁴⁸ The participants were asked to propose a comprehensive vision for the waterfront as a whole and then select and develop a specific sub-area to further illustrate their proposals. One of the winning entries suggested that an examination of existing urban rituals might be a source of meaningful uses for the waterfront. The team of this entry believed that, “by analyzing what community activities currently exist and could be expanded to, integrated into, or relocated to the waterfront edge, one might hope that city life, in all its diversity, would be brought to the edge.”⁴⁹ Evans Heingtes Architects of New York proposed recommissioning ships destined for salvage for adaptive reuse in a “post industrial port,” and Jill Stoner envisioned floating barges along the waterfront where residents could tend community gardens.⁵⁰ Similarly, the 1996, Engaging the Edge Competition for the Hudson River Waterfront in New York City entries, emphasized the intergration of open space opportunities with interesting activities found nowhere else in the city. The second prize scheme proposed by a University of California at Berkeley student, incorporated recording the daily environmental elements of the site with corresponding social activities. For example, the entry suggested that the coming of nightfall be marked by nightly screenings of movies.



Fig.20. Community gardens and windmills occupied the focus of this waterfront competition entry.

Although the solutions that are constructed for competitions may not be implementable in light of the political parameters which often constrain city plans, the creativity of the solutions may expand the range of proposals that are realistic. The inspiration for the various entries was very similar in both of these competitions; the assumption of bringing city activities to the waterfront within a larger park setting. If simplified, all of the winning entries envisioned new activities, which did not exist anywhere else in the city, set amongst a comprehensive waterfront plan that would balance other principal functions of a waterfront: the natural waterfront, the public waterfront, the working waterfront, and the redeveloping waterfront.⁵¹ The participants which considered the importance of these principal functions of the waterfront in each city succeeded in proposing plans that maximized the waterfront's potential as an urban resource.

In the past 30 years, waterfront revitalizations have occupied the forefront of urban planning and development of center cities. Ann Breen and Dick Rigby of the Waterfront Center in Washington D.C. proclaimed that, "Waterfront redevelopment and expansion is, in short, the best current example globally of the resilience of cities..."⁵² Efforts to revitalize urban waterfronts began as early as the 1960's. Some of the earliest restorations were undertaken in San Francisco: the factory buildings at Ghiradelli Square were restored in 1962, and Fisherman's Wharf was redeveloped in 1964.⁵³ Since then, the "underdeveloped edges of the city, its waterfront and railway tracks, have either been reclaimed and redeveloped..." in nearly every North American city.⁵⁴

The early San Francisco restorations, and others that soon followed in New York's South Street Seaport, Boston's Quincy Market, and Baltimore's Harborplace, were conceived as commercial and tourist environments. Recently though, the character of waterfront developments has moved away from shopping malls packaged in maritime themed architecture, and towards extending the fabric of the city up to the edge of the water. Some of these waterfronts have emphasized the educative value of the waterfront's historic resources by incorporating historic materials and information into the waterfront project. I have chosen four waterfronts which illustrate these approaches to study for comparison with San Francisco's waterfront plan: Baltimore's Inner Harbor, New York's Chelsea Piers, Buenos Aires' Puerto

Madero, and Seattle's waterfront. Each of these waterfronts exemplify a planning perspective which views the historic waterfront landscape as part of the urban context.

What caused the water edges in cities to deteriorate? Interestingly, the forces that were responsible for waterfront decline in urban areas, and the physical relationship between the water and the city that resulted, are similar the world over.

Technology made, and then broke, the traditional waterfront. What occurred in San Francisco, the switch from freight to containerization and the decline of both the fishing industry and passenger traffic, also occurred in other American Ports in a steady decline after WWII.⁵⁵ These technological changes had profound spatial consequences: thousands of acres of waterfront land, 2,000 hectares in London, were abandoned throughout the world.⁵⁶ The waterfronts were further siphoned off from the city by the large scale transit projects of the 1960's; the effects of which were well illustrated by San Francisco's Embarcadero freeway. The areas along the waterfronts began to be perceived as lifeless, and in some places, dangerous voids.

In the mid-1980's, this perception changed with the economic prosperity that the United States experienced; there was a rise in the middle class and corresponding growth in disposable income for leisure activities.⁵⁷ Suddenly, waterfront sites, usually occupying the most central urban locations, became desirable redevelopment opportunities. Peter Hall, of the University

of California's Institute of Urban and Regional Development, describes this as, "the return to the waterfront: the reuse of the abandoned doorstep."⁵⁸

Some of the first revitalization efforts occurred in Boston and Baltimore. The underlying philosophy of these revitalizations was based on opening up the waterfront physically through parks. It was in these two cities that the concept of rehabilitating older areas to integrate into multi-functional projects, what came to be known as "festival marketplaces," was developed.⁵⁹ The developer largely responsible for these developments was James Rouse. Soon copies of Boston's Faneuil Hall and Baltimore's Harborplace, incorporating a variety of residential, recreational, and retail services, were sprouting up at every waterfront development across the United States and were later copied internationally. Critics of these early plans noted that the suburban nature of the festival marketplace, "where one could buy anything from anywhere,...concentrated historical time [such] that the uniqueness of place and the specifics of context [were] erased completely."⁶⁰ Urban scales were a factor; many of these copies did not succeed because their cities did not have the critical masses to economically support the development.

According to the Waterfront Center, the most common reasons why a waterfront revitalization may fail to attract people are due to a lack of public access or planning controls, and/or insensitive architectural treatments.⁶¹ On the other hand, the restored

waterfronts which tend to be the most successful are the ones where the principal functions of the waterfront are balanced and equally represented. These principal functions were identified in many of the waterfront competitions as the natural waterfront (beaches, wetlands), the public waterfront (parks, esplanades, waterfront views), the working waterfront (water dependent, maritime, and industrial uses), and the redeveloping waterfront (revitalizing underutilized waterfront lands, residential and commercial development).⁶²

Similarly, the waterfronts which have restored and integrated their historic buildings into their redeveloping waterfronts succeed in maximizing the project's appeal to tourists and residents alike by instilling an unique sense of place to the project which emphasizes the historical identity of the waterfront. Revitalizing a waterfront's historic resources minimizes the "anywhere/anytime" environments which were perpetuated by the festival marketplaces. Historical identity can inform people about the waterfront site specifically, and contribute an understanding of the waterfront's relationship to the historical development of the city as a whole.

There has been a recent trend in waterfront revitalizations away from the festival marketplace scheme towards more cultural, civic, and entertainment oriented restorations. Even Harborplace, which has been the model for the festival marketplace since it opened in 1980, has recently had a significant amount of new con-

struction directed towards developing more urban activities at the waterfront. Harborplace covers the spectrum of waterfront activities and development, and continues to reinvent its role in the larger urban fabric of Baltimore. Baltimore's waterfront, like the other waterfronts examined here, has begun to link the development of its waterfront with both the needs of the city and its historical maritime origins.

The Inner Harbor, Baltimore

Baltimore's waterfront was a virtual wasteland in the late 1950's before a renewal of the area was launched with the Charles Center. The Charles Center was the first redevelopment of the Inner Harbor. The city of Baltimore sold plots of land to developers who constructed offices, hotels, retail businesses, and over 300 apartment units. The success of the Charles Center prompted the city to hire Philadelphia landscape firm, Wallace, McHarg, Roberts, & Todd in 1964, to create a master plan for the waterfront. Harborplace, a Rouse Corporation festival marketplace, was a product of this plan.



Fig.21. Harborplace

Harborplace was not a unique development; indeed the project was just one of James Rouse's festival marketplaces. Yet, Harborplace was successful in two respects: it achieved a balance between public and private spaces, and it was the catalyst that

brought further investment to the waterfront.

Harborplace is comprised of a series of thirty-five foot wide esplanades located along the water's edge and fronted by two twin market pavilions. The restaurants, cafes, and shop spaces of the buildings are focused toward the outdoor promenade spaces. The liveliness of the market activates the public sphere of the promenade, and vice versa. In addition to tourists, the project serves the downtown businesses, and an increasing Inner Harbor residential population.

Baltimore's Inner Harbor has experienced ongoing development in recent years that continually adds layers to the city's public spaces. In 1991, the harbor's eastern end entered into a major new phase of development with the Piers 5 and 6 projects. Pier 5 was redeveloped with a hotel, a restaurant, and Lighthouse Park; the park features the restored Seven Foot Knoll lighthouse, resited from the Baltimore Harbor Channel, in the center. A concert pavilion, designed by FTL Architects, was completed in 1992, and provides a lively urban anchor to the northeast waterfront.⁶³ The architecture of the pavilion, hovering canvas structures which allow for unobstructed views to the water, is well suited to its waterfront location. Siting the concert pavilion on the pier celebrates the city of Baltimore's location on the Chesapeake Bay by providing a cultural, urban amenity on the water. The city awarded lease for the pavilion's Pier 6 site to the Baltimore Cen-

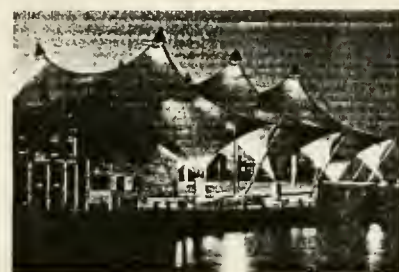


Fig. 22. A waterfront setting for a cultural institution.

ter for the Performing Arts for twenty-five years.

It is the diversity of urban activities along Baltimore's waterfront that makes it a desirable place to be. Admittedly, the recent redevelopments at the Inner Harbor do not allocate any areas for maritime industry. Yet, Baltimore's Harbor does exemplify how a variety of public spaces, and city oriented activities can extend an urban dynamic to the waterfront.

Chelsea Piers, New York

Chelsea Piers is a study in reoccupation rather than a place that makes a great architectural statement or provides a comprehensive waterfront plan. Yet, Chelsea Piers does make productive use of the city's waterfront and revitalized historically significant waterfront structures. The project, a sports and entertainment complex, occupies Piers 59 to 62 along New York City's Hudson River from 17th to 23d Streets.

The Piers were built in 1910 by Warren and Wetmore, architects of Grand Central Station, to serve the major passenger lines. The head house, the structure that parallels the water and the city, was once faced in pink granite on the water side elevation whereas the city facade was faced with monumental cast concrete arches. The arches were removed in the 1960's, and replaced by the kind of bland metal wall that in those years was believed to represent progress.⁶⁴

After the Piers ceased to be used as passenger terminals,

they were used for freight shipping, and then later as a towing pound for cars, until becoming a terminal for tour boats and sound stages for television series. The New York State Department of Transportation acquired the piers in 1960 for the construction of the Westway Highway project which was later discarded. In 1992, Chelsea Piers Management Inc., was awarded a twenty year lease from the Department of Transportation on the condition that the piers be developed with a balance of public access, public recreation, and private spaces.

Generally, the sports facilities occupy the Piers and the private office spaces and television sound stages are located nearest to the city in the headhouse. Piers 60 and 61 are both on the state and national registers of historic places, and both registry agencies agreed that the development plan offered a productive use for the old buildings, which otherwise would have eventually disintegrated.⁶⁵ The historic structure's original steel truss work has been retained, and large windows reflect the original pattern of freight doors along the sides of the pier sheds.

The public access components of the development are concentrated in a walkway that runs along the west side of the head house, called Sunset Strip, and a public waterfront park on the northern end of the piers. The public spaces and the project's connections to the city draw the most criticism. The West Side Highway and dilapidated streetscapes across from the

Fig.23. Required access stairways do not detract from the original character of the pier shed.

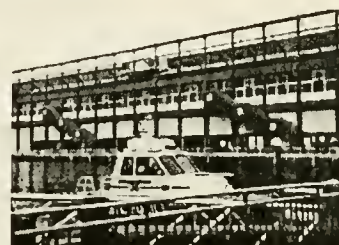


Fig.24. "Sunset Strip," a disappointing public promenade

piers sever any pedestrian connections from the city. In San Francisco, green spaces and generous sidewalks lessen the separation that the Embarcadero roadway creates between the city and the water. At Chelsea Piers, locating the most private aspects of the plan closest to the street further discourages pedestrian access. A sea of parking lots that pedestrians have to cross to reach parts of the project only further hinder fluid pedestrian movement to the piers.

Furthermore, what undermines the public spaces the most is the way they defer to the service elements of the program.⁶⁶ The enclosed promenade has to detour around an elevator shaft, loses definition at vehicle intersections, and dead ends at the golf house. These service elements should have been relocated to give the promenade a greater prominence in the overall scheme of the project. As it stands, the promenade feels like a walkway that is simply filling up leftover spaces.

The isolation of public spaces, and the conflicts between parking, services, and public access suggest that strong planning guidelines would have helped Chelsea Piers achieve a better balance between public and private spaces. Where Chelsea Piers achieves the most success is in the reuse of the pier buildings. Water stained, weathered wood siding of the pier sheds, and informative plaques commemorating the history of the piers convey a sense that the waterfront was once a different place; a place that once had a stronger connection to the city before the highway was constructed.

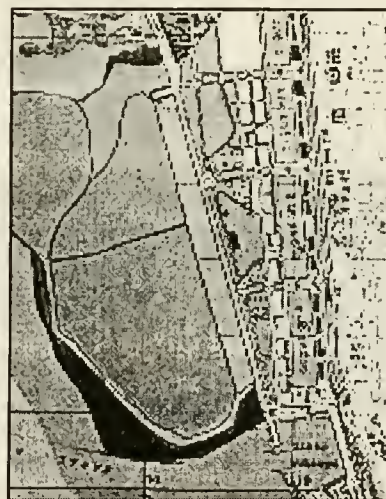
The programs of the piers also lend a character to the project that seems unique to New York – no other waterfront can boast a 300 foot putting range on a city pier; the developers have succeeded in providing, one of a kind, recreational activities that can't be found anywhere else in the city. In spite of the project's weak points, the bustle of activities on the piers, and a changed perception by Manhattan residents that Chelsea Piers is now a place to go is an accomplishment – especially since, in 1985, the Westway Highway project threatened to plow through the waterfront and demolish all of the historic piers.

Puerto Madero, Buenos Aires

Puerto Madero is an excellent example of a revitalization which has achieved a balance between new and old, and maritime and urban activities within a larger park setting accessibly integrated with the greater urban metropolis. The site lies at the foot of the central business district and faces a large green park that lies along the Rio de la Plata in Buenos Aires. The project centers on sixteen brick warehouses built in 1880 by port engineer, Eduardo Madero, and lined up along enclosed basins that were based on English models.⁶⁷ The port was quickly outmoded and abandoned almost immediately after it was built.

In 1989, an independent development corporation com-

Fig.25. The city directly fronts Puerto Madero



prised of city and national government appointed directors acquired the warehouses. This corporation, Corporacion Antigo Puerto Madero, insured the preservation of the warehouses, wharves, and docks by declaring them an "Area of Patrimonial Protection." The aim of the planners of the Corporacion Antigo has been to construct a new urban district close to the city center with a balanced mixture of housing, offices, recreational facilities and shops.⁶⁸



Fig.26. The warehouses at Puerto Madero before rehabilitation

The warehouses have been rehabilitated with a diverse array of programs. Each of the warehouses have been restored by a different architect. The warehouses are all four stories high, and an architectural continuum was maintained by having each warehouses divided into pavilions; in this way, because the architects had to adhere to a defined set of proportions, they were free to develop their own design solutions while the warehouses maintained their overall historic appearance. Galleries and platforms have been added on the dock side of the warehouses which take advantage of the large openings in the buildings where winches once hauled up cargo.

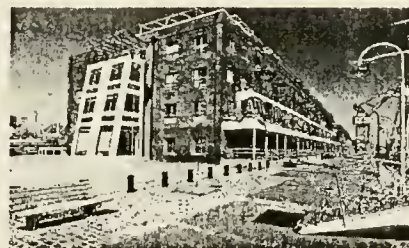


Fig.27.

The buildings have been developed with activities which include cafes, restaurants, businesses, residences, and a maritime museum. Small ships continue to call at the port. In addition, the Argentine Catholic University has an auxiliary campus in four of the warehouses.

The project is part of a larger waterfront development which includes a park and a continuous pedestrian walkway along the docks. This promenade is a wide, landscaped walk punctuated with leftover cranes and street furniture. The walk was built over the old rail line that served the docks, and contributes historic character by incorporating old paving stones and the original railroad ties into the paving.

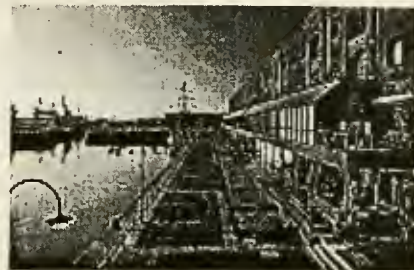


Fig.28. The walkway utilizes the back side of the buildings to heighten the promenade's connection to the water.

Puerto Madero is a well used place in Buenos Aires. This can be attributed partially to the fact that people live there, partially that they work or go to school there, but mostly to its being a lively urban center. The fact that it is a lively place to be completes the pleasant environment that has been created by the promenade along the water, and the reinhabitation of the warehouses which focus out to the walkway. Beyond reinvigorating activities along the waterfront, Puerto Madero instills a maritime history of the city by preserving the warehouse buildings and remnants of historic fabric along the waterfront promenade.

The Seattle Waterfront, Seattle

The Seattle waterfront has achieved its present form through the culmination of small changes. Seattle's waterfront did experience a phase of development in the 1970's when many of the piers were redeveloped. Recent changes along Seattle's waterfront have occurred more incrementally than the restora-

tions that have transformed other urban waterfronts. Seattle's waterfront represents a broad array of maritime and urban activities. It has the definitive marketplace in the Pike Place Market, working ferries, and passenger ships. Private commercial businesses have relocated in appropriately adapted historic waterfront structures which incorporate public spaces. Many of these activities are integral components of urban life in Seattle. There is a seamless transition between the city and the waterfront.

Perhaps this cohesiveness can be attributed to the fact that Seattle's residents never really became disassociated with the waterfront; local residents use the waterfront as part of their daily routines in the city. In 1971, after citizen action prevented its destruction, Pike Place Market was placed on the National Register of Historic Places.⁶⁹ Many local residents use Pike Place to buy fresh meats and produce, yet the market is also a popular tourist location. Local restaurants, stores, and businesses are interspersed throughout the waterfront – many of these businesses are located off public staircases that connect the city with the water in spite of the steep cliffs that separate them.. The Seattle Museum of Art was also located near to the waterfront so that civic buildings would continue right up to the water's threshold.

It is also notable that private development has been incor-

Fig.28. Pike Place market was a focal point of Seattle in 1915



Fig.29. The rehabilitated market in 1991, continues to be an urban center

porated so successfully in several historic industrial buildings lining the Seattle waterfront. In 1994, the landmark Lake Union Steam Plant building was adaptively reused to house a research laboratory. The architects who restored the building did not alter the original facades of the building by organizing a building program to work within the existing configuration of the historic structure, and by replacing historic materials with ones that reflected the original's character and proportions.⁷⁰ The project incorporated a floating pedestrian walkway, boat-launching piers, and a neighboring house that was restored and is now a cafe.

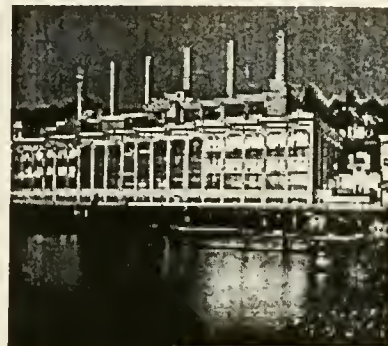


Fig.30.

Many of Seattle's piers were redeveloped in the 1970's. The Seattle Aquarium occupies Piers 59 and 60. North of the aquarium, on Pier 79, is an "entertainment shopping facility" similar to San Francisco's Pier 39.⁷¹ Fewer local residents frequent this part of the waterfront on a regular basis, and so this part of the waterfront feels less lively. The Interstate 5 elevated freeway divides the segment of the waterfront where these piers are from the downtown community. This physical division, and a general perception by Seattle residents that this part of the waterfront is for tourists, weakens the connection between the activities on the piers and the city. If one of the piers in this area were to be redeveloped with a civic building, like the concert pavilion in Baltimore for instance, then that cultural activity may attract a larger segment of the local population.

No single waterfront can answer the question of how to successfully rehabilitate San Francisco's bulkhead and pierhead buildings. Yet, there are lessons to be learned from the positive urban spaces created at other waterfronts. There were common themes that stood out in each of the four waterfronts. Each of these waterfronts demonstrated a shift away from a commercial orientation to new development. Instead, these waterfronts have encouraged a balance between retail or restaurant activities and cultural or civic activities. Similarly, these four waterfront case studies illustrate a balance between public and private spaces; none of the waterfronts were dedicated solely for parks, and private developments had a public access component.

All of the waterfronts focused on extending the city to the edge of the water; many of the activities appropriated for the waterfront — a concert pavilion, residential and office spaces, an university extension — could have been located elsewhere in the city. But locating these programs at the water has brought city residents to the waterfront. Once there, these residents have discovered an array of activities provided for them that range from places for recreation, to places for repose, to opportunities for public interaction.

In at least one part of all of the waterfront case studies examined here, these public spaces were created in an historical setting. Whether these historical waterfront resources provided the backdrop for public activities, or functioned as a container for the

activity, the historic materials linked the project to the historical origins of the waterfront. Restoring the historic environment, the buildings and landscape, was a common factor in educating the general public about the waterfront's maritime past.

Now is the time to decide how the bulkhead buildings will be preserved and rehabilitated. The catalysts necessary to implement the preservation of the Embarcadero's historic resources have been activated; San Francisco voters have called for waterfront renewal by way of legislation, and the Port of San Francisco has responded by developing a waterfront plan. The plan recommends the nature of the redevelopment which is to occur along the waterfront, but it has yet to reach a conclusion as to how the Port will preserve the historic character of the bulkhead and pierhead buildings.

Recommendation

There are two primary preservation issues to be identified which, once resolved, will provide general preservation guidelines for all of the historic structures on the bulkhead and piers. The first of these is what preservation recommendation should be made for the once continuous facade wall that the bulkhead buildings and connector buildings create. Second, what form of development will most appropriately complement the historic character of the bulkhead and pierhead buildings. It is also necessary to recommend the extent to which change to the original configuration of buildings on the piers can occur before the historic physical relationship between the bulkhead buildings and the piers is lost. Many of these questions can be resolved if the question of why is it necessary to preserve the buildings at all is reconsidered.

The Port states as one of the objectives of the Waterfront

Land Use Plan that it is dedicated to maintaining the waterfront as, "a repository for memories of past events," and creatively re-using historic waterfront structures to preserve the waterfront's historic fabric and context.⁷² In what way do the bulkhead buildings convey memory, and what purpose do these memories serve for San Francisco? Henry Cisneros, the former Secretary of Housing and Urban Development once said, "as [people] walk through a historic room, [they] can associate themselves with, and draw inspiration and even ambition from, the lives of people who have gone before. As visitors retrace their footsteps, they link themselves not only to past human achievement, but to human failures as well."⁷³ The physical remnants of the past are what create an historical continuum with the present.

J.B. Jackson, the late landscape historian, also examined this influence of the past on the present in his book, *A Sense of Place, A Sense of Time*. Jackson clarifies that in classical times, sense of place, or *genius loci*, described not so much the place itself as the presence or guardianship of a supernatural spirit.⁷⁴ An emotional connection to the past is experienced through the physical landscape. The presence of the historic built environment alludes to past events.

The ability to convey history through historic structures is a fundamental rationale for historic preservation: that the natural and built environments teach us something about our history and culture. The Waterfront Land Use Plan does not cite this underly-

ing tenant of preservation as a reason for preserving the bulkhead buildings. The educative value of the buildings, what they can teach people about a maritime past that no longer exists along the northern waterfront, should be an emphasized goal in the preservation of the historic resources. With this objective in mind, we need to think less of this specific, and perhaps most historic, part of the waterfront as primarily for recreation and open space and and instead, see it more as an urban place for social and cultural exchanges within the city. The development of this area should provide San Franciscans an opportunity to interact within an historic landscape where they can learn about and identify with the city's past.

The opportunity to enhance the historical and educational value of this new place for the city lies in a preservation plan for the bulkhead buildings. A difficult role that preservationists have to assume is that of a planner not of their time, but of all time. The preservation perspective for the rehabilitation of the Northeast Waterfront's historic resources should be formulated based on, not only what we think is best for the waterfront right now, but also for the future. The historian, David McCullough, urged that history be viewed in the context of a spacious realm, offering this description, "I have long felt that the digital watch is the perfect symbol of our time. It tells you only what time it is now, as if there had been no time before and no time to come."⁷⁵ The context of the historic buildings, the bulkhead buildings, the piers

and the pier sheds, and the connector buildings, must be preserved, at least for one section of the waterfront, so that the place can be wholly understood.

It is not possible to foresee how many of these buildings will survive over time. Even with the aid of our best preservation efforts, some of the bulkhead buildings may be demolished. For this reason, it is necessary to maintain a part of the bulkhead wall, created by the bulkhead buildings, intact. This thesis recommends the preservation of two sections of this wall along the Northeast Waterfront, so that one section will inform the other by suggesting how this pattern of the structures once looked along the entire waterfront. The two sections that this thesis recommends preserving intact are the bulkhead and connector buildings of the series of piers on either side of Pier 9: Piers 1 through 5 to the south of Pier 9, and Piers 15 through 23 to the north.

Preserving the bulkhead buildings which create the appearance of a continuous facade between the Embarcadero roadway and the water will, in turn, preserve the historic environment of the waterfront. All of these piers were built around the same time as Pier 9, about 1915, and all were built as classical fronts between the city and the industrial activities on the piers beyond. These piers are reflections of the City Beautiful movement's desire to dignify cities. Regardless of the developments that are proposed for the pier buildings behind the bulkhead, this wall should be maintained.

There are at least four reasons why the bulkhead facade wall should be preserved. The first two pertain to the standards recommended by the Secretary of the Interior for the treatment of historic properties: the loss of historic material should be minimal, and there should be a clear distinction between the original historic structure and any changes that are made to the structure. The last of these reasons refer the Port to options which should be considered as alternatives to reconfiguring the historic bulkhead wall. First, there are other areas along the waterfront where visual connections to the water are available, and the creation of the Port Walk, which has been proposed by the Land Use Plan, can maximize public access to the water without removing parts of the facade wall. Second, there are precedents which illustrate the effects of the loss of historic fabric on the Embarcadero's relationship with the water. The environment of the southern waterfront that resulted due to the demolition of the bulkhead buildings illustrates compelling reasons why significantly altering the historic fabric of the bulkhead facade is not advisable.

The extreme creation of views at the expense of the bulkhead buildings has already been illustrated. The Mission Revival bulkhead buildings, that also created a continuous facade from the Ferry Building southward, were demolished in the early eighties. The absence of these buildings illustrates not only the effect that the loss of the buildings has on the waterfront, but also that there are many existing areas where large expanses of views to

the bay already exist. Today, there is no evidence that those piers, or bulkhead buildings ever existed. There is no physical evidence for San Franciscans to interpret that would allow them to understand how the waterfront once looked. True, this area has completely unobstructed views to the Bay, but none of the buildings which identifies the waterfront as a uniquely San Franciscan place. Sometimes buildings heighten the power of the natural landscape. The Golden Gate entrance to the San Francisco Bay was beautiful before the Golden Gate Bridge was constructed, but the bridge also gives a scale to the distance that the bridge had to span and a sense of time and place to the natural entrance to the harbor.⁷⁶ Likewise, the bulkhead buildings contribute a sense of time and place to the Embarcadero.

It is not hard to understand why the Port would like to create more views to the water by dematerializing parts of the connector buildings; it's impossible to argue the beauty of the San Francisco Bay. The Port is considering creating visual access to the Bay by removing material from parts of the buildings along the bulkhead. In addition, the Port would like to somehow introduce a transparent quality to the roll up doors that dominate the bulkhead entrance to the pier sheds, so that the water beyond the bulkhead is visible through the building. This has already been accomplished at some of the bulkheads that have already been renovated by leasing businesses. The change of materials from steel to glass for the freight doors has not changed the overall

appearance of the building's architectural form; the size and shape of the opening was not changed, only the material of the door. However, creating large openings in the connector buildings will significantly alter the original character of the buildings' facades.

In addition, it would be difficult, if not impossible, to distinguish for the general public which openings were original to the buildings, and which were new. Attempts at visually differentiating the old versus the new might only further detract from the historical character of the buildings.

The views that were created by the removal of the Mission Revival piers should be capitalized on by the Waterfront Land Use Plan by concentrating the open space recreational areas along these parts of the waterfront where these activities will not require changing historic fabric to provide for them.

The Port has several ways to enhance the visual access to the Bay without damaging the historic facade wall that it has committed itself to preserve. It can make the area just south of the Ferry Building, which is completely open to the Bay, a focal point for outdoor recreation and sailing opportunities. It can also appreciate the unique views that exist between the bulkheads where there are no connector buildings. Finally, the Port can develop the bulkhead and pierhead buildings in such a way as to draw San Franciscans onto the piers, so that they can experience views of the bay from the piers. But if the Port is committed to preserving the history of the bulkhead buildings, then it is the continu-

ous, repetitive architectural features of the bulkhead and connector buildings that contributes most to their historic significance, and it is this quality of the buildings that should be preserved.

The Waterfront Land Use Plan has proposed the creation of a Port Walk throughout the waterfront. This proposal offers a wonderful opportunity to design a walk that will provide for public access to the water in a stimulating environment that would also offer views of the city, the water, and the activities that will be developed for the historic buildings. This walk could also create intimate spaces in which to enjoy the waterfront – either on the city side or water side of the Port Walk.

There is also an opportunity to add an educative component to this walk. If the Port decides to nominate the waterfront as a discontinuous historic district, then perhaps the Port and the National Park Service can jointly develop the Port Walk to aid in the public's historic interpretation of the waterfront. An example of this exists in Boston. The National Park Service runs a Black Heritage Trail at the Boston African American National Historic Site on Beacon Hill. There, a park ranger leads tour groups through the alleys and streets of the Beacon Hill neighborhood describing the free black communities that once existed in the area.⁷⁷ In San Francisco, visitors and residents alike, on a tour or on their own, could make a connection between the history of the place and the



Fig.31. The Port Walk is proposed to run along the bay side(back side) of the bulkhead buildings

physical remnants that once was the setting for that history. Similarly, such a project could be incorporated into the redevelopment of the Embarcadero. An educative tour along the waterfront, enhanced with information and public art, could teach people what activities used to occur at the waterfront, moments of celebration and strife, could have the potential to illustrate how the historic areas, which are now gone, once appeared.

These physical remnants of the past are what philosopher, Edward S. Casey called “place memory,” or, “the stabilizing persistence of place as a container of experiences.”⁷⁸ Even if a person did not directly experience such memories of a place, places can represent a shared past. The Port has already attempted to instill this educative aspect along the Embarcadero in the public art installations that combine historical photos with text that describe the maritime history of the waterfront. But this same concept can be used for the Port Walk where the history of the place can be applied to the physical record of the story, the historic buildings. In this way, the walk can be a quiet promenade along the waterfront, and an additional contribution to the historic interpretation of the buildings.

Using this idea of the character of a place can also help formulate a development proposal that complements the historical character of the Northern Waterfront. As mentioned in Chapter One, the Northern Waterfront was a diverse place, home to a wide variety of maritime related activities. Not only was it a place



Fig.33. A sidewalk plaque along the Embarcadero informs pedestrians about ships buried under the pavement

of work, but it was also home, entertainment, shopping, and recreation for many San Franciscans from the mid-nineteenth well into the first half of the twentieth century. There was a transient and exotic character to the waterfront. The goods and people that arrived at the piers came from all over the world, and local residents came to the waterfront to buy fruit and watch the unloading of cargo which had been shipped from all the corners of the globe.

In addition to the written history of a place, there is a physical character of a place which is comprised of the spatial relationships between buildings. The relationship between the buildings on Pier 9 is somewhat tight— an expected condition considering the spatial constraints determined by the size of the pier. The bulkhead building itself is not very deep and is connected to the pier shed



Fig.34. An alternating pattern of finger piers and water

which occupies almost all of the pier, except for the narrow streets where the belt line tracks encircle the perimeter of the pier. The bay side of the Embarcadero alternates between piers and water, where the water spaces are almost the same size as the finger piers. Perhaps there is a way to incorporate the insulated water spaces in between the piers into the proposal for the reuse of the buildings.

The Monterey Bay Aquarium in Monterey, California, is an example of a project where the architectural features and the grouping of the buildings convey a sense of the original physical

qualities of the location. The aquarium is located on Cannery Row, and the site of the Hovden cannery, built in 1916, which was a sardine cannery until 1972. Three of the cannery's smokestacks and restored boilers are the frontispiece to the aquarium's entrance which is accessed unassumingly through a large opening that resembles a rolling warehouse door. The scale of the building is also visually broken up by the changing roof lines and setbacks that make the aquarium appear as if it is several factory buildings that have continually been added onto over time. These architectural features echo the feel of the sardine canneries that once dominated the Monterey Bay. Although the aquarium is a completely new building, except for the smokestacks and boilers, which does not function as the area did historically, people can appreciate the sense of how Cannery Row must have looked and how the environment felt.

Another project that is architecturally sensitive to the original waterfront environment is the fish market in Nanao along Japan's northern coast. This two level market on an old fishing pier is housed within a multi-story structure. The building has industrial design features, and a fish shaped roof. The architecture is vernacular, borrowing local architectural features which are then combined with modern, yet industrial materials. The market includes a produce market, a fresh fish market, and a collection of



Fig.33. The unassuming entrance to the Monterey Bay Aquarium

Fig.34. Vernacular architecture and an appropriately suited development program make the Fish Market at Nanao a success



local arts and crafts shops. A local museum and a ferry terminal are also located in the building.

The redevelopment of the piers along San Francisco's waterfront deserve these kinds of successful architectural rehabilitations as well. So to what new use can Pier 9 be rehabilitated, yet still retain the historical and physical features that con-



Fig.35. Some of the colorful cargo that came and went at the Port

vey a sense of the past? It should be a function that can take advantage of the physical configuration of piers and water, and can remind us of the transitory nature of the waterfront. It would help if it had a pre-existing tie to the natural occurrences of the San Francisco Bay.

An educational facility, like the aquarium in Monterey, or a marketplace, like the fish market in Nanao's Toyama Bay would appropriately complement these characteristics of the pier. Both of these facilities contain activities that focus on foreign, and seasonal things that are also both native and transitory.

There is an event which occurs along the San Francisco Bay that has a seasonal, transitory, maritime, and native quality to it. It is the temporary inhabitation of some of the piers by the California Sea Lion. In the late Spring, sea lions sometimes invade the piers, lured into the bay by herring, and they sometimes stay long enough that the weight of their bodies causes structural damages to the piers. The sea lions, who can weigh 700 lbs., sun themselves near Fisherman's Wharf, and have in the past inflicted

around 2 million dollars in damages to the docks.⁷⁹ One San Franciscan commented, “everyone loves them, but they keep everyone awake with their personal habits and their partying, and they smell bad.”⁸⁰ When they come, the sea lions draw a lot of attention from tourists, but their hotel dock near the shops and restaurants of Pier 39 and the rental boat slips, is not an ideal location.

The sea lions follow the herring population migrations which are seasonally regular, and sea lions also have a yearly mating season which occurs around April in the Channel Islands, off the coast from Ventura and Santa Barbara.⁸¹ This schedule determines that the sea lions are fairly temporary, although regular, visitors to the San Francisco waterfront. Instead of the sea lions staying at probably the worst place for them along the waterfront, in front of restaurants, rental slips, shops, and residences, a location could be prepared for them that could support their weight where they would be less, if only temporarily of a nuisance.

Instead of developing Pier 9 as a sailing center which would attract primarily tourists, why not develop the pier with the biggest tourist draw, which would likewise attract Bay Area residents: a place to accommodate the yearly visit from the sea lions. The remainder of the year, the pier could be used as a nursery for lost or injured marine animals. The development could use the pier shed building for tanks, and medical and holding facilities that the public could have some degree of access to. In addition, the

nursery could take advantage of the pier's relation to the insulated water spaces between the piers for the rehabilitation of marine animals. At certain times of the day, people could walk along the perimeter of the pier, where the belt line tracks used to carry cargo from the ships, and view the recovering animals. The large freight doors on either side of the pier shed could be replaced with glass where water tanks could be viewed from inside and outside of the building.

There is a possibility that the sea lions will not relocate to another pier; past efforts to relocate the seals have failed. However, the sea lions are repeatedly returning to a food source. Ann Bower at the Marine Mammal Center in Sausalito, California, agrees that the seals frequent Pier 39 because of the food scraps consequently provided for them by the restaurants' garbage and tourists. Luring the seals to another pier by offering them another food source has not yet been tried and, until it has, the success or failure of such a proposal cannot be determined.

Relocating the sea lions would require very minimal alterations to the appearance of the pier shed and bulkhead buildings, yet would draw people to the pier. The bulkhead building of Pier 9 could be lighted at night, and the promenade paving decorated to celebrate the nursery. It would offer Bay Area residents an appreciation of the native marine life that naturally inhabits the San Francisco Bay, and the natural and human activities that threaten the health of these animals. It would be an

uniquely San Franciscan facility, in a uniquely San Franciscan setting – the historic bulkhead and pierhead buildings which have, in some form, existed at the waterfront for as long as San Francisco has been a city.



The bulkhead building should be seen as a place of destination rather than blank facade walls. In the case of the nursery proposed for Pier 9, the facade of the bulkhead buildings can indicate the activities occurring on the pier and in the pier shed building. The public can be informed of the arrival and departure of recovering animals through banners and other informative plaques. Celebrating the bulkhead buildings in this way maximizes their potential as thresholds between the public interaction on the Embarcadero promenade and the piers out on the water.



The large freight doors along either side of the pier shed buildings which once facilitated the unloading of cargo can now be utilized as large glass openings through which to view recovering marine patients. In between the tanks and enclosures, signs and banners can offer information on the animals, or the history of the pier. There is an opportunity to incorporate such public access on the piers with the Port Walk.



In addition to the marine recovery center, the seasonal visit of the California sea lion would be an attraction to tourists and residents alike. Small piers designed to accommodate the weight of the seals could be extended off the original pier. Designating a structurally sound pier for the seals to sunbathe would protect the under designed piers from excessive weight strains, separate the sea lions from restaurants and residences, and provide the sea lions with a comfortable location for their transient visits.

Ten years ago, San Francisco's Embarcadero waterfront was an abandoned landscape. The dismantling of the Embarcadero freeway, and the improvements to the Embarcadero roadway and sidewalk promenade have brought profound changes to the Northern waterfront. Yet, the waterfront has become a linear landscape which focuses only on the streetscape, and not on the buildings which are the remnants of a forgotten environment. This thesis proposed the rehabilitation of the historic waterfront buildings as a vehicle for preserving the historic identity of the waterfront, and as a means to integrating the waterfront within the larger urban fabric. Inherent in this proposal are preservation guidelines which emphasize the educative value of the buildings for the urban community.

Although the thesis made a rehabilitation proposal for only one of the piers, the preservation plan for the bulkheads should view the waterfront as a cohesive environment which relies on context to convey the historic character of the waterfront. As such, it is not a proposal for one pier, but rather a comprehensive preservation plan that develops recommendations for the physical treatment of the buildings, and the nature of development proposals that will determine how the bulkhead buildings will be integrated into the bordering city fabric.

Urban waterfront revitalizations were explored in various cities in an effort to understand how a mix of urban oriented developments can facilitate a smooth transition between the city

and the waterfront. Drawing on these contemporary precedents, the thesis proposed a rehabilitation program oriented to the interests of the local urban community in an effort to bring city life to the waterfront edge. Preservation guidelines for the bulkhead and pierhead buildings should encourage the adaptation of the buildings to new uses while balancing respected preservation standards and contemporary urban needs.

While adhering to preservation standards which aim to protect the character defining features of historic buildings, the preservation plan for the waterfront should also encourage a willingness towards creativity that seeks the imaginative solutions from the design community. Fostering an explorative atmosphere for the development of preservation plans will provide cities with opportunities for new, unique developments which are distinctly place defined by the character of the city's historic landscapes.

Finally, this thesis addressed the original question of why the bulkhead buildings should be preserved. Though this thesis did not explore the diverse cultural histories that are recorded in the waterfront's physical narrative, there is a potential to reveal this collective past in a preservation plan for the waterfront. The collaborative efforts of designers and historians manifested in public art installations along the Embarcadero have begun to teach people about the waterfront's past. These strides can be expanded upon so that these stories speak to a larger segment of the urban population, and so that people can make a physical correlation between the history of the waterfront and the built environment.

In closing, San Francisco is fortunate to have the opportunity to preserve and restore the historic bulkhead and pierhead buildings along the Northern waterfront; fortunate that past perceptions that viewed these buildings as disposable did not reach the Northern waterfront. In preserving the buildings, there is an opportunity to instill a sense of continuity with the past, by reminding San Franciscans of their adventurous heritage in a time of rapid technological changes, and renew the waterfront to the focal point that it once was in the early years of the city's development.

Plates



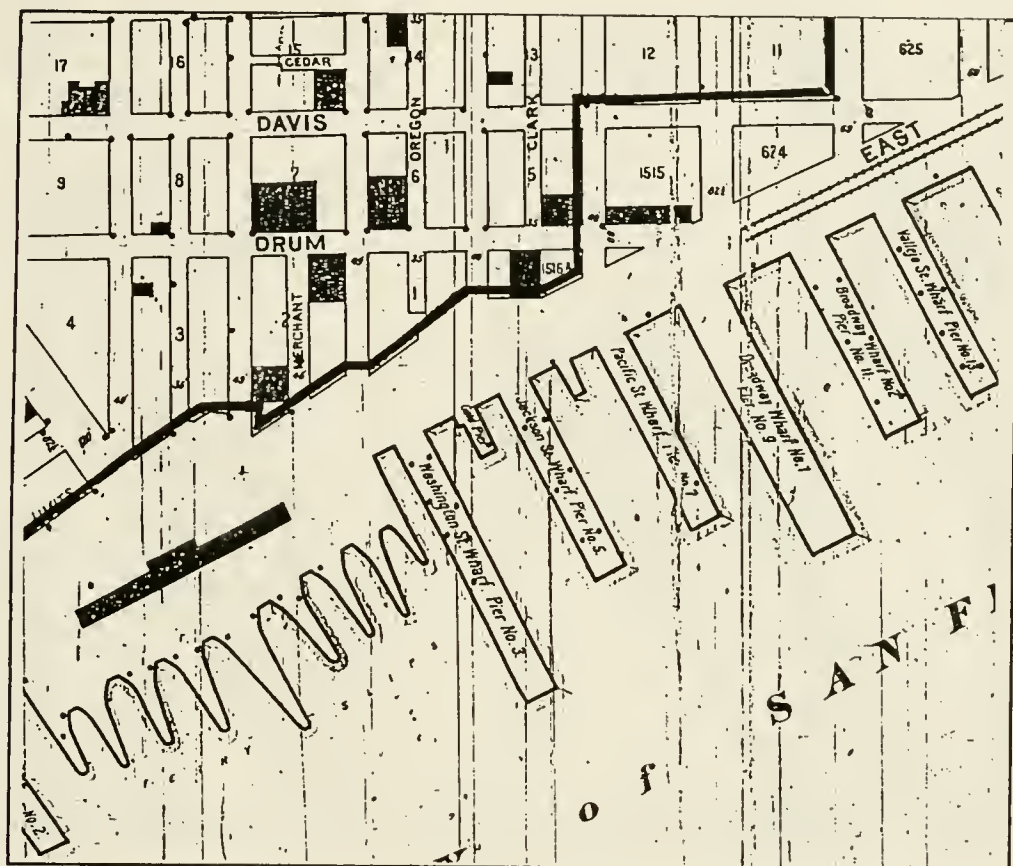


Plate 1. Sanborn Insurance Map, 1887. Volume 1. In the 1887 survey, East Street had not been replaced by the Embarcadero, and there were two Broadway Wharves: Broadway Wharf No. 1 and Broadway Wharf No. 2, Piers 9 and 11 respectively.

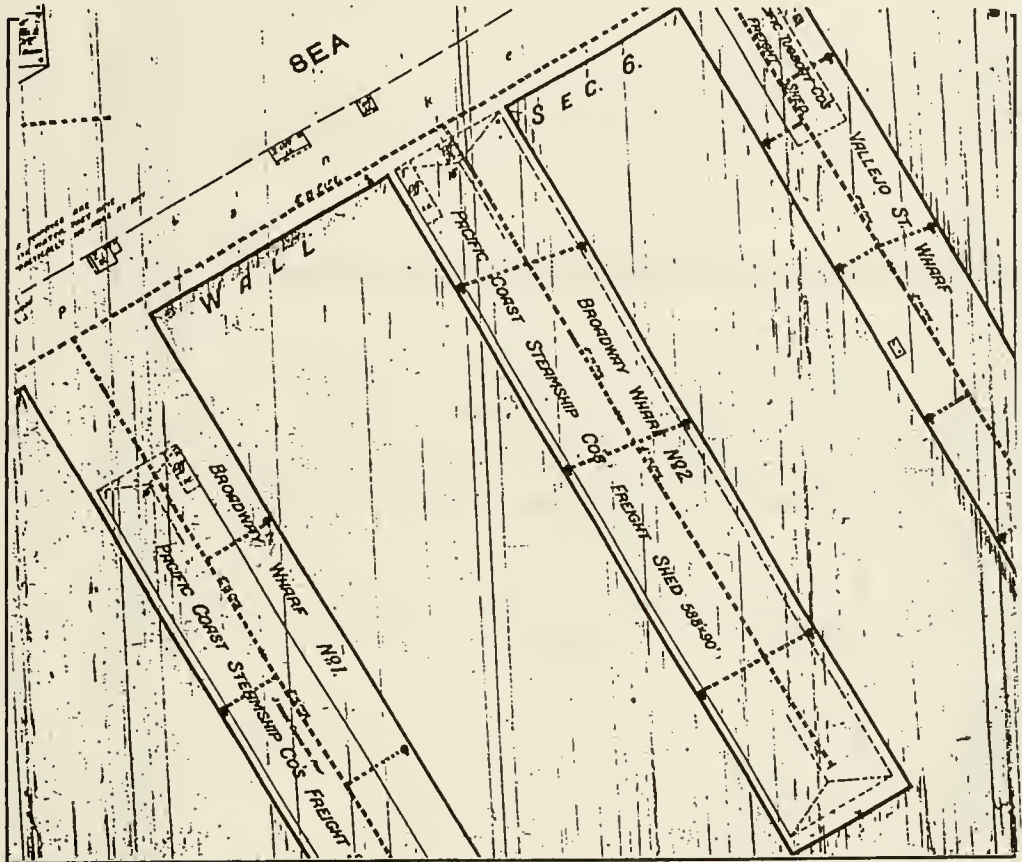


Plate 2. Sanborn Insurance Map, 1887. Volume 1, Map Q. Both Broadway Wharves were leased by the Pacific Steamship Company and used as freight sheds. At this time, there are buildings on the piers, but not on the bulkhead.

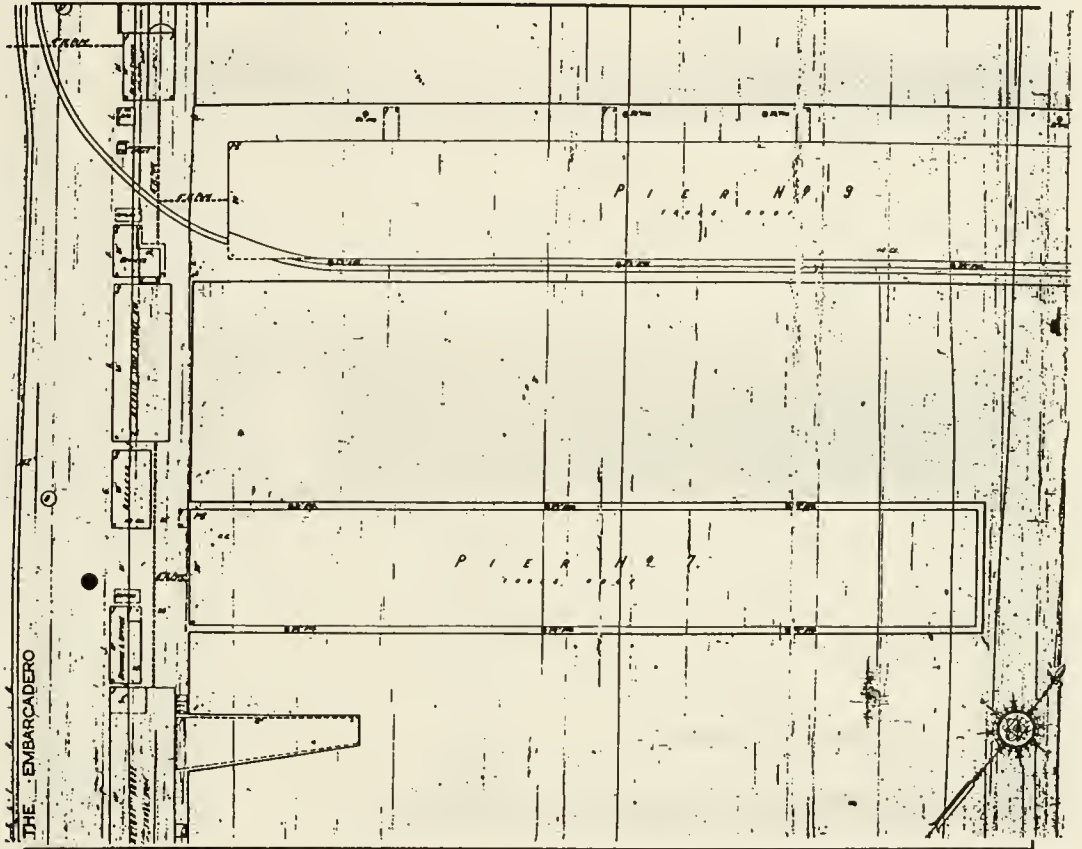


Plate 3. Sanborn Insurance Map, 1913. Volume 1, Map Q. In 1913, the bulk-head was completed along the section in front of Pier 9. A belt line track is shown on the South side of the pier. East Street had been renamed The Embarcadero.

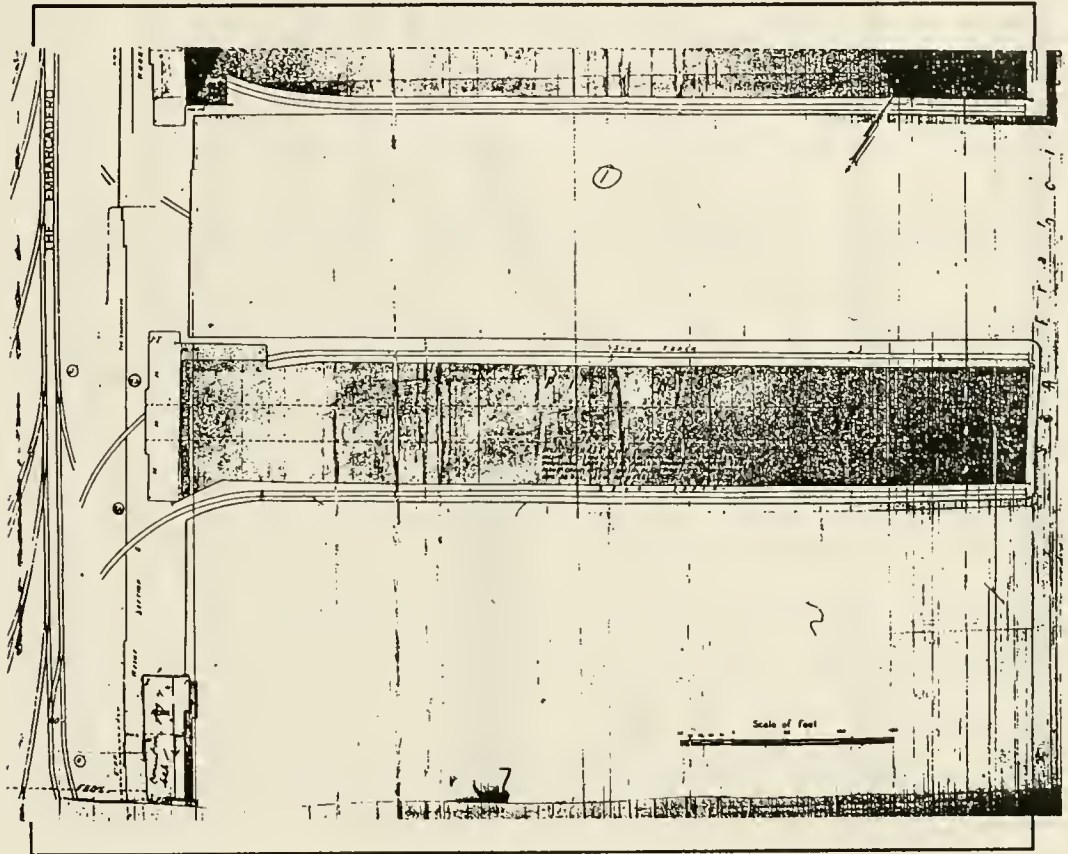


Plate 4. Sanborn Insurance Map, 1941. Volume 1, Map Q. The 1941 survey shows the bulkhead buildings on Pier 9. An additional track has been added to the North side of the pier.

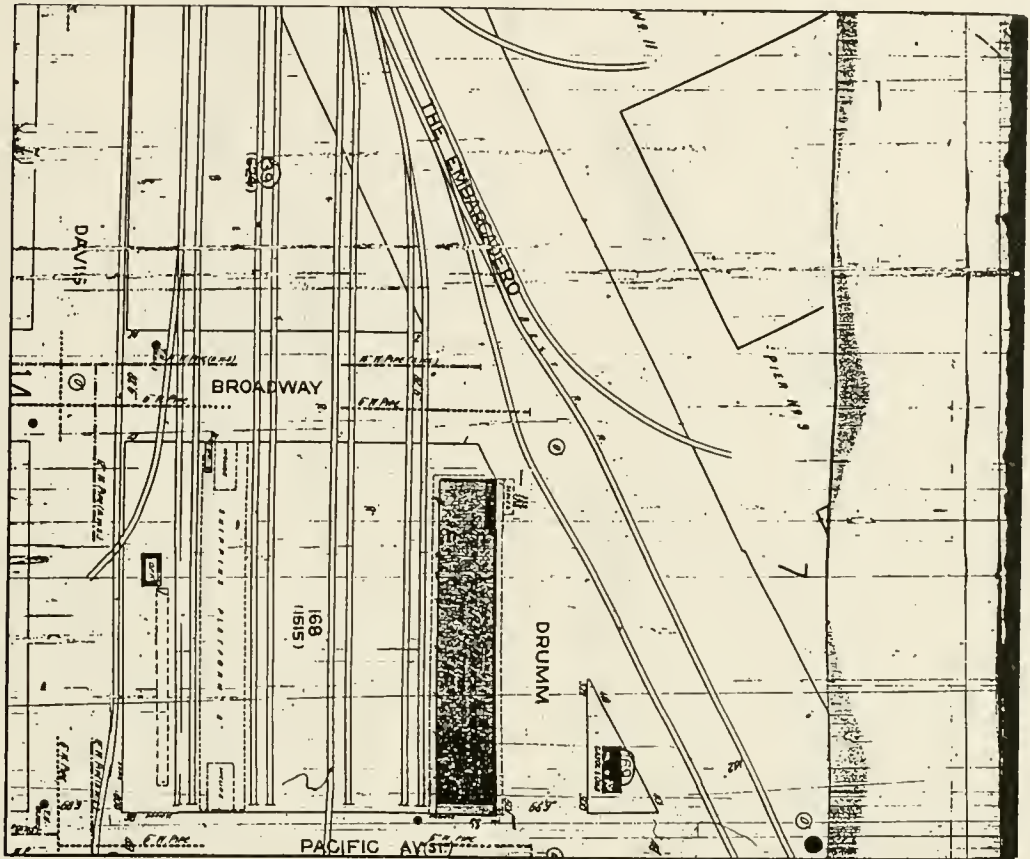


Plate 5. Sanborn Insurance Map, 1941. Volume 1, Map Q. The company across The Embarcadero from Pier 9 was listed as the Pacific R.R. Branch Freight Depot indicating that the pier was still be used for unloading and storing goods during WWII.

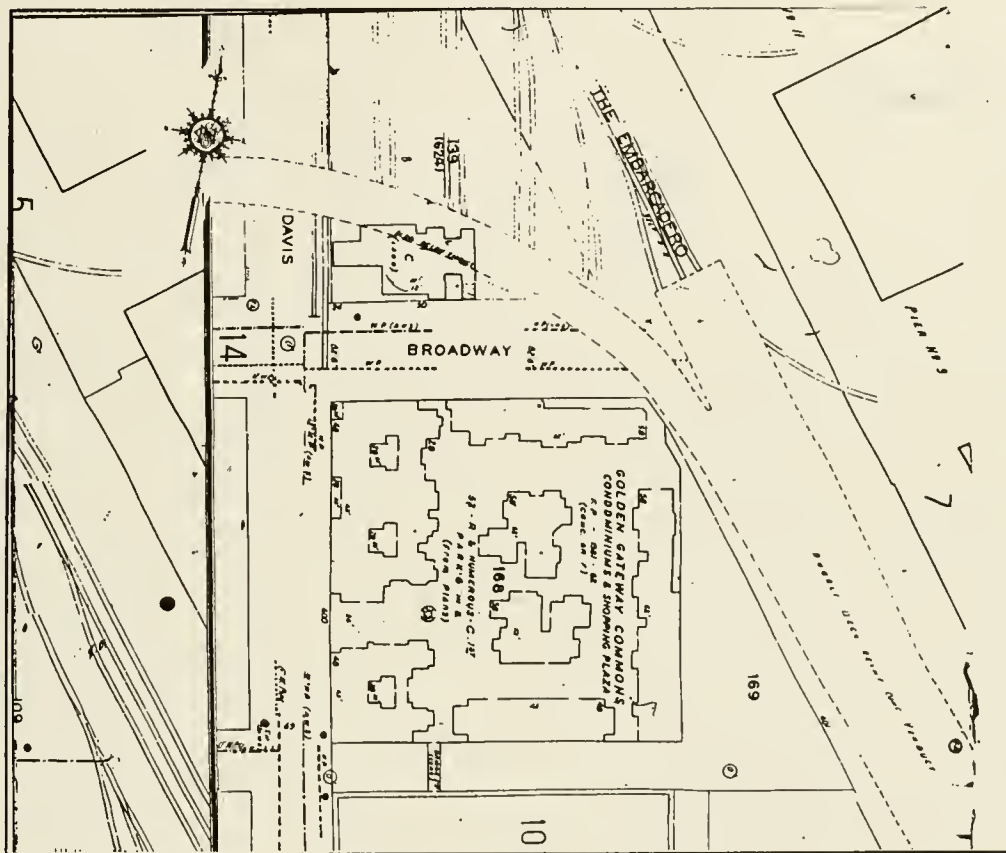


Plate 6. Sanborn Insurance Map, 1986. Volume 1, Map Q. The Embarcadero Freeway is included in the 1986 survey. In addition, the freight warehouses and rail road depots have been replaced by condominiums.

Appendix A

4
1

THE NORTHEAST WATERFRONT ACCEPTABLE LAND USE TABLE (1, 2, 3)

| | Maritime Uses (5) | Open Spaces/Public Access | Residential Uses | Commercial Uses | Other Uses |
|---------------------------------|--|-----------------------------|----------------------------|---|--|
| | Cargo Shipping Fishing Industry Ferry and Excursion Boats Historic Ships Maritime Office Maritime Support Services Passenger Cruise Ships Recreational Boating and Water Use Ship Repair Temporary and Ceremonial Berthing Water Taxis | Open Space Public Access | Residential Residential | Commercial/Designers Artists/Designers Assembly and Entertainment General Office (6) Hotels Museums Parking Retail (includes restaurants) Recreational Enterprises Visitor Services Warehousing/Storage Wholesale Trade/Promotion Center | Academic Institutions Community Facilities General Industry Power Plant Sports Facilities Transportation Services |
| Pier 35 | | | | | |
| Pier 33, 33 1/2, 34 1/2 | | | | | |
| Seawall Lot 314 | | | | | |
| Pier 31 | | | | | |
| 18 315, 316, 317, 318, 319, 322 | | | | | |
| Pier 27-29, 29 1/2 | | | | | |
| Pier 19-23, 23 1/2 | | | | | |
| Seawall Lot 320 | | | | | |
| Pier 15-17 | | | | | |
| Wall Lots 321, 323, 324, 322-1 | | | | | |
| Pier 9, 9 1/2 | | | | | |
| Pier 7 1/2 | | | | | |
| Pier 7 | | | | | |

* General Office is an acceptable use in non bulkhead/berhead annex buildings fronting on The Embarcadero.

Table Notes

- 1 This table focuses primarily on acceptable long-term uses for the sites described. The Draft Plan also allows other interim uses on Port property, which uses are not identified in this table. See Chapter 3 for a description of interim use policies.
- 2 Refer to Chapter 3 and Chapter 4 for General Land Use Policies and specific Development Standards which apply to the acceptable uses and sites identified in this table.
- 3 Definitions of land uses are included in Appendix C, Glossary of Terms
- 4 An "E" indicates that the use already occurs on site and is an acceptable long-term use. The amount of space devoted to this use on each site may be expanded or contracted, if consistent with the land use objectives for the area.
- 5 The table identifies acceptable maritime and maritime support activities best suited for the sites in this area. However, the Port Commission retains the authority to use Port sites for any maritime uses.
- 6 Unless otherwise indicated, an "E" for General Office on pier supported structures reflects existing general offices in pierhead or bulkhead buildings, which are acceptable long-term uses. An "E/I" indicates existing general office uses in structures on the pier deck, which are allowed as interim uses pursuant to the interim use policies in Chapter 3.

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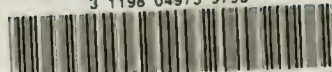
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