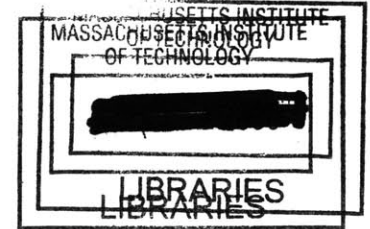




**Architecture as Connector:
Insertions, Ruins, and Additions at Pier 26, San Francisco**

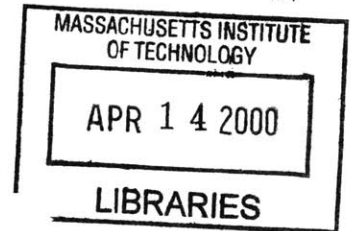
By Eunice M. Lin

**Bachelor of Arts in Architecture
University of California, Berkeley 1995**



Submitted to the Department of Architecture in partial fulfillment of the requirement for the Degree of
Master of Architecture at the Massachusetts Institute of Technology, February 2000.

ROTON



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February 2000

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Hasan-Uddin Khan - Visiting Associate Professor
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Chairman of Departmental Committee on Graduate Students

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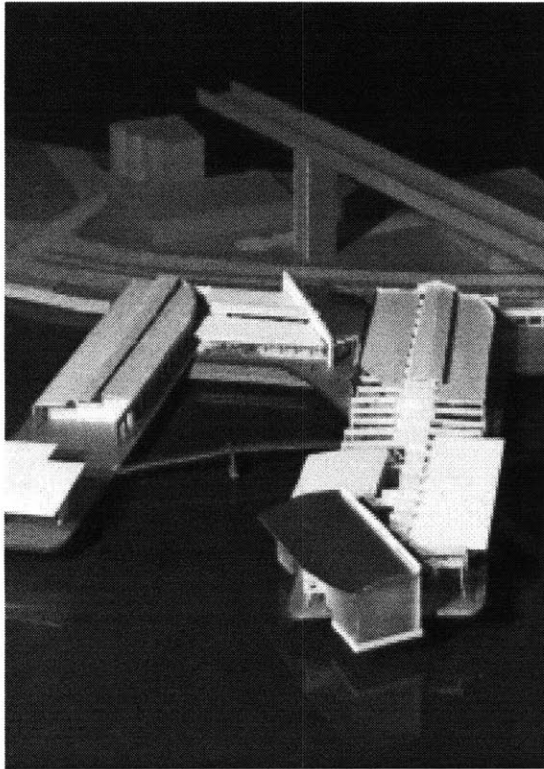
Architect

Thompson and Rose Architects, Inc.

Cambridge, MA

cover: view of Pier 26 from circa 1915.

abstract: view of site model



**Architecture as Connector:
Insertions, Ruins, and Additions at Pier 26, San Francisco**

By Eunice M. Lin

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Abstract

The thesis addresses the issues of adaptive reuse of Pier 26, one of few remaining pieces of San Francisco's grand maritime heritage. With the city's vision of changing its unused industrial waterfront into a recreational zone, the thesis focuses on the conditions affecting the reuse of the site to achieve this vision. The goal is to investigate how architectural reuse of a building can keep alive history and memory of place in the context of transformation. The investigation occurs at three scales: urban context, site, and building. These scales provide clues to defining reuse strategies and inform the new uses and their overall design concepts. The selected program uses cultural and recreational activities as the appropriate vehicle for revitalization of this edge of the city, in relation to the following nearby developments: the cultural area of Yerba Buena — the post-industrial bohemia areas coexisting with the "Multi-Media Gulch" area — South of Market and the popular recreational Embarcadero Promenade which runs along the waterfront. The program for the building will include artists' studios, recreational facilities and a restaurant.

The main tools to achieve this end are based on the strategies for reuse developed in this thesis: insertions, ruins, and additions. The thesis aims to demonstrate how adaptive reuse can address the idea of architecture as connector: connecting the past, present and future through memory and history; connecting uses and different user and social groups; and lastly connecting once separated parts of the city fabric.

Thesis Supervisor: Hasan-Uddin Khan
Title: Visiting Associate Professor of Architecture

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*note to images, all images are numbered
except for original imaes by author

methodology

Methodology

As a native of the San Francisco Bay Area, San Francisco in my eyes has always been a city of wonders filled with a mixture of sights, cultures, and events, and the heart of the region. The last twenty odd years, I have witnessed the many changes of the city and its waterfront. I have vague childhood memories of drives into the city from the elevated freeway and landing in the northern area of the city, never knowing there was a waterfront of any significance below and hidden by the freeway. I knew the city had some sort of maritime past alluded to at the overcrowded tourist area at Fisherman's wharf and Pier 39, but that was all that I knew. Unfortunately I never walked along the Embarcadero until after the freeway was removed in 1991 so I have never experienced the waterfront at its lowest of times. In searching for a site for my thesis focusing on reuse, I knew only that the place would ideally have a rich history and promising future. I quickly decided the city I knew the best, San Francisco, would be ideal. In thinking about the nature of the city, I realized to have a project that was tied to the city's history I needed a waterfront site. I had never really noticed my site of Pier 26 until I went in search of it.

Having chosen an urban site 2600 miles away required many site visits and a summer spent working and researching in the city. The steps taken are shown below.

April 1999

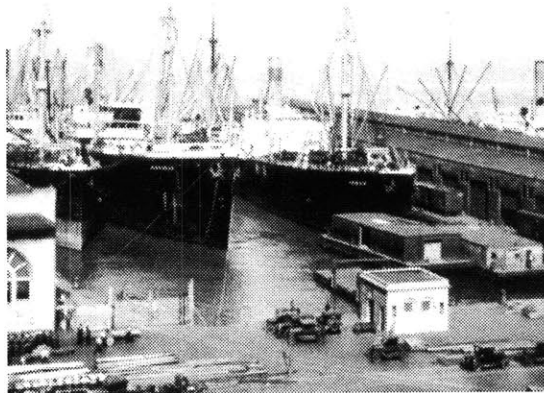
- Visits to the adaptive reuse projects designed by Carlo Scarpa: Castelvecchio and the Fondazione Querini- Stampalia
- Selecting the site involved taking a walking tour of the rapidly developing area, aided by area maps and Sanborn Fire Insurance maps and a camera.

Summer 1999

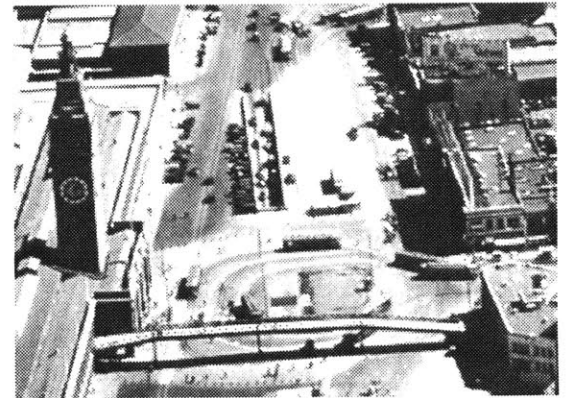
- Conducting research on the selected site of Pier 26, the San Francisco waterfront and the city itself. Main resources included: the San Francisco History Center, the Port of San Francisco, the City and County of San Francisco Planning Department, UC Berkeley Libraries, J. Porter Shaw Maritime Library.
- Open studio visits to local bay area artists occupying converted spaces

Fall 1999

- Urban Analysis and an assessment of what may be appropriate program for the site as well as well as supporting the ideas of my thesis.
- Defining a process of design approach and the scope of investigation to be emphasized at each scale of design.
- Developing strategies of reuse based on my analysis and prior courses dealing with issues of adaptive re-use, restoration, preservation and conservation.
- Precedent research to find projects of similar scale, approach, and scope to have examples of projects that were the catalysts for revitalization of urban sites and the density and vibrancy of activities needed to accomplish this.
- Strategy and program development and studies of design schemes that would best emphasize the site scale moves as well as at the building scale.
- Models, images, and historic images, and construction drawings to understand the spatial qualities of the existing structure.
- Studies of the character and experience of the existing space in relation to the goals of my thesis.
- Design working mainly in section and model



1.1



1.2



1.3



1.4

place

overleaf:

1.1 View of ships docked between Pier 26 and pier 28, 1915.

1.2 View of the Ferry Building, 1920's.

1.3 Aerial view of Southern waterfront, 1970's.

1.4 View of Pier 26 during ESPN's Xtreme games, 1999.

background

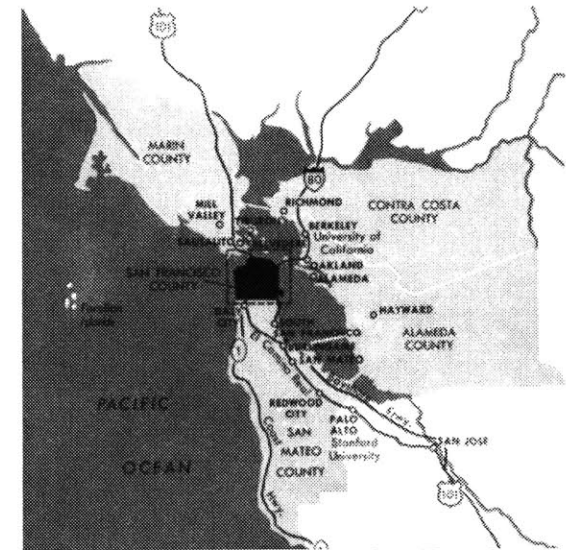
History of San Francisco

From its beginnings in the 1700's to its plans for the 21st century, the life and character of the city of San Francisco has been tied to its relation to the surrounding waters of the San Francisco Bay and the Pacific Ocean. The formation and growth of the waterfront are connected to the up's and down's of the city's economy. Though the San Francisco Bay is known as an excellent natural harbor, its natural land formations and heavy fog cover kept it hidden during the years of early exploration in the 1500's. Sebastian Rodriguez Cermeno landed at a small bay north of San Francisco, and named it *Puerto de San Francisco*, (Port of St. Francis). This would establish the name San Francisco for the region. Spanish and British sea explorers came close, but never entered the Bay. It wasn't until 1769, when the bay was discovered by a land expedition by the Spanish explorer Gaspar de Portola Spanish settlement began in 1776. The first settlements were near the northern portion of the peninsula at the Presidio army base or at the later established Mission San Francisco de Asis, later renamed Mission Dolores after the nearby Lake Dolores, approximately 1.5 miles south of the Presidio. In 1820, Spanish rule ended and the land came under the

control of the independent country of Mexico. The main landing area along the bay was known as Yerba Buena Cove. Businesses were started there as early as 1830's. By 1846, the growing settlement located at the cove was also known as Yerba Buena. The Americans took control of the settlement on July 10, 1846. Before the city was irreversibly changed by the Gold Rush in 1848, the name of the growing village was changed to San Francisco by the town council.¹ The city became incorporated on April 5, 1850.

The city continued to grow after the initial boom of the Gold Rush and later with the completion of the transcontinental railroads. Many fortunes were made at this time from both events. With the wealth came a spread of culture in the form of luxurious mansions, new theaters, and world renowned entertainers to perform for the newly rich. People from all over the world had begun coming to the city in search of gold and in search of a better life. With the influx of different cultures, the city began to develop various ethnic districts and neighborhoods. The city's continued growth was linked to the economic boom related to its port activities. By 1900 the population had reached a little over 340,000.

The devastation of the 1906 earthquake



1.5 Map of the region of the San Francisco Bay Area. The city and county of San Francisco is highlighted. The areas in grey are the seven counties included in the metropolitan area.



1.6 Map of the peninsula city of San Francisco.

erased much of the city's fabric. Its fires razed 500 blocks covering, 2,800 acres and 78,000 buildings.² The city rapidly recovered and returned to the spotlight showing its recovery with the 1915 Panama Pacific International Exposition that celebrated the opening of the Panama Canal. The city continued to grow and modernize its port facilities, increasing its shipping industry and role as one of the major seaports in the world. By the 1930's the city's two famous bridges, the Bay Bridge and the Golden Gate Bridge were completed, further uniting the city with the growing communities that surrounded the bay and the city. The city celebrated these bridges with the Golden Gate International Exposition on the man-made island of Treasure Island, located in the middle of the bay.

World War II continued the growth of the city, turning the city into the world's largest ship-building center as well as acting as a major post for the United States Navy. The 1950's, 1960's, 1970's brought the city many joys and problems common to many of the nation's metropolitan centers. There were problems of housing shortages and race issues, as well as the problems of urban renewal, and heated political battles. The city's waterfront industries declined heavily with the new cargo container shipping technology and the

increased road vs. rail land transportation. But during these decades developed many American cultural icons and movements that were developing in the city such as: the beat culture found in North Beach, the Haight Ashbury district, the Hippie culture and the peace movements, and various music icons of the decade.

The 1980's marked the beginning of changes. The city began to address revitalizing its problem areas. New dynamic political leaders came into office as well. Plans for a new cultural area in the heart of the changing industrial area South of Market Street began as did the beginnings of the Internet and web company boom in the unused industrial area of the city. The damage caused by the 1989 earthquake initiated many major architectural projects repairing damaged historic buildings as well as revitalizing newly cleared areas created by the removal of the elevated waterfront freeway. The 1990's have been filled with large city projects such as work on the city's international airport terminal, several historic renovation and seismic upgrades of its many beaux-arts civic buildings as well as new large civic and cultural projects designed by internationally renowned architects.

History of the San Francisco Waterfront

In 1848, gold was discovered in the Sacramento River at Sutter's Fort, northeast of San Francisco. This discovery brought thousands of people into the area, landing mainly at the West Coast port of San Francisco. The population prior to the gold rush in 1847 was only 459 but after gold was discovered in 1848, the boom began in 1849 and the population grew to 30,000.³ Ships abandoned in the cove turned into prisons, storage warehouses, stores and dwellings. At times as many as 800 vessels filled Yerba Buena cove. The initial gold rush had emptied the city, but then the people returned and the growth of the city and the need for wharf construction increased at an uncontrollable rate of development. The wharf construction that had been started by the town council before the gold rush was soon turned over to private industries as lucrative investing possibilities. The early wharf development after the Gold Rush stretched from the southern point of the city and along the length of the eastern bay side of the peninsula. The wharves extended from the street grid into the water. Within four years after the Gold Rush, the construction of the sea wall and the filling in of the tidal lands dramatically reformed the eastern waterfront of the city.

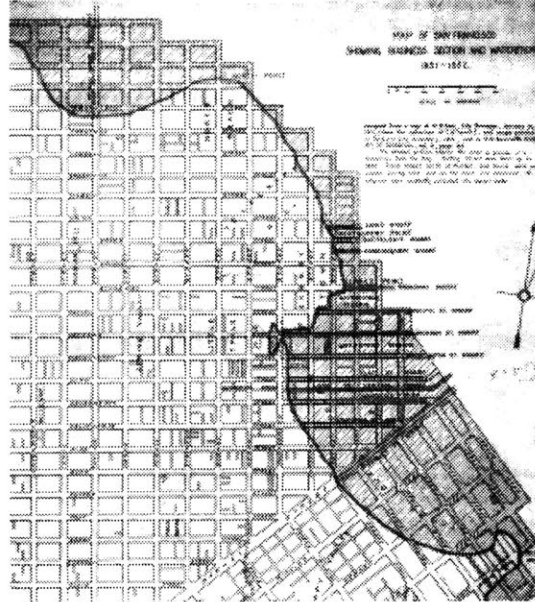


left: 1.7 Map from 1851 of the San Francisco Waterfront. The dark line indicates the original waterfront.

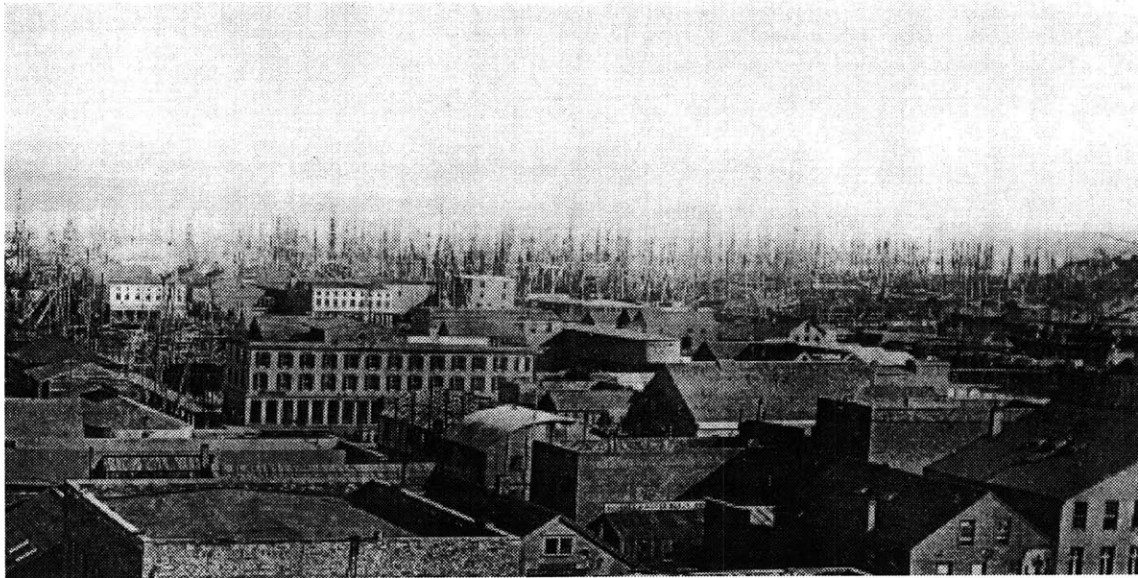
bottom: 1.8 Panoramic view of the 1850's waterfront. The bay was filled with abandoned ships.



right: 1.9 Map from 1852 of the development of the San Francisco Waterfront. The first jagged edge sea wall is shown developing into the northern waterfront.



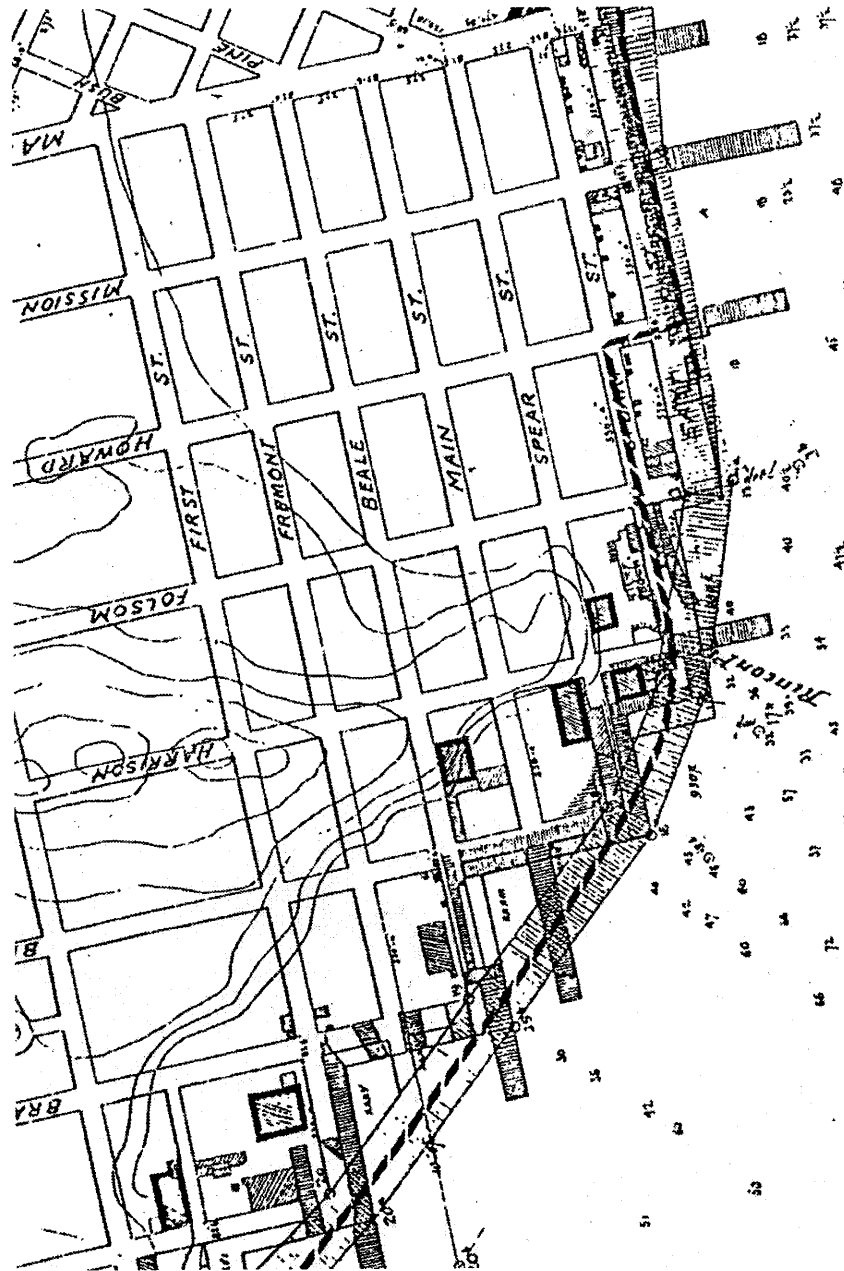
The spaces between the wharves were quickly filled in and new piers continued to the same layout and extended off the street grid of the city, into deeper waters and carried with them the name of the street. The early wharves that extended off such streets such as Folsom, Mission, Market, California, Sacramento, Commercial, Clay, Washington, Jackson, Pacific, Front, and Greenwich Streets, were the commercial life of the port. These wharves were filled with merchants, auctioneers, customers, and bankers daily who packed the wharves, the nearby auction houses, and cloth and provision buildings. One of the most popular and most profitable, the Commercial Street Wharf, commonly known as Central or Long Wharf once stretched 800 feet in length and routinely turned away business that it did not have the room to accommodate.⁴



In general the area south of the main street of Market was industrial with a small amount of residential areas. Early photographs of the waterfront area depict the life of activity that once filled the waterfront. Pier sheds carried the names of the companies that occupied them. American-Hawaii Steamship Line- Pier 10, Pacific Mail Steamship Co.-Pier 42, Union Iron Works, Pacific Rolling Mills, Arctic Oil Wharf are some of the names that were

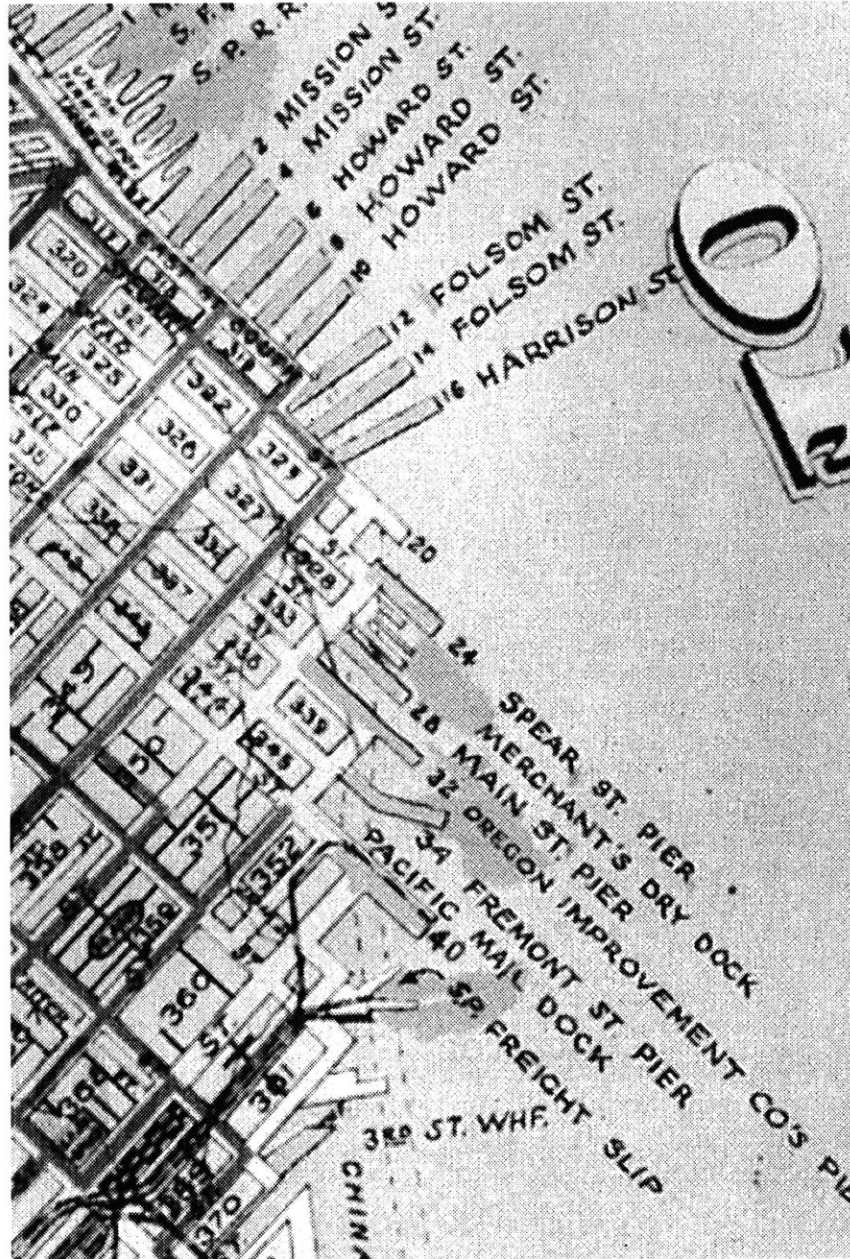
familiar sites along the southern waterfront. The few blocks that lined the waterfront were filled with industrial and maritime related uses. There were manufacturing and storage warehouses, shipping industry businesses, services such as boarding houses, restaurants, saloons, brothels, hotels and supplies stores for the sailors and longshoremen, and large amounts of land for railroad use.

The port saw much activity and had a significant role in the maritime history of the country. The great clipper ships were raced from the East Coast to bring the profitable cargo the quickest to the western port. During the Civil War, the square-rigged British grain trade ships, Alaskan fishing ships filled the harbor. Gold from the California mines and silver coming from the Comstock Lode in Nevada also came through the harbor. The completion of the Transcontinental Railroad in 1869 temporarily decreased the trade around the Cape Horn from New England. But then transpacific trade with Asia increased and later in the 1870's products from the California farmlands re-invigorated the trade with New England around the Cape Horn. Maritime activities continued to boom with the lumber trade coming from the Pacific Northwest, and coal from British Columbia, and salmon and cod from Alaska.



left: 1.9 Map from 1877 showing the proposed curved sea wall in relation the existing orthogonal geometry of piers extending of the street grid of the region of the San Francisco Bay Area.

right: 1.10 Map form 1896 showing the changing waterfront due to the new curved sea wall. The southern waterfront still extends from the orientation of the street grid.



The actual piers, wharves and land that make up the physical waterfront of the city developed rapidly and have radically changed the original natural waterfront. State Administration of the port of San Francisco began in 1863 after private ownership of the waterfront and development of new wharves led to corruption and exorbitantly high cost of use. By the late 1870's the Board of State Harbor Commissioners placed in charge of the port decided to build a permanent sea wall that would also round out the jagged orthogonal edges of the waterfront. It was built between the years 1877 to 1881. The map from 1896 depicts the continued development of the sea wall done in stages with the waterfront in transition. In the northern waterfront, the new finger piers that extended perpendicularly like fingers off the new curved waterfront to maximize the efficiency of the piers. The southern waterfront still existed with the earlier sea wall. At its peak during this time, the port had approximately 60 piers. The waterfront edge still was constantly changing with the filling in of tidal land with earth and debris from the city's hills. The main street built on top of the sea wall was then called East Street, was later changed to the Embarcadero, meaning "place of embarkation."⁶ Pedestrian activity along the

Embarcadero was also largely fueled by the Ferry rider-ship from the other cities in the bay. In 1896 a formal ferry building house, “the Union Ferry Depot,” was built at the end of the Market Street along the waterfront. It marked the point of entry into the city at the foot of the main downtown artery, and acted as a formal landmark with its clock tower and colonnaded archways directing traffic flow to and from the ferries into downtown. In the high point of ferry travel, 100,000 people traveled daily on the ferries.

Though fires caused by the earthquake in 1906 burned the majority of the city, little damage was done to the waterfront. As the civic center of the city was rebuilt in the beaux-arts visions of the City Beautiful movement, the waterfront as well became the focus of major re-design efforts. The emphasis was on improving efficiency and functionality as well as improving the image of the city portrayed through its waterfront. Key improvements included continued construction of the curved sea wall begun in the 1880's, the laying out of new piers, a new aesthetic applied to the new facades, and more durable construction techniques for the piers, and improvements along the busy Embarcadero street.

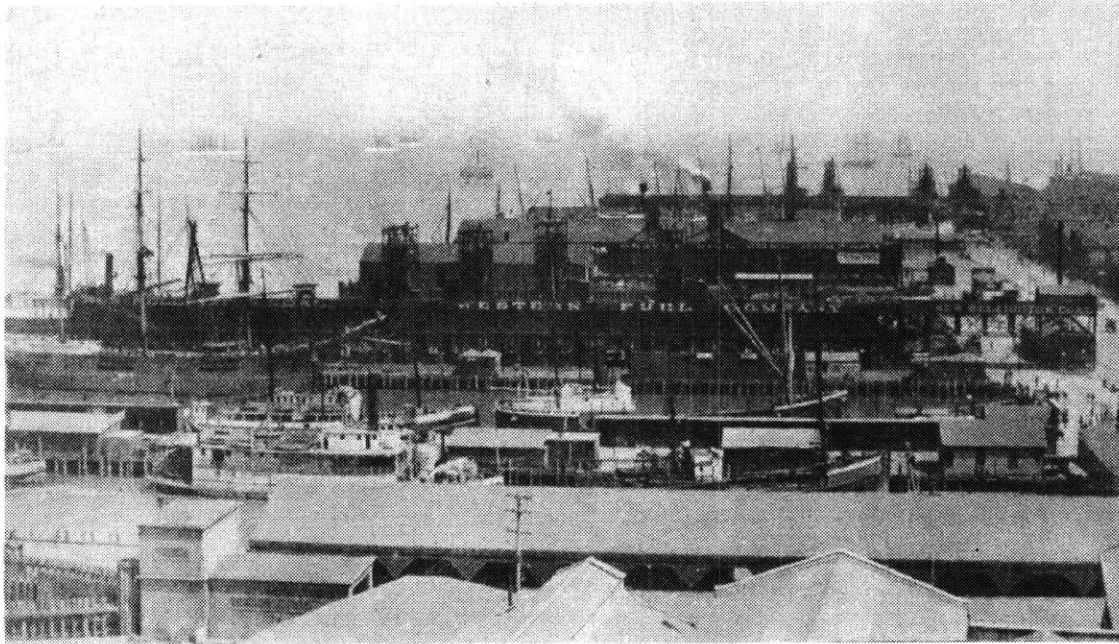
Upon the opening of the Panama Canal in 1915, the city hosted the Panama Pacific International Exposition of 1915. It was a 10 month showcase celebration which had a recorded 18, 756,148 visitors.⁷ Civic pride was at a high point, in successfully showing the world how the city had come back from the devastation of the earthquake ten years prior. In the Board of State Harbor Commissioner's Biennial reports from 1910-1912, the port's anticipation of the visitors and importance of needed improvements in anticipation for the opening of the canal as well as the exposition are evident:

Furthermore, the commerce of the port of San Francisco is steadily increasing with acceleration that will become greater and greater with the opening of the Panama Canal and the inevitable growth of trade in the Pacific Ocean. San Francisco possesses all of the prime requisites of a great seaport except ample docking facilities...it is ideal as far as natural conditions are concerned. It is the terminal point of three great transcontinental railroads and gas at its gates a vast, rich, and growing hinterland. All it needs is betterment of a its docking system.⁸

The city's plans to host a world exposition in celebration of the canal's opening added another element of pressure to further

top: 1.11 View looking south along the Embarcadero, 1912

bottom: 1.12 View of the Panama Pacific Exhibition, 1915.



beautify its waterfront. An \$11 million bond issued in 1911 and a \$9 million bond issued in 1909 funded the second phase of development of the waterfront. It was marked mainly by the completion of the construction of the curved sea wall along the southern waterfront in 1908, the demolition of several 19th century piers and the building of many new piers, sheds, and bulkhead buildings. The older 19th century sheds were long and barn-like with simple facades with rectangular entrances and shed roofs.⁹ The new finger piers were laid out in right angles to the sea wall to improve the efficiency of berthing space. The completion of the 12,000-foot long sea wall stabilized the waterfront from the deteriorating action of the bay's currents and added 800 acres of new land.¹⁰ The new bulkhead buildings were of either a modified Mission style or Mediterranean style in the southern waterfront or Neo-Classical style in the northern waterfront, patterned after the Chelsea piers in New York. Though a selection of these styles can be found in early reports of the Board of State Harbor Commissioner's, there was never any decision enforcing these styles nor describing how to design them. Though different in style, the massiveness of the facades and the dominating arch opening found in all the bulkhead buildings along the entire waterfront

create a sense of planned formal uniformity as a whole. Individually, both presented a strong public face of continuous false front facades to the city and a strong sense of character to each area of the waterfront.

The construction of the piers was directly related to the construction of the new curved sea wall. The earliest date of the newer piers in the Southern waterfront is 1908, and the construction of the Pier 40 shed and pier.¹¹

The existing piers on southern waterfront date from 1915-1918. The Northern waterfront piers date from 1915 to the 1930's. There was a strong concern for improvements with the durability of the materials and construction, especially after the fires of the 1906 earthquake, and the deteriorating wood based construction of the existing structures. The 1910-1912 Board of State Harbor Commissioner's report states that of 26 piers, 2/3 should be removed and pulled out to be replaced while others are to be repaired as needed until can be replaced.¹² The original general components of the shed construction were defined with the following recommendation:

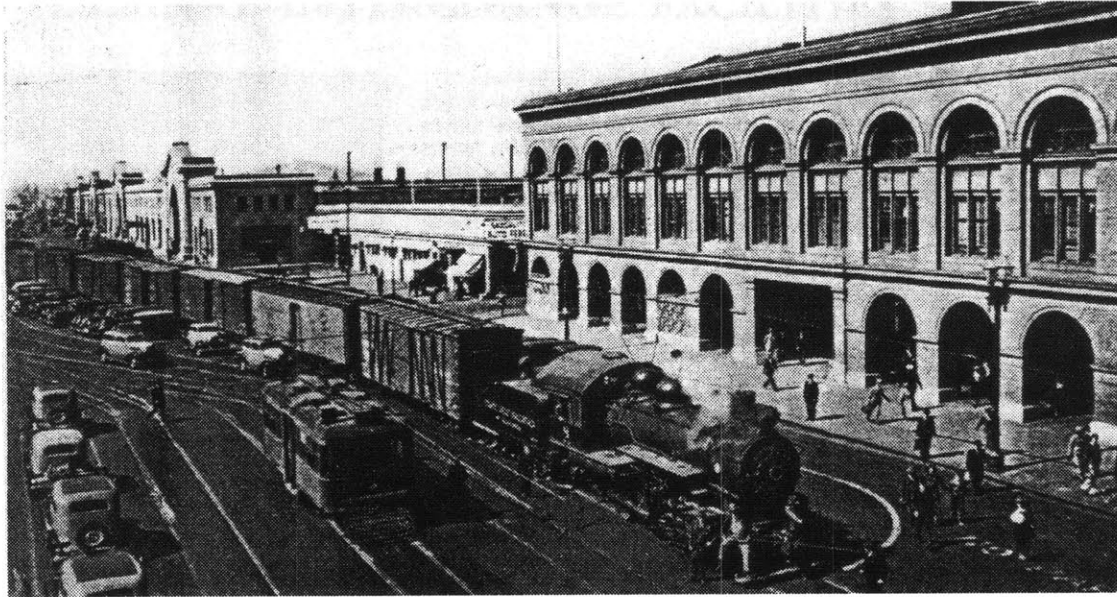
Taking into consideration the many changes that are going on constantly in the manner and methods of handling cargoes from ship to wharf, and wharf

to ship, we believe a type of moderate cost should be adopted, and would recommend that buildings supported by either steel or wooden trusses, preferably the latter, be erected, so designed as to make the members as large as possible; the roof be constructed either of tar and gravel, corrugated iron or other similar roofing material; that the sides from the eaves to the heads of the doors and the ends to be constructed of corrugated iron; that rolling metal doors be provided along the entire length of either side.¹³

Though the pier sheds were ordinary industrial buildings, the construction along the waterfront was still publicly reported on. With the near completion of some of the new piers the San Francisco Examiner on August 1, 1915, described the progress of the pier construction:

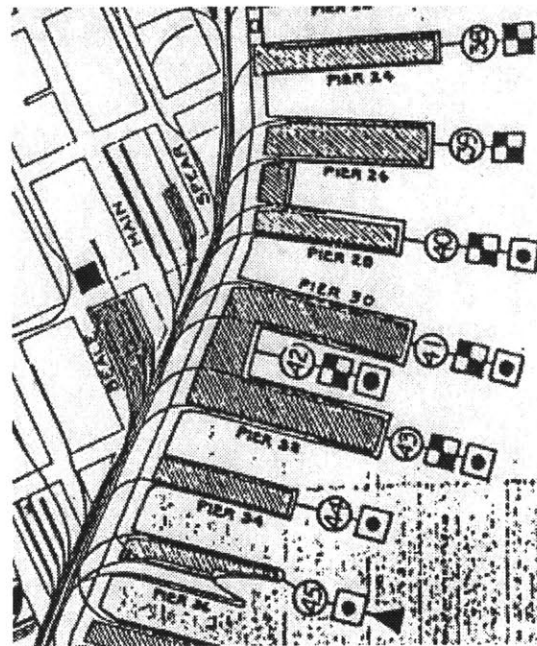
They are constructed on reinforced concrete cylinders on hard bottom, with concrete beams and decks. There is now a complete chain of piers from Mission Street to China Basin. In all these new piers the old ugly type of shed front was abandoned and the pier fronts are built in modified Mission style, which add to the attractiveness of the waterfront.¹⁴

The article also stated the status of all waterfront improvements: the piers 16 and 18



top: 1.13 View of the Belt Railway Locomotive crossing in front of the Ferry Building, 1920's.

bottom: 1.14 Map showing the curved pattern of the Belt Railroad tracks turning onto the piers, 1983.



were completed, pier 20 was being remodeled, and pier 22 was under construction. The dimensions of some of the new piers were also published: Scheduled to begin, Pier 24 was 800 ft long by 127 feet wide; Pier 26 was near completion and was 756 feet long and located between Harrison and Bryant St.; Pier No. 28 would be 676 long by 150 ft wide and piers 30 and 32, would be 750 long by 200 ft wide and connected by a wharf 220ft by 200ft.¹⁵

The development of the waterfront also included the development of the Embarcadero artery on top of the sea wall and the State Belt Railroad. The Belt Railroad was introduced in 1890 and played a major role in linking land to sea in the transport of goods. In general the rail line circled the waterfront running along the Embarcadero. It eased the transit of goods from the waterfront to the main railroad connections located further inland. The construction of the new piers also provided the opportunity for the rail lines to be incorporated into their construction allowing direct connection to the sheds and to ease transit. The older piers did not have this direct access. The rail lines occupied a large portion of the Embarcadero roadway as well as spurring off onto the piers, along both long

edges of each pier, on the exterior of the pier sheds. The radius of the spur tracks defined the footprint of the sheds and also created a distinct pattern language of industry embedded in the street.

The Ferry Building was the heart of public use of the waterfront since the late 1800's until the early to early mid 20th century. Located at the intersection of the Northern and Southern waterfronts at the foot of the main downtown artery of Market Street ending at the Embarcadero, it was the transportation hub of the area. At its front door was the intersection of all traffic: ferry traffic carrying passengers from across the bay, the Market Street Rail turnaround, a pedestrian walkway crossing over the area, and a vehicular subway running beneath. This was the main point of public interaction with the working waterfront.

With the completion of the two main bridges, the Bay Bridge in 1936 and the Golden Gate Bridge in 1937, ferry patronage diminished and vehicular traffic and rail access increased. The lower deck of the Bay Bridge also used to carry two lines of passenger rail across the bay. The last waterbound footing of the bridge was placed on the end of Pier 24, with the span running directly over the



left: 1.15 View looking north along the Embarcadero towards the Ferry Building, after the 1906 earthquake.

bottom: 1.16 Aerial view of the San Francisco waterfront before the building of the Bay Bridge, 1920's.

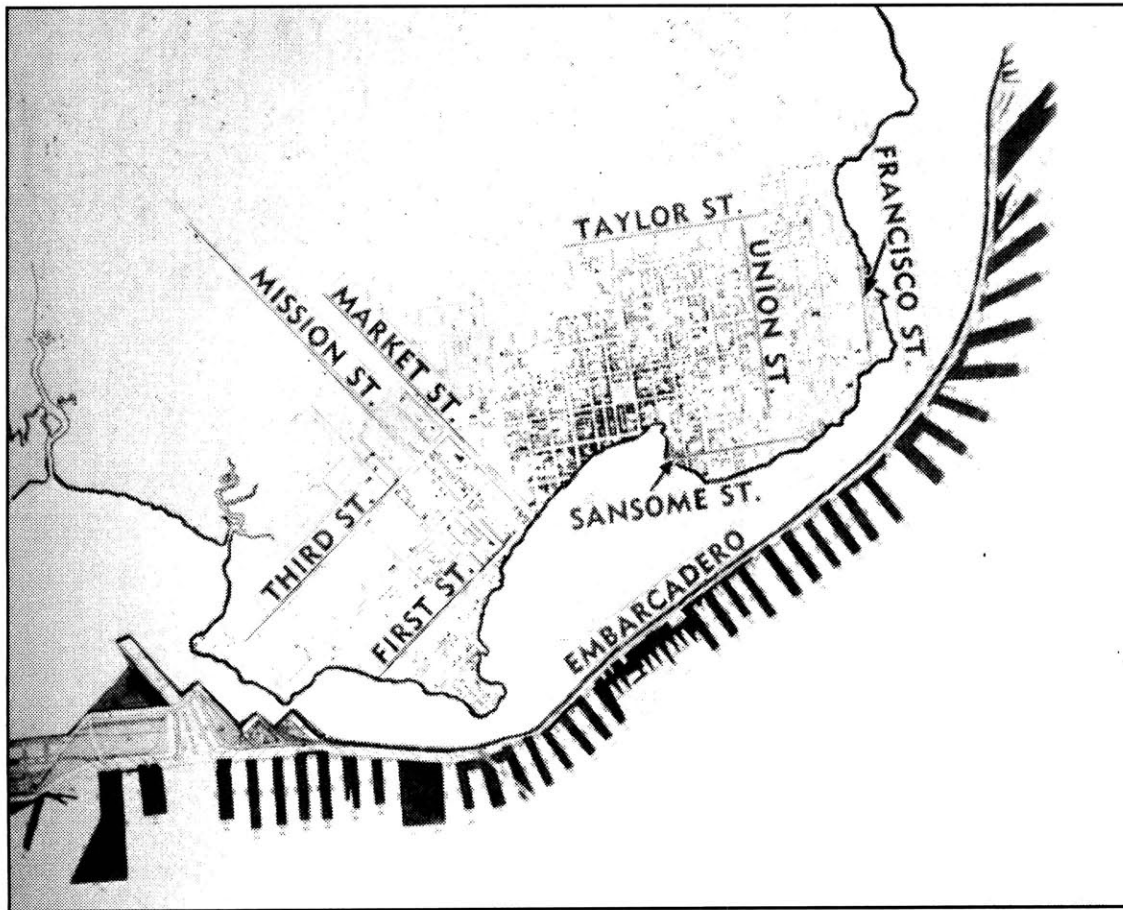


front northern corner of the Pier 26 shed. The heyday of break bulk shipping continued into the mid 1930's. But by the 1940's the Second World War brought the navy into the harbor. During WWII, San Francisco played a large role in the nations efforts in the Pacific. The Bay was filled with navy ships.



The prosperity of the port during the war carried over into the 1950's with the construction of the 29-acre docking facility, at Pier 50. More modernized facilities were also built in 1958 at the 68-acre Army Street Terminal. A new World Trade Center was also opened in a newly renovate Ferry Building in 1958. But despite public opinion, an elevated freeway was erected along the Embarcadero landing just south of the Ferry Building and directing traffic into the northern areas of the city. It remained until after the 1989 earthquake and was finally removed in 1991. The freeway circled the waterfront, blocking views and intruding on the pedestrian experience of the waterfront





opposite top: 1.17 View of the San Francisco Bay during World War II

opposite bottom left: 1.18 View of the elevated freeway along the northern waterfront

opposite bottom right: 1.19 View of the relation of the elevated freeway to the bay hidden behind it.

above: 1.20 Map showing the number of piers along the waterfront in 1957 in comparison to the original waterfront of 1848.

waterfront's government and funding, being held in public trust, the Port of San Francisco did not have sufficient funds to maintain the upkeep of the sheds. And they have been left to slowly deteriorate until unsafe, unusable and then erased.

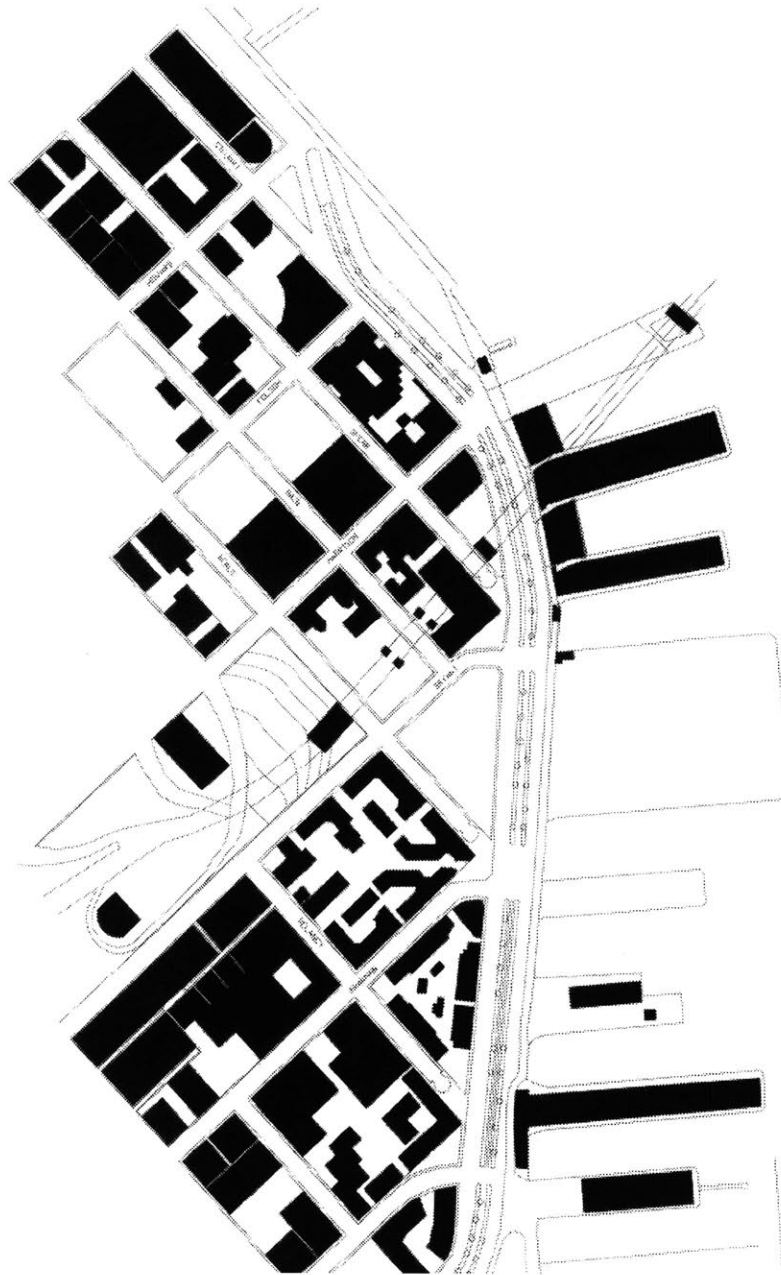
In the 1990's the Port of San Francisco continues to be a working port that has Multi-cargo Terminals. The majority of shipping activity though occurs across the bay at the more modern facilities found at the port of Oakland. The port of Oakland developed at the same time as the technology of container cargo was popularized and therefore was able to address the needs of the newer technology. Despite the decrease in the ports' shipping industry and ship building industry, there are still a range of remaining maritime activities that occur along the: recreational boating, Ferry and excursion boats and water taxis, Historic ship berthing, Maritime support activities, , maritime offices, and ceremonial and temporary berthing.

Present Conditions of the Waterfront

Analysis

Figure Ground







The geometry of the 19th century city grid and its relation to defining the lots sizes can still be seen in existing urban fabric and the remaining older large and small industrial buildings in the South of Market area. The new development though has begun to alter the density of this once industrial area filled with warehouses and small wood frame buildings.





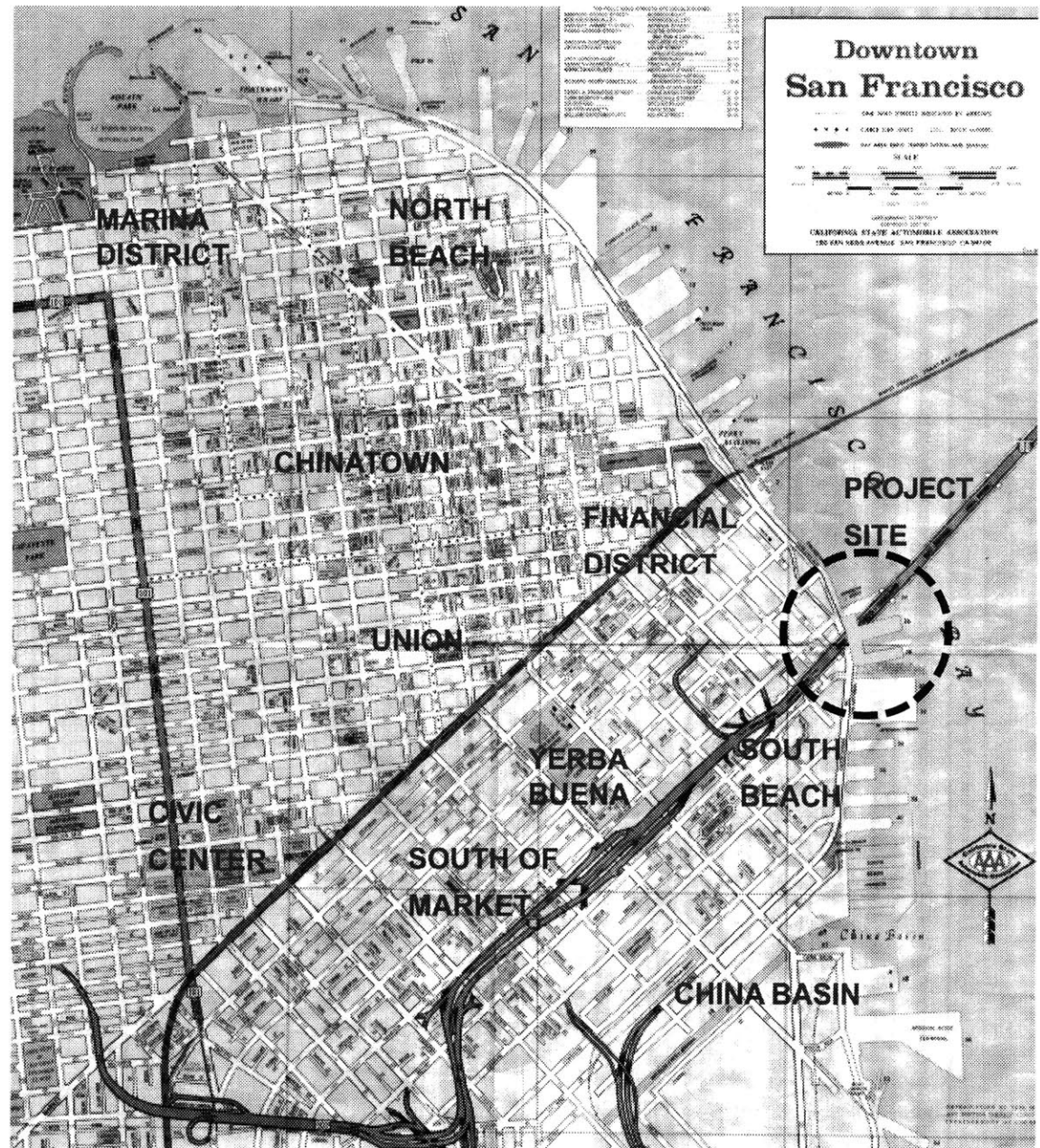
Land Use

The area is a mixture of uses with a growing number of office buildings creeping southward from the financial district as well as a rapid development of the South of Market area into the home of the web designers and internet companies, a.k.a. Multi Media Gulch. In the opposite direction from the southern most areas of South of Market and the Protero Hill area there is a rapid development of new apartments and loft housing, that is spreading northward.

-  commercial
-  light industry
-  office-residential
-  office
-  residential
-  public green space

San Francisco's Districts

The city has always been comprised of many smaller areas and ethnic districts. And as new development continues, new areas are born such as the new cultural area of Yerba Buena, and the new residential area of South Beach.



1.21 Street map of San Francisco with neighborhood areas labeled.

Descriptions of each area referred to on the map on opposite page.

MARINA DISTRICT

residential, location of tourist waterfront attractions: Fisherman's Wharf, Pier 39, Ghiradelli Square, the Cannery, and recreational marina

NORTH BEACH

residential, old Italian district and converted industrial areas

CHINATOWN

residential, commercial and businesses, old Chinese district

UNION SQUARE

shopping district

FINANCIAL DISTRICT

business center of the downtown area, located on either side of the main street of Market St.

SOUTH OF MARKET

light industry, design firms, internet companies, restaurants, night clubs, new work live lofts

CIVIC CENTER

location of city hall, main library, opera house, symphony hall, theaters. designed during the City Beautiful Movement in the beaux-arts tradition

YERBA BUENA

new cultural and entertainment center. location of the Museum of Modern Art, Yerba Buena Center for the Arts and Yerba Buena Gardens, the Jewish Museum, Moscone Convention Center, Childrens Center, Ansel Adams gallery, and Sony Metreon Center and Theaters

SOUTH BEACH

new area of reclaimed industrial spaces. new residential and work live lofts complexes as well as many converted warehouses. recreational marina and marina green

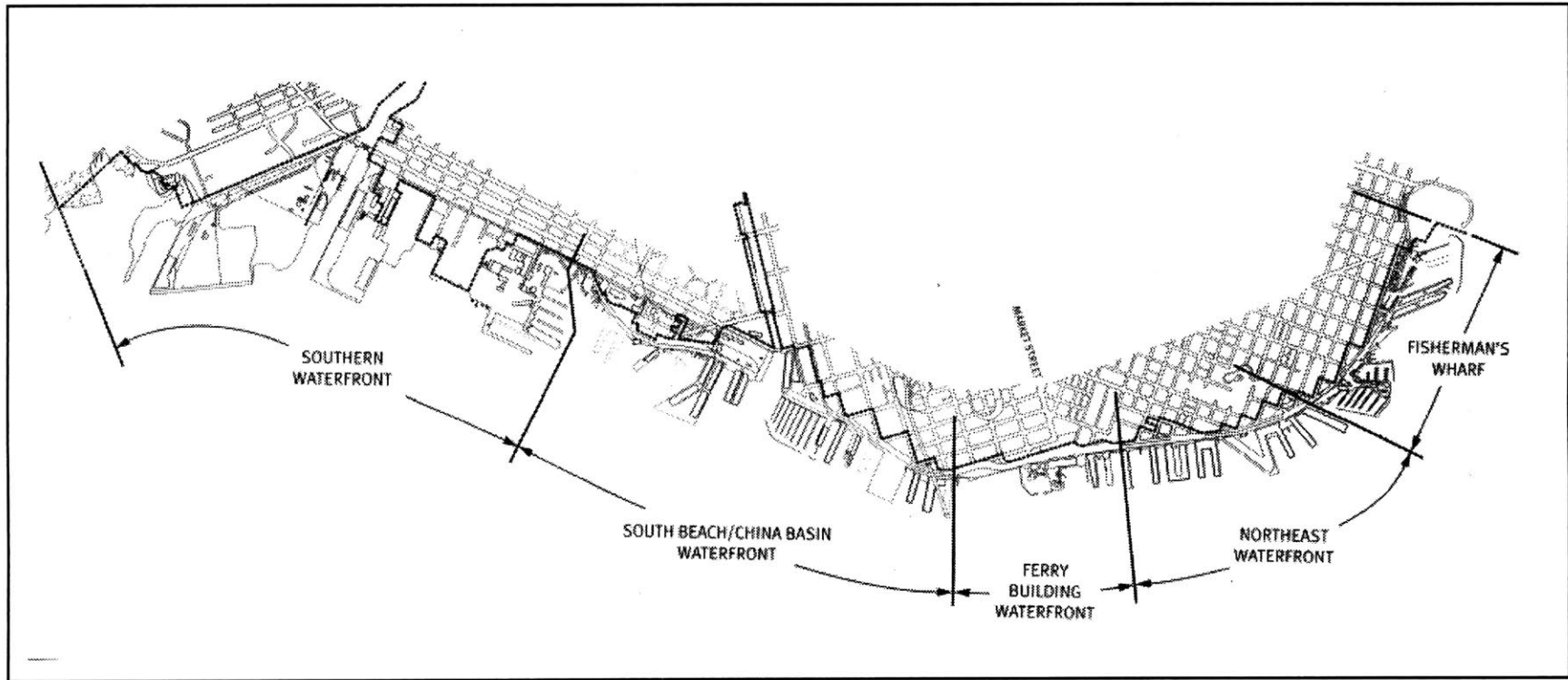
CHINA BASIN

location of remaining industry and working port areas. location of new baseball stadium on its northern edge bordering South Beach.

The city's working waterfront extends along its eastern edge. With the Ferry Building as the main waterfront landmark, located at the foot of the main downtown street of Market Street at the Embarcadero Street, the waterfront area north of the Ferry Building is known as the Northern Waterfront. The piers are numbered with odd numbers increasing as they get farther away from the Ferry Building. The Piers starting from the southern most remaining ferry building pier, Pier 14, are labeled with even numbers increasing as they move south. The area south of the Ferry Building is broken into many smaller sub regions. The piers immediately south of the Ferry Building to Pier 38 are in the area known as South Beach, in reference to its location and distinction from the North Beach district of the city. My site, Piers 26 and 28 and their respective connector buildings are also known as the Rincon Piers, in reference to the geographical Rincon Point once was located at that location before area was filled in. South of this is the China Basin area and then what is left of the working waterfront is referred to as the Southern waterfront.

Due to the nature of the creation of the waterfront began in the 1880's, the majority of the city's waterfront, approximately 7 miles, is publicly owned. This stretch of the

waterfront from the Hyde Street Pier to the India Basin is a result of the filling in of Bay tidelands. In 1968 through the Burton Act, the lands were transferred to the Port Commission, created by the city, to manage, operate and use these lands that were impressed as a "public trust" on the behalf of the people of the state. " The Port as trustee of these public lands, is required to promote maritime commerce, navigation and fisheries, as well as to protect natural resources and develop recreational facilities for public use."¹⁶



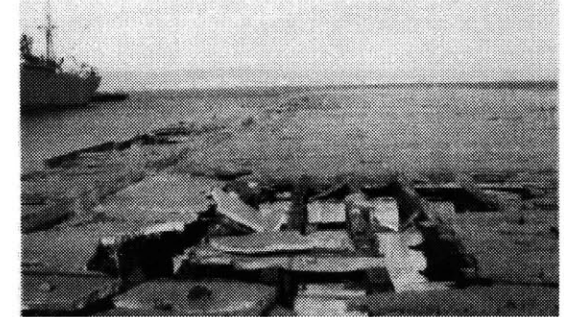
1.22 Map of the San Francisco waterfront, labeled with the various subregions south of the Ferry Building.

The number of sheds and piers has changed considerably over the last decades. The oldest existing pier in the Southern Waterfront, Pier 40 is intact, but has been relocated and a new shed is on the original pier. A report conducted in 1991 stated that in the Northern waterfront there are the following number of historic structures: 11 piers, 14 sheds, and 13 bulkhead buildings. In the Southern waterfront there are: 7 piers, 6 sheds and 7 bulkhead buildings. These numbers refer to piers: 24, 26, 28, 38, 40-pier only and, 42- bulkhead only. The pier 42 bulkhead has been relocated to South Beach harbor in 1984. And since the report was conducted, the bulkhead and pier of Pier 24 has been removed. The report did not include Piers 30-32 which had been modified and the shed and bulkhead buildings removed and Pier 34 which is deteriorating. From an original total of 19 piers in the Southern waterfront, only 3 remain completely intact with the original pier, bulkhead building and shed all intact.

1.22a Open Space Plan and Opportunity Areas



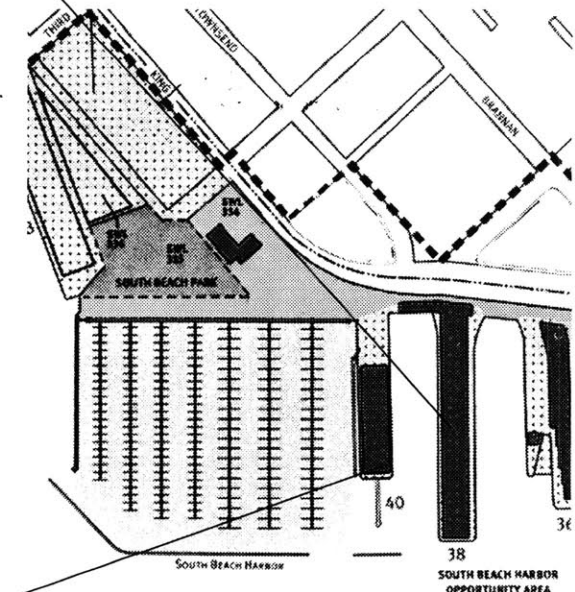
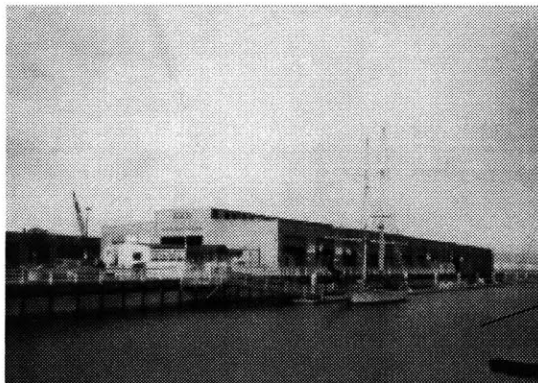
1.23 Pier 38: one remaining historic bulkhead building. It has been restored and offices and restaurants have been placed in it

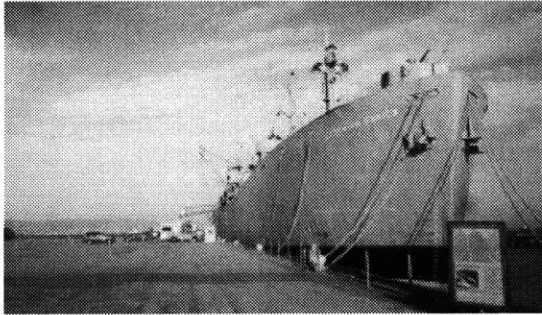


1.24 Pier 34 is in the same condition as Pier 24, pieces of the concrete and wood pier remain, the shed is gone, holes and piers punch through its old surface. It lies in waiting and impossible to use.

-  Project Site
-  Public Open Space Under Construction
-  Maritime Areas
-  Waterfront Plan Project and Boundary areas
-  Port designated opportunity areas
-  Existing Open Spaces

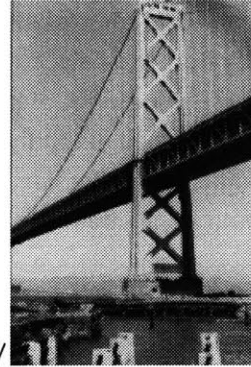
1.22 Pier 40: original pier structure, but new modern shed





1.25 Pier 30-32: The sheds were removed and gap between the two piers and the connector building was filled in. The now large expanse of surface area is used for a television stage set. Recently it was used for the docking of a historic

WWII ship, the set for ESPN's X-treme Games, Parking. Older aerials also show it used as a storage site for cargo. The city has made plans for the site to be made into a harbor cruise terminal by 2001.

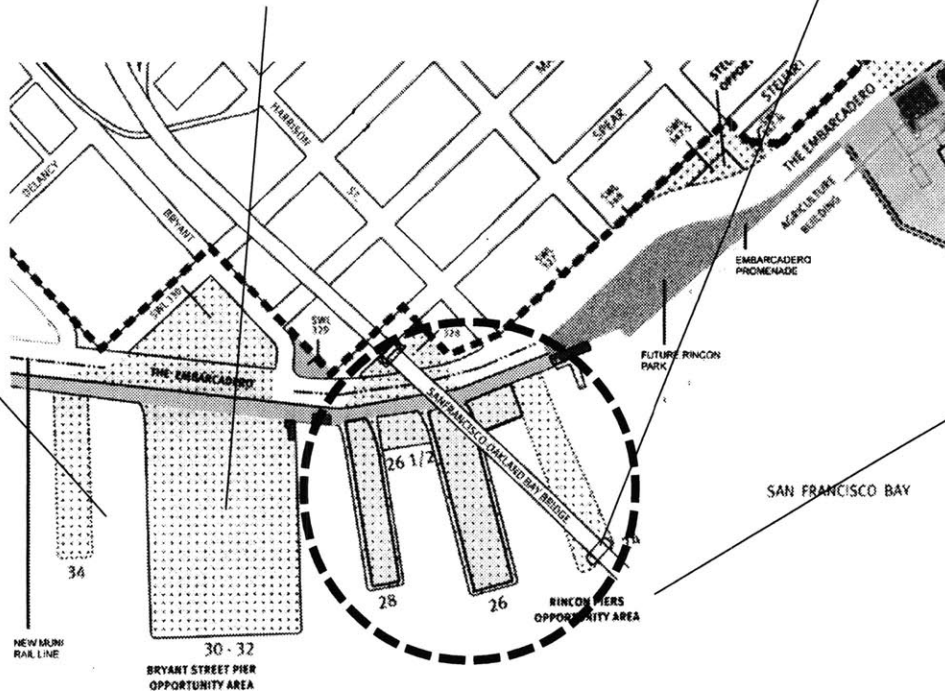


1.26 Pier 24: has almost been completely erased and lies in pieces. The shed had been removed sometime in the early 1990's. The Bay Bridge footing still remains intact marking the end of the vanishing pier.

The first few piers south of the Ferry Building have already been removed in the last twenty years, piers 16, 18, 20, 22. Only a few abandoned timber piers in the water near the shore remain. Not shown:

Pier 36: non-historic shed, the shed is used for storage by a local non-profit

Pier 42: Historic Bulkhead building has been relocated



1.27 Bulkhead Building 24-1/2, Pier 26, Bulkhead Building 26-1/2, Pier 28: They are the only remaining example of the continuous Mission revival facades that used to line the street.

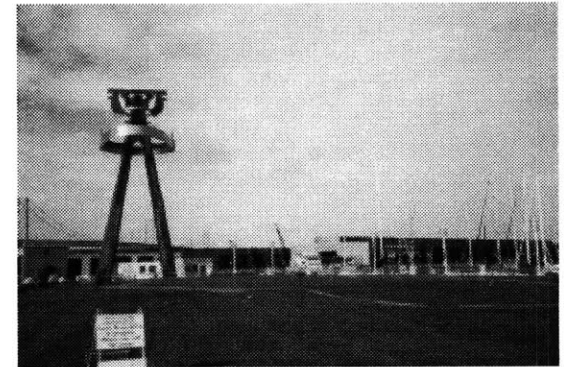


Since the 1960's the city and the port had begun to address the need and opportunity to reconnect to its waterfront. In the 1960's the adaptive reuse of two northern waterfront factories, 1960's Ghiradelli Square and the Cannery strengthened the appeal and character of the Fisherman's Wharf area. The adaptive reuse of Fort Mason in the 1970's created a large public access to the waterfront with open green space and several smaller piers that are now filled with cultural groups and special events. The adaptive reuse of other factories directly facing the Embarcadero in the 1980's were the real beginnings of bringing public enjoyment of the unused industrial waterfront. These include the renovation of the Icehouse warehouses adjacent to Levi's Plaza, and the Hillsboro Brothers Coffee Building.

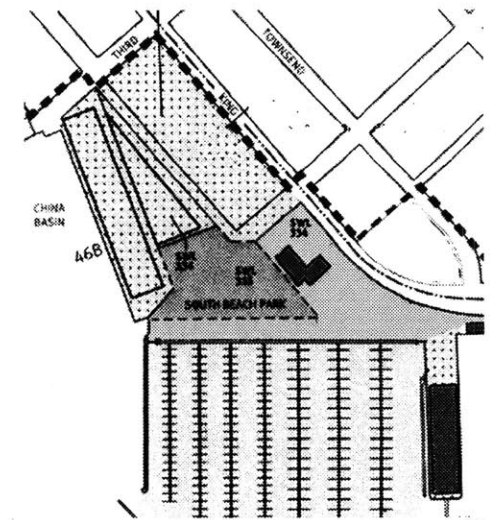
The 1990's have been a decade of great changes for the waterfront. With the removal of the elevated freeway in 1991 that was damaged in the 1989 earthquake, came the opportunity for the city to reclaim and revitalize its southern waterfront. Pieces of the city's maritime history still remain, mainly within the context of the piers. Their poor condition and lack of funds to maintain them have led to their downfall and slow erasure. New development began with the introduction of new

residential complexes spreading towards the bay from the adjacent South of Market area and South Beach areas. The change in use has sparked the further development of the edges of the Embarcadero in the Southern waterfront, south of the Ferry Building.

The development of the Embarcadero has incurred several changes. The waterside sidewalk of the street is now at an average of 25 feet wide and two lanes of traffic and bicycle lanes run on either side of the street. Historic street lamps also line the street along with a concrete block and glass sculpture, which runs the length of the waterfront and was created by designer Stanley Saitowitz and artist Vito Acconci. At times it varying lengths act as street furniture, sculpture and as a ribbon of light come nightfall. The street even has acquired a second name in the last few years, with the passing of the city's great newspaper columnists, the street was re-named the Herb Caen Way. People biking, walking, skating, skateboarding, and running at all hours of the day heavily use the new promenade. The new transportation project of the E line of the Muni Street Rail, further redefines the street, running two lanes that are 35 feet wide in total down the middle of the street. Completed in 1997, the new line connects the main lines of public transporta-



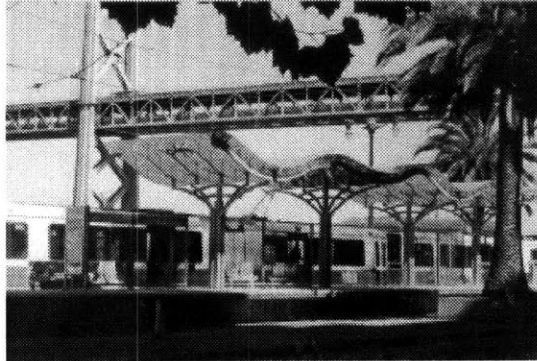
1.29 South Beach Harbor Marina Green



1.28 New Housing developments at Brannan St. along the Embarcadero



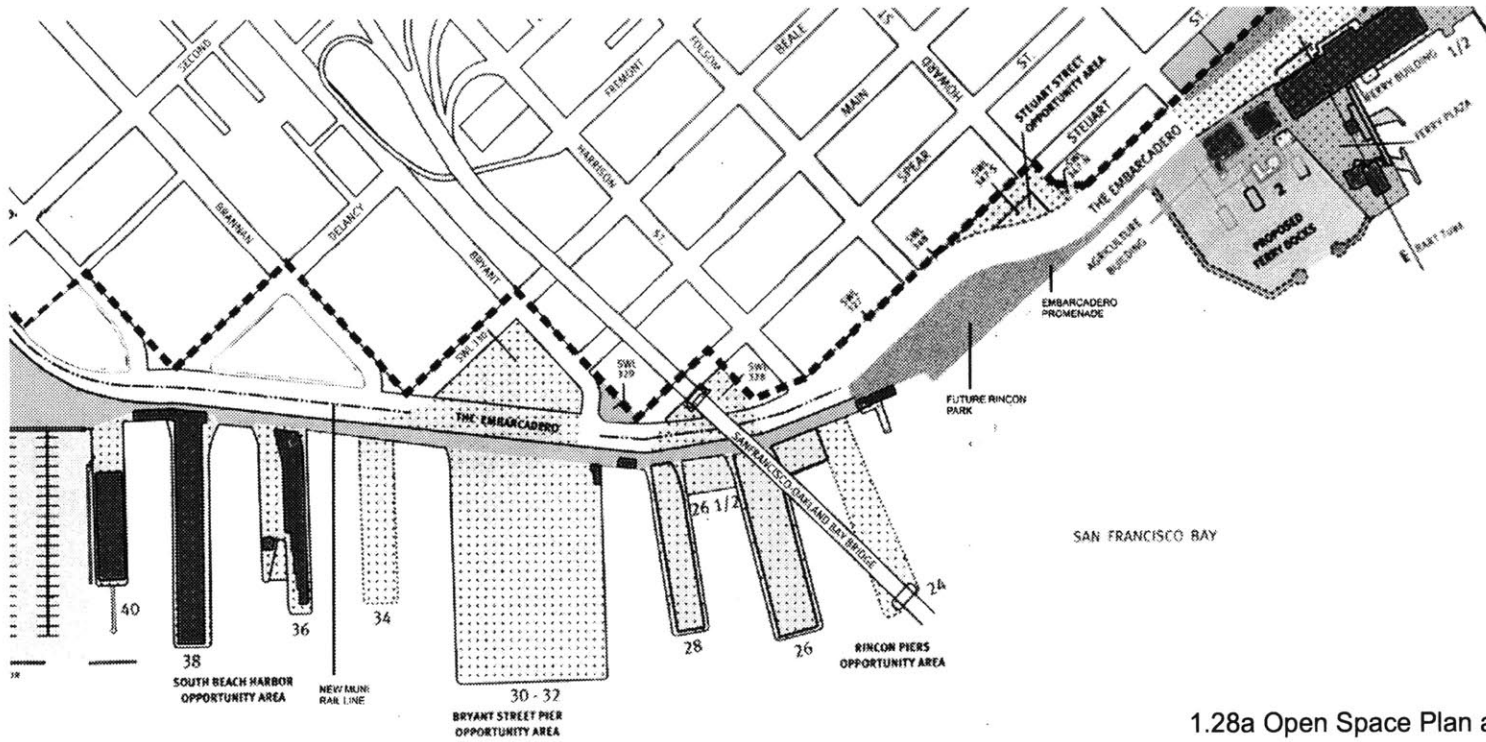
1.30 Art Ribbon sculpture along the Embarcadero.



1.31 New Muni Street Rail Line E Platform that runs along the Southern Waterfront



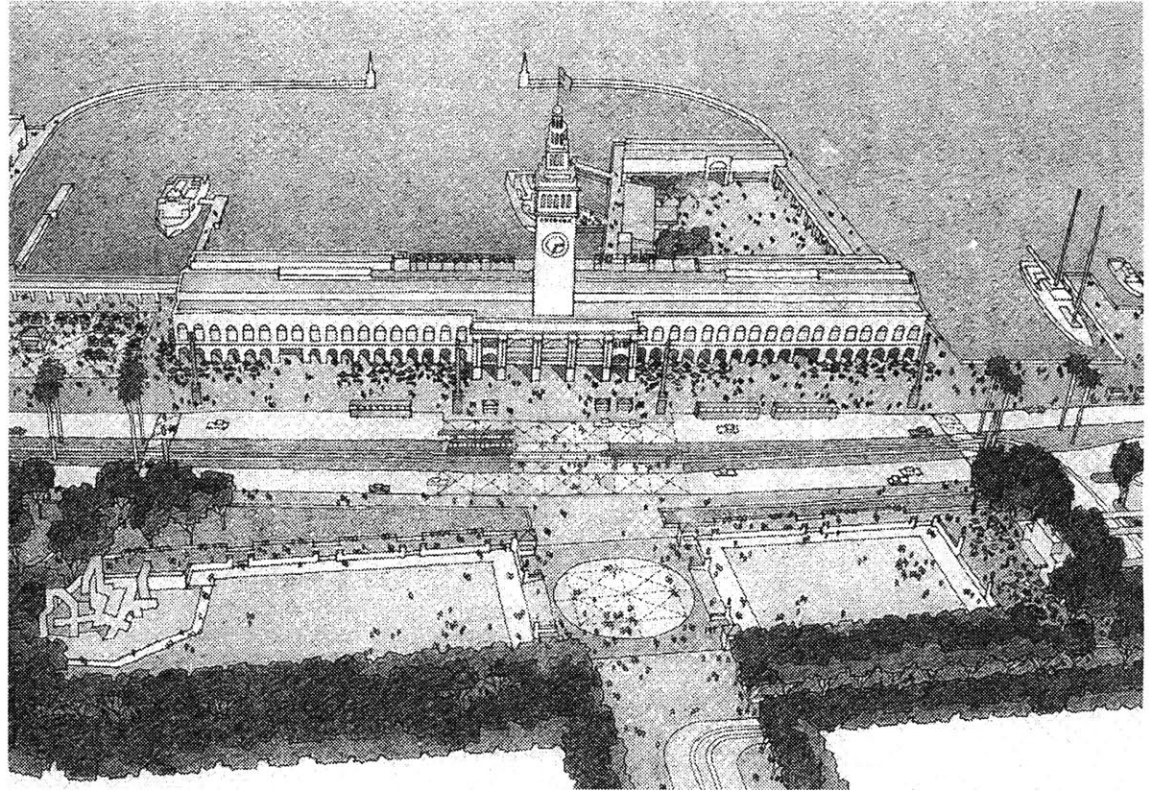
1.32 Esplanade at future location of Rincon Park



1.28a Open Space Plan and Opportunity Areas

tion to the commuter rail depot and the new baseball stadium to be completed in April 2000 which both lie in the South of Market area. On either side of this new median strip runs a row of palm trees, reminiscent to the palm lined avenue of Dolores St. near the Mission Dolores still resides. The life of this busy street has been renewed, but in a completely different manner from its industrial beginnings in the 1800's.

The Ferry Building itself is being studied to find appropriate new uses to facilitate a redesign of its spaces that were converted in the 1950's. The grand arched spaces of the ferry terminals and lobby spaces were closed up and converted into offices spaces inserted into it to house the Port of San Francisco. At present there are only a few ferries that still operate out of the Ferry Building. But ridership increase has been projected and several new ferry terminals are also being planned. The space in front of the building was redesigned by ROMA Design Group and is under construction. ROMA has planned a series of new plazas and outdoor spaces connected to the existing Justin Herman Plaza to create a grand open plaza space to mark the foot of Market street, replacing the lots vacated by the demolished freeway in 1991.



top: 1.33 Illustration of Ferry Building Plaza design.

bottom left: 1.34 View of Ferry Building, 1999.

bottom right: 1.35 View looking at the northern waterfront.

Future of the Waterfront

The Port's dedication of the waterfront to the public is evident back in 1892 as stated in the Harbor Commissioner's Report:

There can be no doubt of the advantages to the State at large of the past policy of the Board regarding the ownership and control by the State of all the waterfront property, and the structures thereon. No person nor corporation should own any structure whatever upon the State property, nor should such structure, when built by the State be under the exclusive control of any person or corporation.¹⁷

This attitude held by the board was in light of the monopoly held by the Southern Pacific Railway over transportation in California at the time. The continued goal of development of the waterfront as a public asset is an important issue in its growth. Several proposals have been made for many of the sites, but were eventually vetoed by the city and the people of the city and were judged undesirable.

The Port of San Francisco Waterfront Land Use Plan published in 1996 states the following seven goals that will enable the Port to achieve the plan's ultimate vision, of “

reuniting the City with its waterfront:

1) a working waterfront, 2) a revitalized port, 3) a diversity of activities and people, 4) access along the waterfront, 5) an evolving waterfront mindful of its past and future, 6) urban design worthy of the a waterfront setting, and 7) economic access that reflects the diversity of San Francisco.¹⁸

The port though already has plans for other large new projects besides the redevelopment of the Ferry Building and the Central Embarcadero area. to realize their established goals. Within the short timeframe of 9 months plans have been made for two new projects, a large retail and office complex within the historic Pier 1 building and a new cruise terminal facility at pier 30-32 which also includes development of the large sea wall lot across the Embarcadero. The new cruise terminal project also includes a dedicated portion to developing open public space as well as non-maritime uses such a jazz club, a cinema, a hotel and commercial space. Locate immediately adjacent to the remains of Pier 24, the new Rincon Park is under construction as well. The future of the port has been much widely published within the last few years. In an article focusing on the Ferry Building projects, one of the designers of the project comments, the Embarcadero “... is marking the transition from a maritime area to a place of recreational opportunities.”¹⁹

site

History

Pier 26 and Pier 28 were completed in 1915, during the second phase of waterfront development. The two connector buildings on either side of the Piers 26, bulkhead building 24-1/2 and 26-1/2, were built later in the 1920's and 1930's. Two other significant historic elements that belong to the site are the state owned Belt Railroad that circled the waterfront and the Embarcadero artery. In 1936, the San Francisco Oakland Bay Bridge was built with its last water based footing being placed on the end of Pier 24, and the first land based footing fell directly in front of Pier 26, on the opposite side of the Embarcadero. The bridge's double deck span ran overhead the northeast corner of the Pier26 shed, roughly 80 feet above it. Unfortunately much information regarding the history of the site only remains in the biennial reports published by the governing body of the time, the Board of State Harbor Commissioners.

Located between Harrison and Bryant Streets, Pier 26 was planned in 1912 and built in 1915, by the architects Charles Newton Young, A.W. Nordwell, and A.C. Griewank.¹ The original occupants include Cal Atlantic S.S. Co. in 1910, Balfour Guthrie

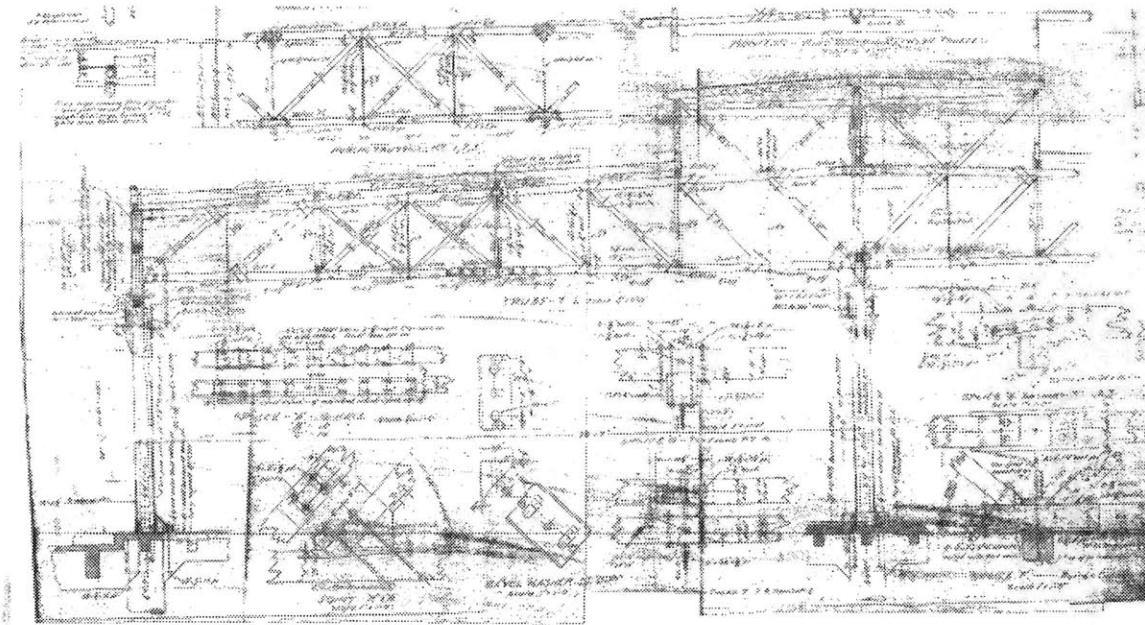


1.36a View of Pier 26 and Pier 28, 1915.



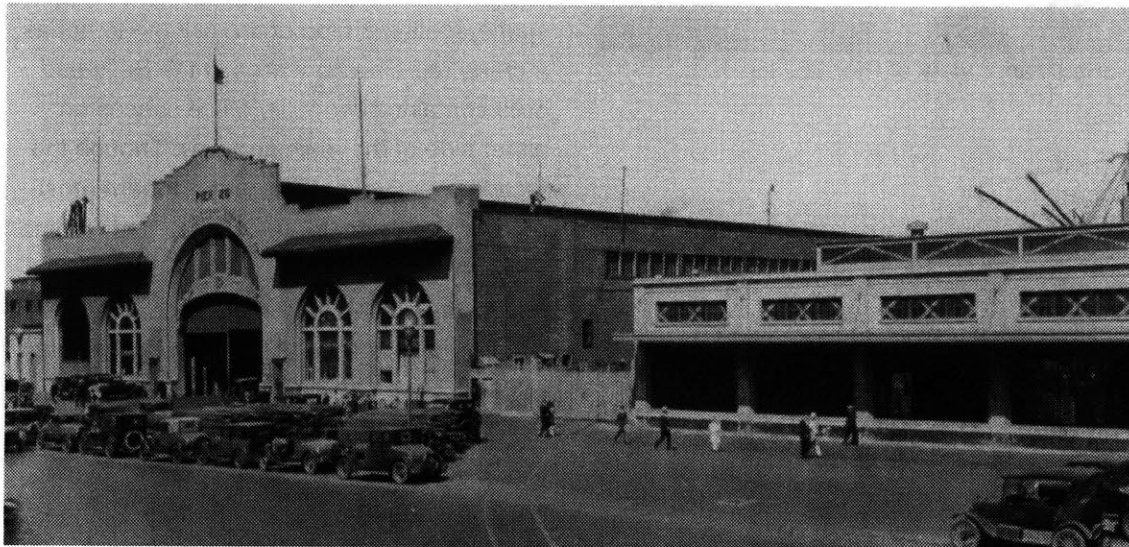
1.36b Interior view of Pier 26, 1914.

and W.R. GRACE Co. in 1912-1914, and the American - Hawaiian Steamship Co. in 1930. The original use of the pier was general cargo, inter-coastal and coastwise trade. The pier was constructed out of reinforced concrete cylinders with a reinforced concrete deck. The shed was wood frame and reinforced concrete and steel rolling doors. The exterior material was a cement plaster. The structural system was a heavy timber trusses with steel columns in a configuration with one central column and two bays. A line of clerestory windows ran above the line of steel doorways as well as on either side of the raised middle portion defined by the truss. The pier dimensions are 756'L x 200'W, 19'-1" wide on either side for the rail tracks. A central steel beam ran down the middle of the space, resting on top of the column to act as a crane rail. The front area in the Bulkhead area contained two story office spaces on either side of the main archway. Though the façade was symmetrical, the northern most arch, was a portal for the submerged rail line. The symmetrical façade actually hid the necessary curved northern front of the building, which allowed for the turning radius of the rail line. The rail track on the northern side was submerged and the southern side was a surface rail track, as specified by the original planned occupant- Balfour Guthrie.



top: 1.36c Typical section of Pier 26 from original construction documents.

bottom: 1.37 View of Pier 26, late 1920's.



Built in 1927, bulkhead building 26-1/2 has heavy timber trusses, steel columns and a 2 bay wide layout, similar construction to Pier 26. The building sits on a wooden plank wharf 200 ft. long and extends a distance of 137ft. into the slip. It was built to be used for package freight delivery to and from trucks and was therefore built at approximate truck height, three ft. above the pavement. The building rests on a slope and is therefore three feet at its tallest on towards the north. Two ramps lead down to and connect to Pier 26 and Pier 28.² Concrete jacketed timber piles support the wharf. The street elevation is simple with concrete columns, steel rolling doors and a seven foot deep canopy overhead. Bulkhead building 24-1/2 was built in 1935 and is similar in construction to bulkhead building 26-1/2.

A basic description of the construction of the first sea wall begun in 1867 can be found in the 1936-1938 Board of State Harbor Commissioner's report:

A channel 60 by 100 feet wide was dug into the mud to a depth of from 20 to 45 feet below the mean tide level. Huge rocks were dumped into the trench and allowed to settle to hard bottom. Then concrete 2 feet thick and 13 feet high

was constructed on the concrete. This general plan was followed in early sections of the seawall, but construction was adjusted somewhat as the wall was extended section by section. The last two sections, south of the Channel were completed in 1913. Since the fire of 1906, all new construction and all new reconstruction has been concrete.³

In the late 1800's the engineer AJ Arnold formally defined the dimensions of the Embarcadero Street to be a 200-foot wide artery separating the waterfront from the city. The development of the Embarcadero was in conjunction to the creation of the new sea wall and the new land sea lots that were created with the infill of land of the area. The land immediately across from Pier 26 and Pier 28 was one of these sea lots. Until the 1930's it was a site of rail yard. The Embarcadero along with the Belt Rail Line also served as the main thoroughfare for horse and buggy and car traffic, but its edges remained largely industrial during the highpoint of the waterfront.

The Belt Railroad spur tracks required a turning radius, which affected the form of all buildings that it ran along side of. In the four buildings on this site, turning curve of the affected corner was formed from equal width

planes that were rotated to form the curve. The submerged rail that was located on the north edge of Pier 26, required that a pedestrian drawbridge be built as part of the construction of bulkhead building 24-1/2, to facilitate an at grade connection between the two buildings.

The Belt Railroad connected the rails that ran along the pier edges to the transcontinental and shortline railroads. Run under a single control, it aided in the smooth and efficient transport of goods through complex switching and transport necessities. Before it was built, transporting goods across the Embarcadero were difficult since the rail terminus was inland and the goods would have to be transported from the inland rail lines to waterfront, and then from the piers to the ships. Access to the piers was not convenient unless the warehouse was along the Embarcadero. Grain trade and trade in Asia had caused a boom in the city's shipping industry. The Belt Railroad proved to be the obvious solution. The locomotives were state owned and the freight cars were privately owned. The Belt Railroad was constantly improved with the development and needs of the Port. The improvements and upkeep of the Belt Line followed the progress of construction of the seawall.⁴



1.38 View of the Industrial activity at the site. Belt Railroad cars can be seen along the edge of Pier 28, 1915.

The 200-foot width of the Embarcadero would allow for expansion of up to four rail lines, though only three rail lines were put in place. It initially ran along the northern waterfront. Though it meant crossing the jumbled traffic intersection in front of the Ferry Building, a single-track rail was added to cross over and link to the southern portion of the Belt Rail tracks in 1913 due to the increased demands of the growing shipping industry. Lines were expanded north to Fort Mason in 1915, to serve the Pan Pacific Exposition. In the 1920's, the Port of San Francisco was internationally known for its modernized port facilities and technologies. The Belt Railroad was a crucial element of its make up. At this time, rail line reached a highpoint, with the rail operating often around the clock. During World War II, the Belt Railroad was further expanded to serve the needs of the military and was again running 24 hours a day. By the 1940's the Belt Railroad connected the entire waterfront running from the Presidio in the north, to Islais Creek in the south with 70 miles of track and seven locomotives in and an average 450 freight cars daily.

An excerpt from an report conducted in 1985, stated that after the 1940's the decline of use of the Belt rail lines declined as the rest of the waterfront did with the new container cargo

technology. The trucking industry quickly became competitive with the remaining rail lines still in use. There had been some discussion of reviving the Belt line for passenger use. From a report dated from 1983, a field check was done of the remaining rail lines. 8% had been removed, but for the most part the majority of the line had been left intact. The spurs lines on the piers are deteriorated and many have been removed. With the introduction of the new Muni line along the Embarcadero, the remaining Belt Railroad lines on the Embarcadero have most likely been removed or paved over.

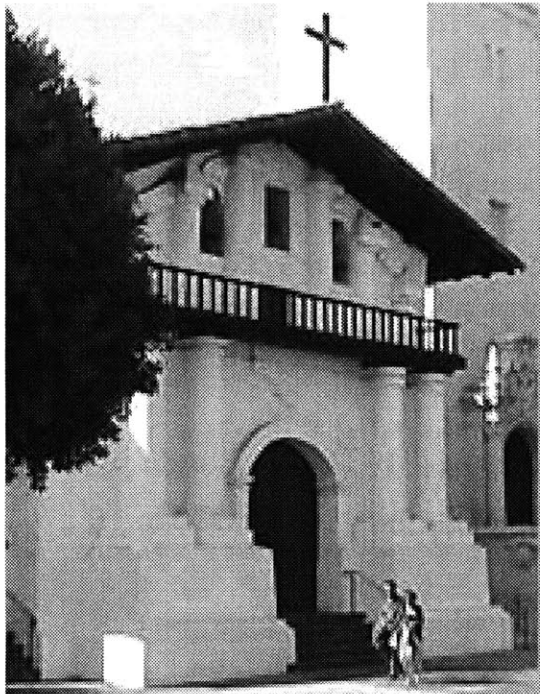
Mission Revival

The Southern waterfront was designed in the Mission Revival style. Though designed by various architects and engineers over the years, the style was simple enough to create a uniform aesthetic and character to the waterfront. When completed, the length of Mission Revival style facades created a continuous wall of false fronts along 13 piers. The style was at its highpoint of popularity at the turn of the century and used frequently for a variety of building types. Its development and popularity in the late 1800's are in relation to the ideas that the Mission style was an appropriate representation of a California architectural style and its history. Though there was never a clear concise definition of the Mission Revival style, it has left a lasting mark in the history of California architecture.

During the Spanish Colonial days of this country the most developed examples of mission life occurred in California. Father Juniper Serra founded the first missions in California in 1769. In total after his death there would be twenty-one missions in all established along the coast of the state to aid in the efforts of creating new civilizations,



1.39 View of the Mission style facades along the southern waterfront. Pier 30 and 32 are in the foreground. Pier 28 and Pier 26 are in the distance.



1.40 Mission Dolores, in San Francisco. 1990

providing places to stay for travelers and to spread Christianity to the Native Americans that occupied the lands. Unlike other missions established by the French and British, the Spanish missions were also established as small settlements where the Native Americans would also live and work the land. In many instances the California Missions were the beginnings of many of today's large cities, such as San Diego, Santa Barbara and San Francisco. They were spread from the as south as San Diego, CA to north near Sonoma, CA and were generally located within the distance of one day's journey. Several were located within the San Francisco Bay Area, with the Mission Francisco de Asis built in San Francisco in 1778. The mission was later changed to Mission Dolores, and is still located intact in its original location. In 1821, the missions came under control of the Mexican government and later by 1834, the lands being sold to private citizens.

By the late 1800's the missions were falling into ruin and were abandoned. The author, but the combined elements of historicism, romanticism, and the sublime were responsible for the rise in popularity of the California Missions and the Mission Revival style becoming fashionable. The interest in the

missions and the mission lifestyle brought a link to the state's history and culture and a link to an exotic past and distant Hispanic culture unique to the west in comparison to the history of New England. This also came during the rise of the preservation era, and the era of Romanticism. The spread of its popularity came mainly in the form of literature and later in well publicized physical examples of the "Mission Revival style." Novels, magazine articles, and railroad promotional pieces were the first to portray the romantic image of the missions and the lifestyles surrounding them. These novels were also the first to begin to give physical descriptions of the buildings. From these stories and with the romanticism that enclosed them, came the chance to recognize the Hispanic origins of the state and the history of the Spanish in the California culture. This was significantly different than the British colonization of New England and the subsequent push westward into the middle of the country of this British cultural influence.

The first significant building to be built in the Mission Revival style was Stanford University built in 1890's at Palo Alto, CA, about 30 miles south of San Francisco. The university commissioned by the Governor Leland

Stanford was planned with arched walkways, a patio like quadrangle and a church and bell tower as focal points. The definition of the Mission Revival style was still in its early years with this example. Within it are mixed elements of the Romanesque style popularized by the architectural firm's prior founding architect, H.H. Richardson.

Though many architects continued to publish in national architectural magazines theories and designs exploring this new style, it was the physical examples that made the style popular to the mainstream public. The California Building shown at the Columbian Exposition in 1893 in Chicago was the first key building. Early designs for the style stayed mainly in residential buildings. But with the spread of the railroads, came the opportunity for the railroads to play on the regionalism of the areas of the new depots in the West and the southwest. The mission revival style was soon applied to train depots and hotels. The style would be spread to a variety of buildings, factories, schools, civic buildings, and even bridges. The widespread use with school design in the first decades of the 1900's would be the most popular building type to be designed in this style. It eventually led to a new approach to school design, once it was realized that the basic elements to the

design were highly conducive to the climate as well as similar in basis to the original educational function of the missions.

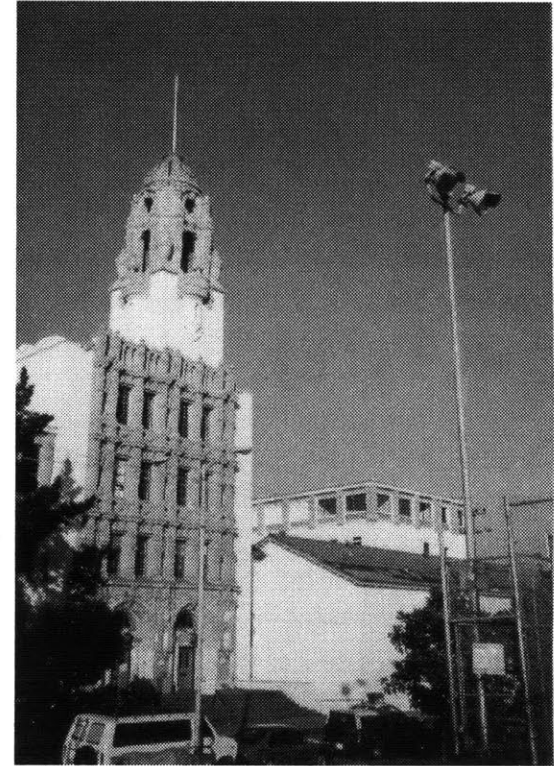
Though confused with Spanish and Mediterranean styles, the Mission Revival style was characterized by its simplicity of plan and of ornament. Typical elements of the style included the planar massiveness of adobe construction, large planes of blank stucco covered surfaces, arched portals, a low pitch gable roof, red clay tile roofs, patio style arcades, bell towers and curved edges. Though there was a confusion of styles, all three styles were recognized to be ideal for the climate of California and were thus appropriate models for cultural as well as climatic reasons.

At its highpoint of popularity, the Mission Revival style provided a link to its Hispanic past and became symbolic of industrial and institutional uses. In light of the popular styles of the times, the desire to beautify the waterfront, and the opportunity to emphasize the city's Hispanic heritage, the choice of the Mission Revival style was not a poor choice. The style continued to be used and can be found in examples all over the city today. In the mission district, near the original mission are examples of the later descendent of the

style—Spanish Churrigueresque found in the design of the 1926 Mission Dolores Basilica and the Mission High school. A simpler Mission revival style can be found in the nearby Everett elementary school. Other examples include the Mc Laren Lodge in Golden Gate Park and the Green's Eye Hospital in the western Addition. With its own Spanish origins the city played a major role in the development of the style. Many of the city's most renowned architects were early supporters of this style. And the city also had two of the original Spanish remnants of settlement, the Mission Dolores and the Presidio Army Base.



1.41 Everett Elementary school, example of Mission Revival style in San Francisco,



1.42 Mission High School

Present Site Conditions

There are no apparent changes to the architecture of the two pier sheds and the Bulkhead Building 24, except for the obvious exterior color of the paint, a shocking bright yellow that has been applied to all four buildings street facing bulkhead facades. The original color of the stucco-covered surface is unknown since most historic photos found are black and white images. In general, there are a few rare architectural modifications marking the time gone by, only the deterioration of the materials marks the time past. There are no obvious signs of new inhabitation. After the shipping companies left, the front offices were filled in, maximizing the spaces into smaller enclosed spaces to be split up between several businesses. The exterior elevation of the office clusters remains similar to it was shown in the original drawings. The offices though were meant to be functional spaces for a shipping company and were probably never very grand. At the rear of the shed there is new light wood frame construction added on top of platform in rear of shed, The current inhabitants include engineering and maritime related businesses, such as the Podesto Divers, an underwater construction company. The interior bays are leased out for storage and parking uses.



1.43



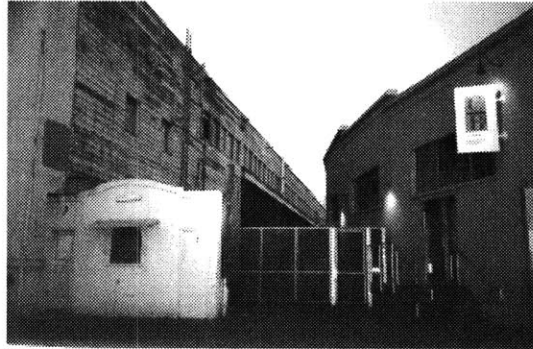
1.44

1.43 Front facade of Pier 26

1.44 Interior view offices and view from the street

1.45 North side of pier, remaining submerged belt railroad tracks, and drawbridge shown.

1.46 South side of pier, remaining surface belt railroad tracks shown.



1.47

1.46

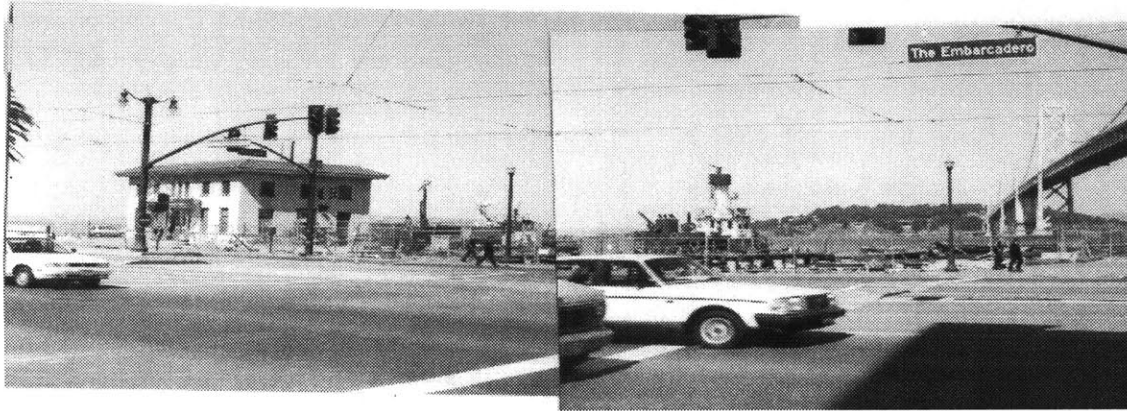


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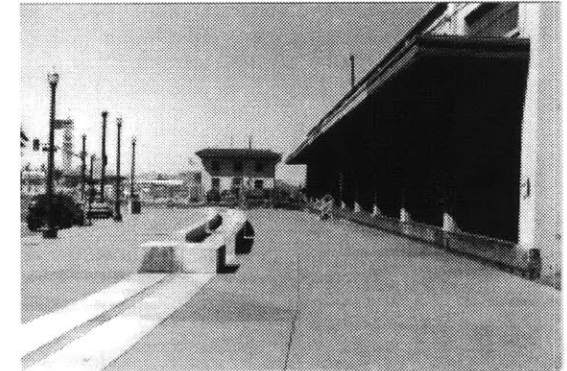


The interior of Bulkhead Building 26-1/2 was recently renovated in 1995. The only obvious interventions are a new entrance stairway at the north side of the building, new glass in the first bay of the street facade, where the steel rolling door is occasionally opened, and new glass openings on the east side of the buildings. A design build construction firm has been occupying a recently redesigned no new layers evident, any new changes have all occurred within the original space and architecture

The Belt Railroad spur tracks are still intact. On the north side of Pier 26, the first portion of track is covered for about ten feet, from where the Embarcadero St. sidewalk ends to about ten feet inward along the pier. A drawbridge is still in place connecting the surface of Pier 26 to Pier 24, over the submerged railroad track. The edge though is badly deteriorating and is covered in weeds. The surface laid tracks on the south side of Pier 26 and the north side of Pier 28 are still in place, only left uncovered from the edge of the sidewalk towards the bay.



1.48 View of Historic Fire Boat dock house, and Fire Pilot dock, immediately north of Pier 24



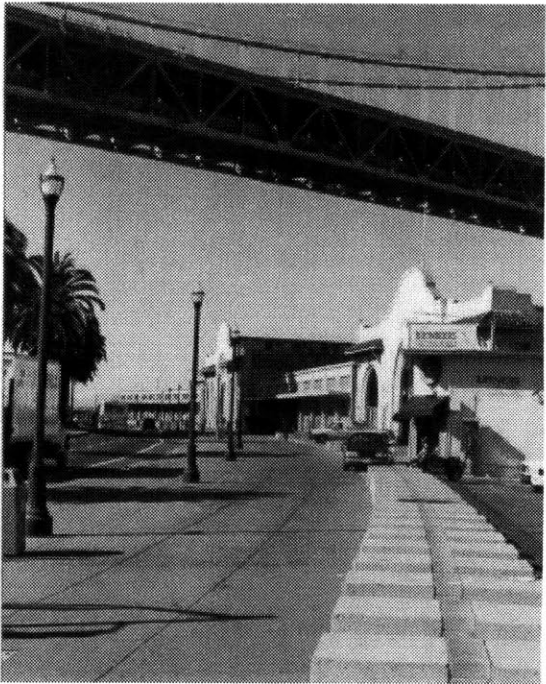
1.49 View from site, looking north

below and opposite: 1.50 Street elevation of site, from left to right, bulkhead building 24-1/2, Pier 26, bulkhead building 26-1/2, and Pier 28.





1.51 View looking at site, looking south along the Embarcadero.



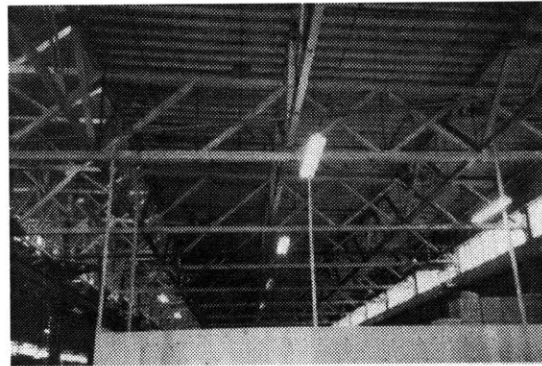
1.52 View of site looking north from Pier 30.



1.53 Panoramic view of interior from midway down the shed, looking towards the rear

1.54 View of purlin trusses

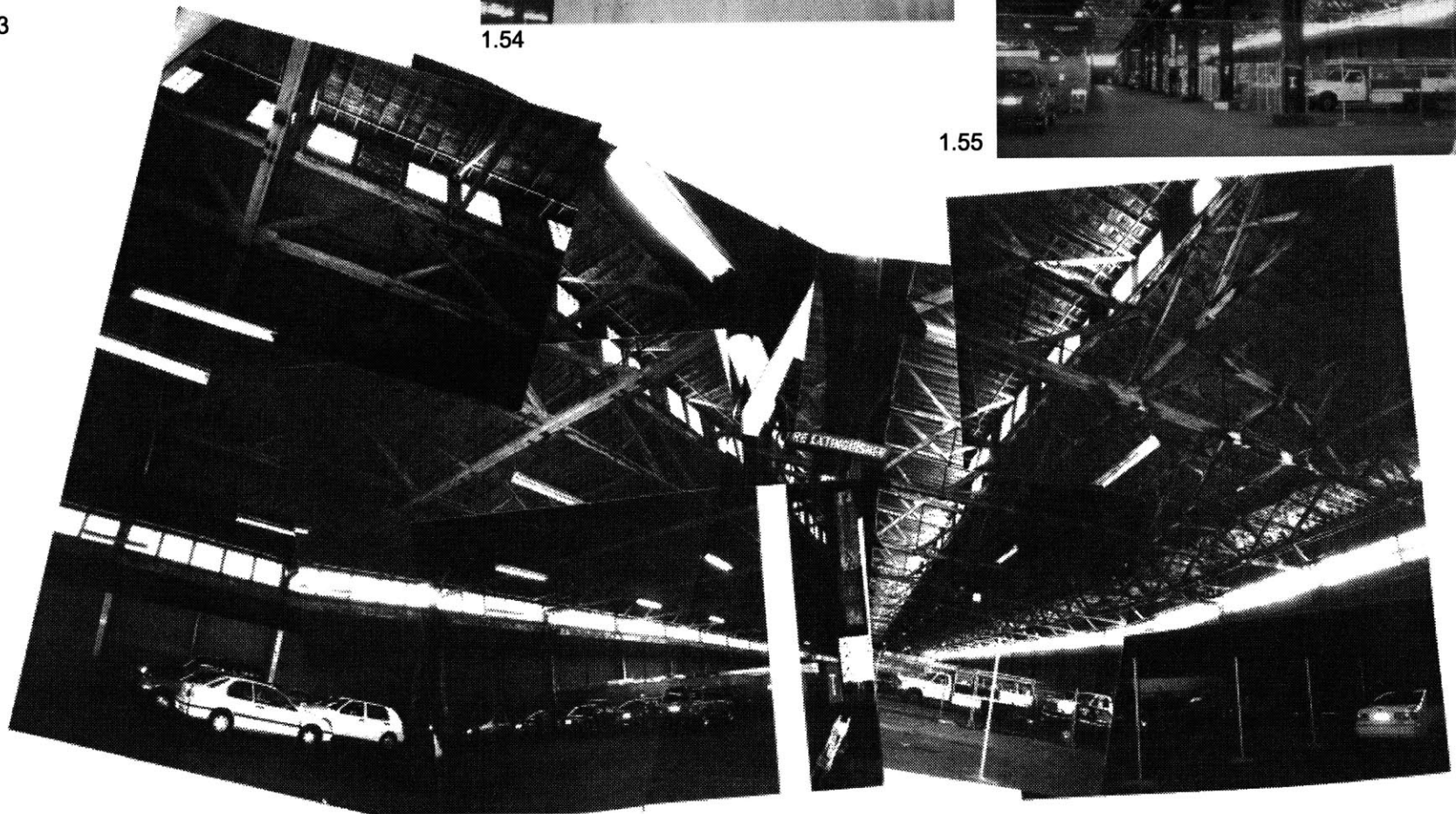
1.55 View of central column

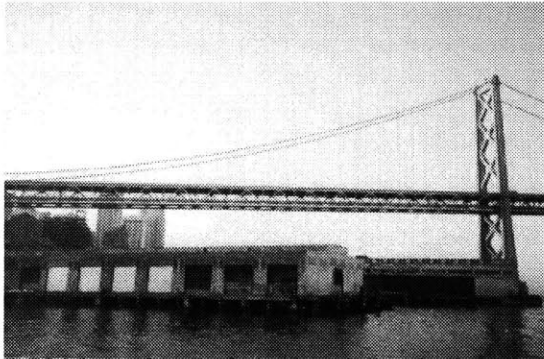


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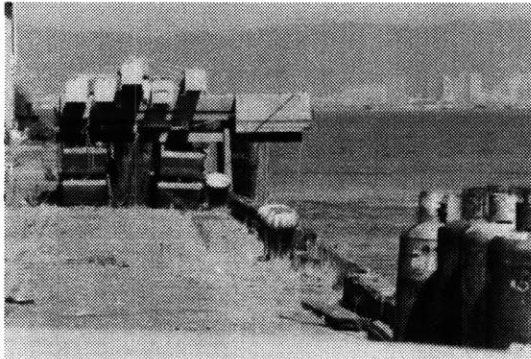


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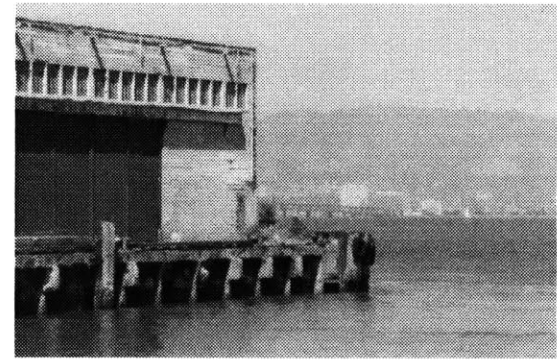




1.56 View of end of pier in relation to the city



1.57 View of the end of pier looking across the bay to Oakland



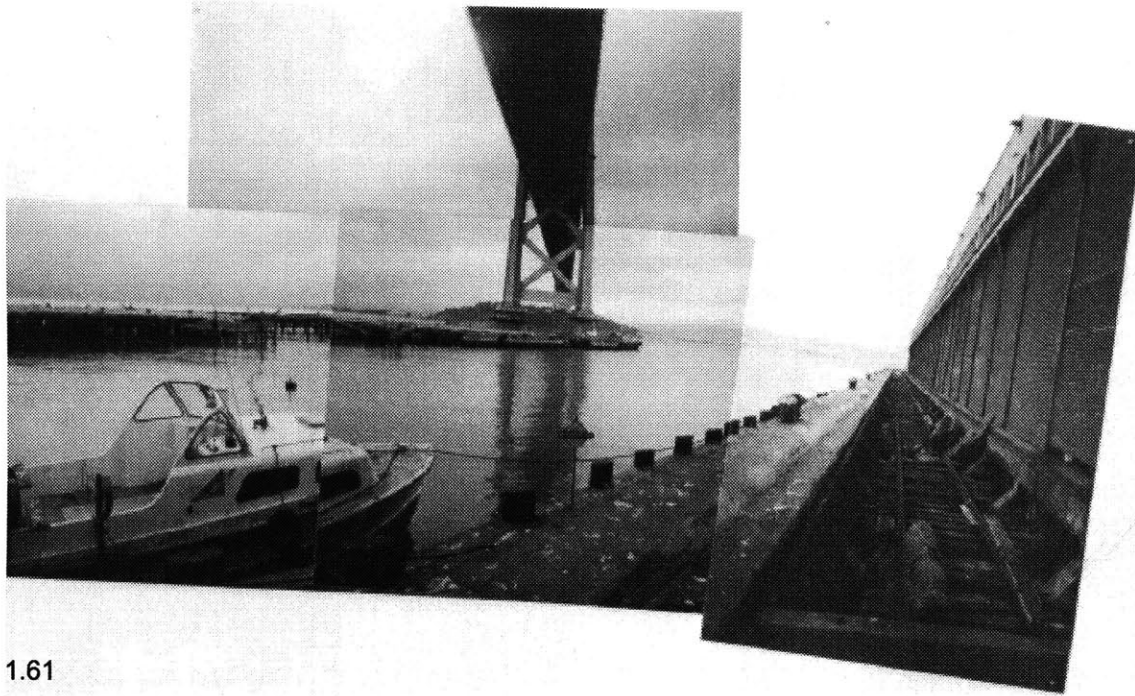
1.58 View of end of pier and the view across in the distance

1.59 Looking up under a central column



1.60 View of the rear facades of the site. Pier 26 is the middle pier, here shown with Pier 24 still standing.





1.61

1.61 View out the northside door of Pier 26 looking east to under the bridge.

1.62 View looking at the rear of bulkhead building 24 1/2.

1.63 View of north facade of pier from the construction site of the Rincon park.



1.62



1.63



1.64

1.64 View of out the main archway of Pier 26. In front there is the footing of the bridge, and to right are some adaptive reuse office buildings.

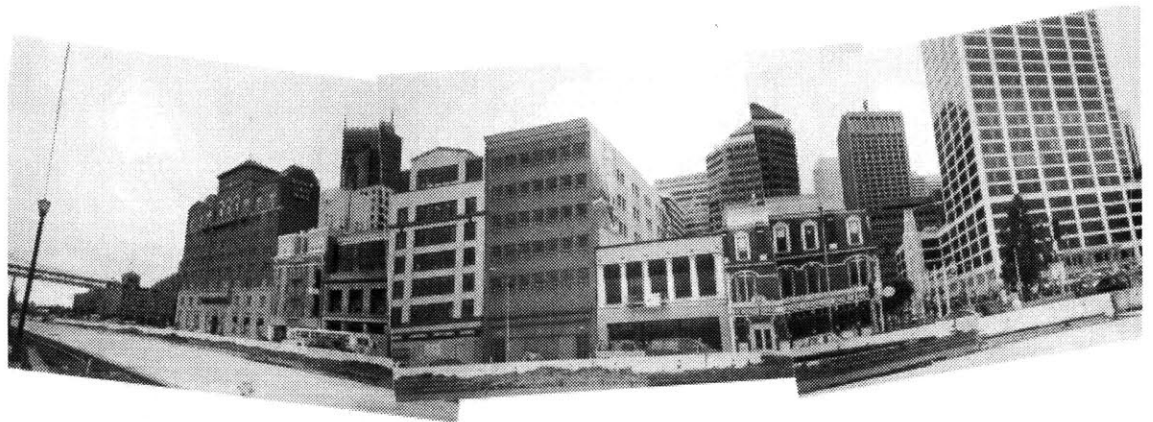
1.65 View from Embarcadero just south of Pier 28. To far left is the large parking lot and beyond it are shown the new housing developments.



1.65



1.66 Historic Hills Brothers Building and New street rail line platform directly across from Pier 24.

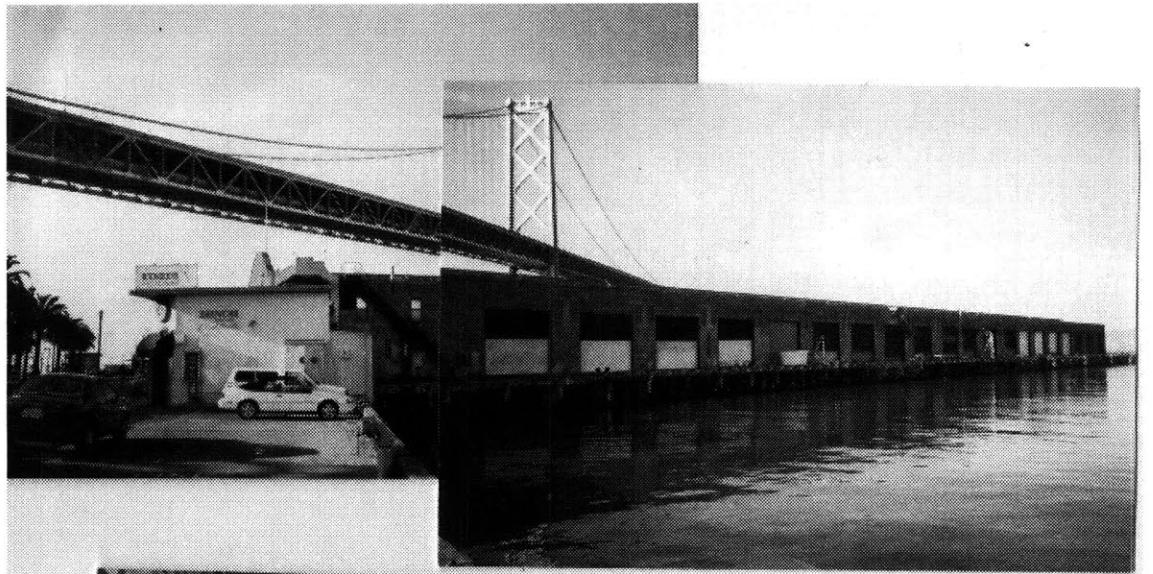


1.67 Historic East Street Row, 2 blocks north from the site.

1.69 Interior view of Pier 28's metal structure.

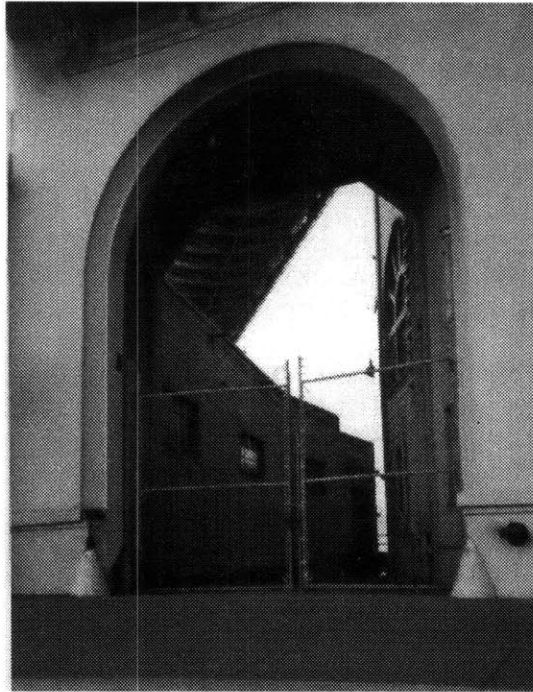


1.68 South elevation of Pier 28

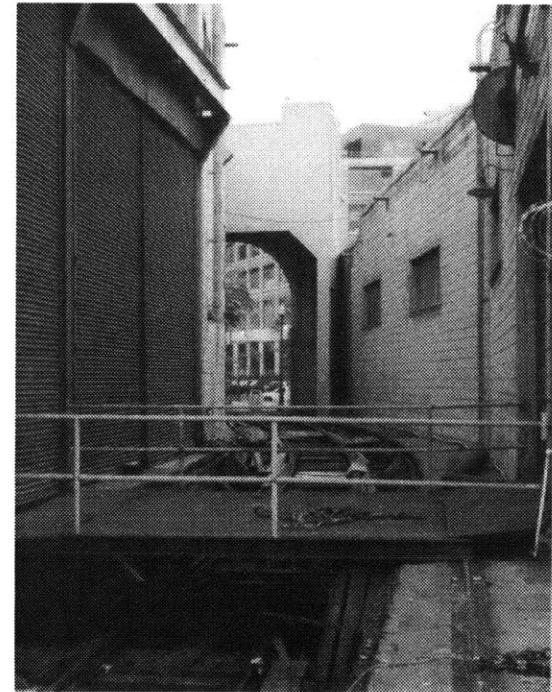




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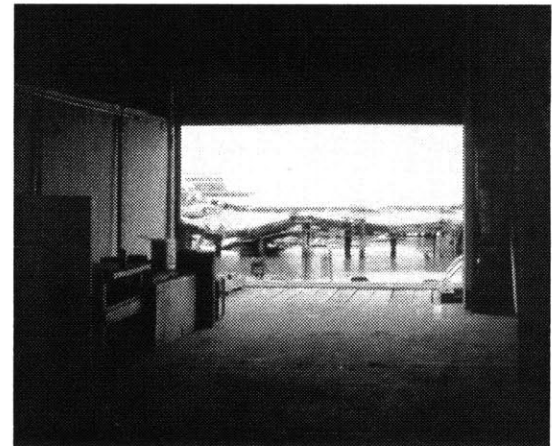
1.70 Framed view of bridge footing seen through the main archway.

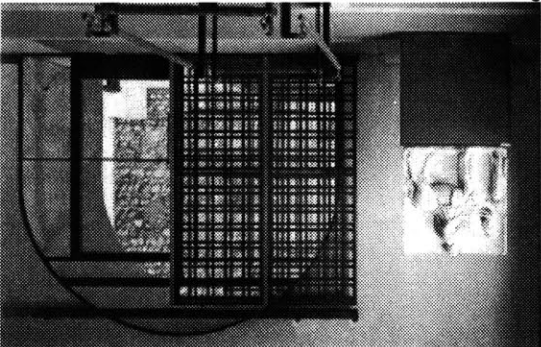
1.71 Framed view of the site behind, seen through the north archway belonging to the Belt Railroad tracks

1.72 View through the same arch, but looking west towards the city

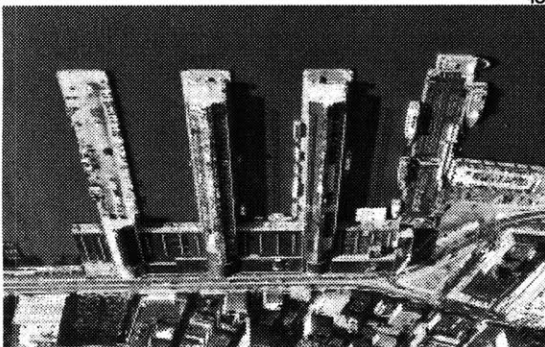
1.73 Framed view through open north side door looking at the deteriorating Pier 24.

1.74





2a



2b



2c



2d

governing concepts

overleaf:

2.1 Castelvecchio Museum, Verona, Italy

2.2 Chelsea Piers, New York

2.3 Skyline stage, Navy Pier, Chicago.

2.4 Street arcade, Ghiradelli Square, San
Francisco, California.

reuse

Preservation, Conservation, and Restoration

The preservation movement began in the 1800's. The early theorists and advocates of preservation and conservation dictated ideas of strict protection, maintenance restoration and conservation of buildings, treating them as individual precious art objects. Concerns were more focused on restoring historically outstanding monuments to their glorious state and preventing further deterioration. New uses may have been introduced, but new large-scale architectural interventions were discouraged.

The early preservation and conservation advocates promoted a particularly static view of historic architecture. Throughout history, buildings have routinely been transformed with the introduction of new architecture and new uses. Famous examples include the Roman amphitheater turned into medieval villages in Nîmes and Arles as well as a church inserted into the Mosque at Cordova. Two advocates, John Ruskin and Eugene Voillet-le-duc, in particular though began to address the issues of history and memory, the layers of history captured in older buildings, and the issues surrounding preservation and restoration of such structures.

In his book, "Seven Lamps of Memory," Ruskin discusses the spirit and life that is contained within a building and how impossible it is to recapture and recreate this with restoration. Though it is intangible and difficult to place a value on the this "spirit", he writes, "There was yet in the old *some* life, some mysterious suggestion of what it had been, and of what it had lost; some sweetness in the gentle lines which rain and sun had wrought." He continues by describing restoration as destruction that if it has to be done that "...do it honestly, and do not set up a Lie in their place." Although his views towards restoration are not favorable, his writings address ideas of the intangible value attached to historic structures and the idea that the building has a true character and integrity that should be held to honestly.

Eugene Voillet-le-duc believed in a less absolute approach to restoration and preservation of modified buildings. In discussing the early approaches to restoration and authenticity, his solution, similar to Ruskin, addresses the notion that the building has a certain truth it must be held true to, "...we hold that an edifice ought to be restored to a manner suitable to its own integrity." Voillet-le-duc also believed in the importance of the

TERMS:

Collective Memory: The memories held by a group of people, of a place or history, looked upon in a consensus.

Restoration: To return a space to a prior state of existence.

Preservation: To keep a space in its current conditions or it may also involve restoration of certain elements to a previous state.

Conservation: Similar to preservation

Reconnection: To re-establish a connection between separated elements. Opportunity for reconnection are found with reuse strategies

Transformation: Most prevalent in reuse strategies, and addresses the ideas of changing existing elements instead of merely restoring or preserving the element.

Reuse: To find a new use for a space different from the original use. Implies using existing architectural elements as the basis for design. New and old elements are combined to transform the whole.

life captured in the building, created through the layers of history and modifications it had acquired. But unlike Ruskin, he did not believe restoration was destruction. With this definition of the value contained in historic buildings, he addressed the act of restoration as more similar to a transformation, making note that new interventions may be the solution to maintain the integrity of the original structure. His writings address and question the individual elements of the building that might be involved in the restoration and their relation to the resulting honesty and integrity of the whole building.

Preservation and conservation addressed concerns of maintaining and protecting historically significant buildings: Often restoration to an earlier or original state was the solution: The removal of any of the subsequent layers of new modifications should be destroyed. This attitude towards preservation raised many questions about "authenticity" and the difficulty in determining what was authentic or valuable and what criteria were valid. The more modern evolution of these theories now address the relevance of respecting existing modifications as well as the relationship of these existing layers to newer additions. Reuse then not only focuses on

preservation of significant elements but also looks at the accretion of layers of history, uses, and collective memory of the place in determining a design approach. The terms, adaptive reuse, transformation, and recycling may be used to describe this newer attitude.

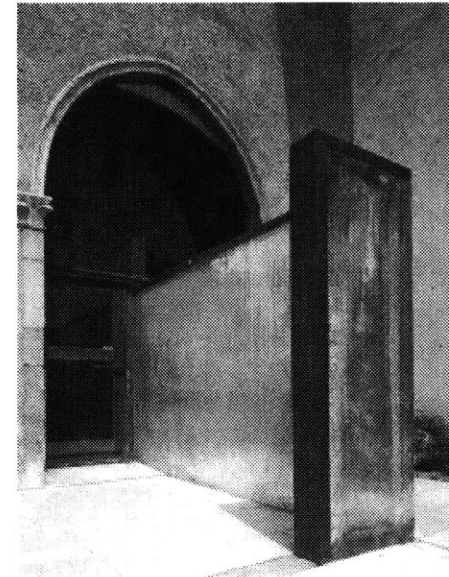
Adaptive Reuse

Contemporary arguments have developed largely in response to the modern movement and new technology that defined from the ideas of “form follows function” and the rejection of historical examples of design. The many unsuccessful large sweeping urban scale design projects of the early 20th century that failed also were a catalyst to the recognition of the value in the existing urban fabric of ordinary buildings. Arguments for reuse were then also applied to entire urban areas and sought as the solution to “re-knit” neighborhoods and districts. The ideas of restoration or preservation were being transformed and no longer were just applicable to individual historical monuments. The author Sherban Cantacuzino, writes: “The emphasis has also shifted from accurate and reverential restoration to a freer and more creative attitude to the changes that an old building may undergo; from the building as an art objet to the building as the product of a whole socio-economic system.”

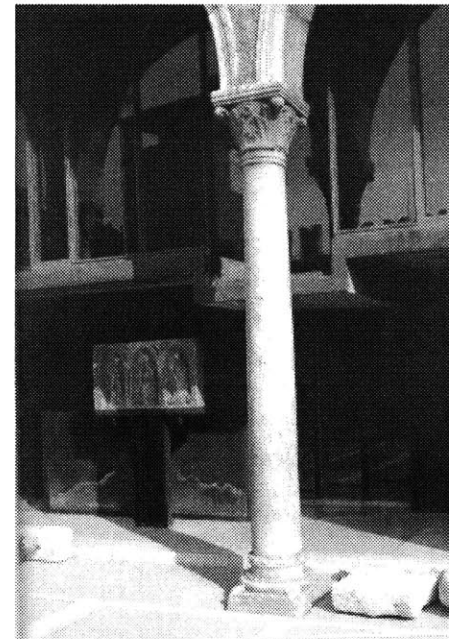
One of the most interesting architects involved with the ideas of transformation and reuse was Carlo Scarpa. Born in Venice, the majority of his work lies within that region of Italy. In his work, unlike others of his time he preferred adding to existing buildings vs. building new. Most famous are his museum

designs in which the existing fabric of the building would inform his design to create new layers and spaces. His sensitivity to details and materials enabled him to create as well as highlight layers of history found in his buildings. New interventions are clearly distinct from the old building and often only touch the old when absolutely necessary. In the reconstruction of the Castelvecchio museum, exhibition space is created from the peeling away of layers of past modifications and the introduction of his own interventions. Together, the layers give the architecture a richness of context where the history of the building is revealed and not disregarded, though it is also not revered.

Architecturally, the terms adaptive reuse and recycling may now imply architectural transformations of ordinary as well as historically significant buildings. There is no definitive science or rules to adaptive reuse, but there is the challenge of designing within the integrity of the original building, and defining what this integrity is. The French architect known for many of his reuse projects, Phillippe Robert, metaphorically describes the recycling of architecture as a “palimpsest”, referring to the term used to describe any written surface that has been erase and used for a new text. He also describes different



2.1
2.2





2.3

2.1 View of the entry into the Castelvecchio Museum by Carlo Scarpa.

2.2 Layers of history displayed in the windows of Castelvecchio.

2.3 The reactivated spaces between the factory buildings at the Cannery in San Francisco.

architectural approaches to this idea: “building within, building over, building around, building alongside, recycling materials or vestiges, and adapting to a new function.”

San Francisco has many successful and noteworthy adaptive reuse projects, the most famous being: Ghiradelli Square and the Cannery. Combined with the commercial fishing industry area of Fisherman’s Wharf, the Underwater World Aquarium, and the Pier 39 retail complex, Ghiradelli Square and the Cannery compromise one of the city’s famous areas, and is considered the main tourist waterfront attraction areas. Ghiradelli Square and the Cannery are two early 20th century brick factories that received much attention for their innovative and sensitive reuse designs that created new public and retail spaces out of the existing buildings. Wurtser, Bernadri, and Emmons were the architects.

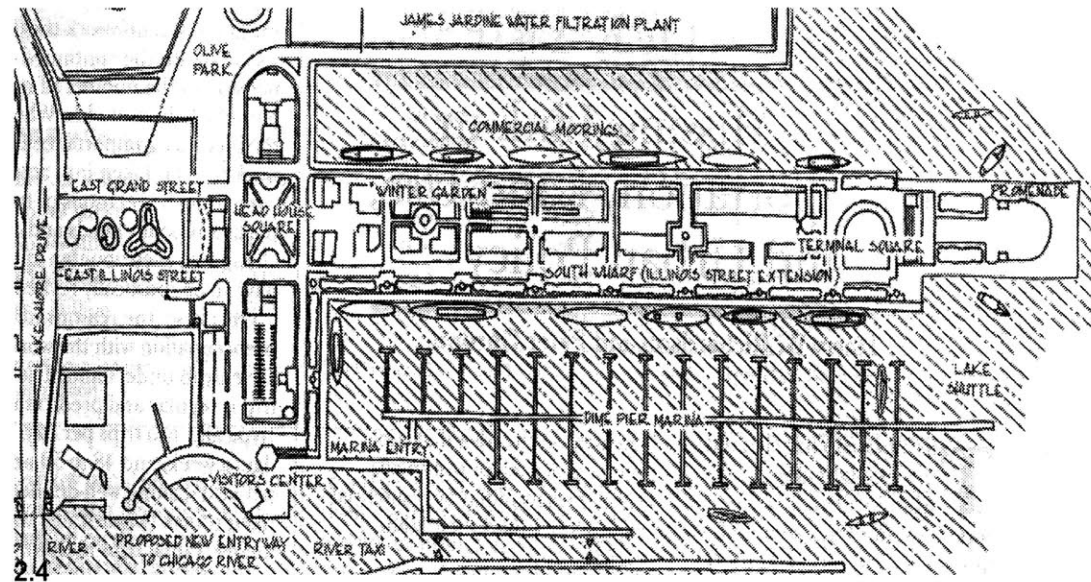
Other relevant reuse projects include the Fort Mason complex and several reused warehouse sheds near or along the Embarcadero: The Oriental Warehouse, the Hills Brothers Coffee building, and the Ice Houses- the Levi Strauss’ Headquarters. The Fort Mason warehouse sheds and smaller buildings since the 1970’s have been turned over for use as

cultural, environmental and entertainment facilities. The sheds are often used to house various art and craft shows and large art and performance functions. The smaller buildings house several arts and crafts makers and performance groups. The fort’s park like grounds are open to the public and connect to the large public marina green directly adjacent to it.

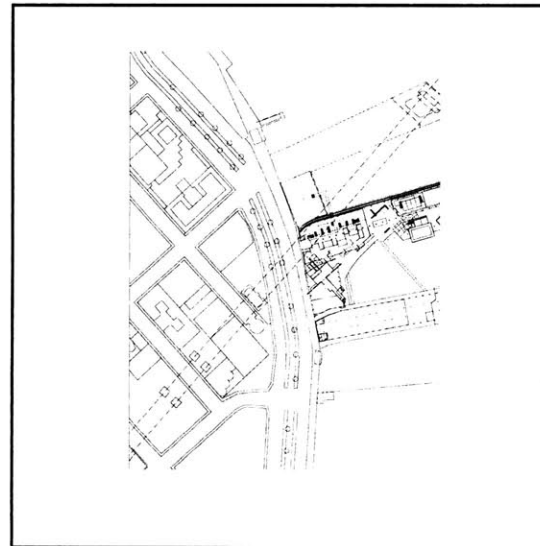
Precedents

The following precedent projects were chosen for their similar approaches to adaptive reuse of waterfront sites. They provided insight to how successful adaptive reuse pier projects, at comparable scales, address creation of place, path, piers as extension of the life contained in the urban fabric, and the new possible relationship of the public to the waterfront in the context of a former industrial site. These selected projects: Chelsea Piers, Navy Pier and the Torpedo Factory are all reuse projects that also show different approaches to architectural reuse and transformation. The variety of new program elements for these projects provided an example of a range of activities that might benefit from a waterfront pier location. The comparison to the Boston Waterfront focuses on a reference of urban scale, not architectural scale, though the revitalization of the Boston Waterfront also does include individual reuse projects.

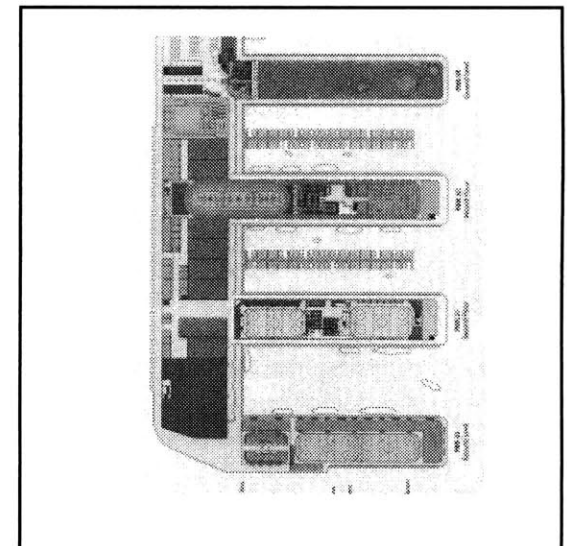
Comparison of scale shown at the same relative scale.
 2.4 Navy Pier Plan, 3,000 foot long pier
 2.5 Plan of Pier 26, 800 foot long pier
 2.6 Plan of Chelsea Piers



2.5



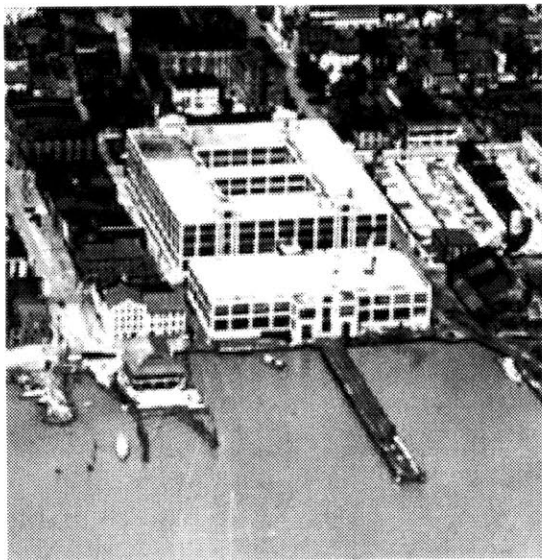
2.6





2.7 View of interior of the Torpedo Factory.

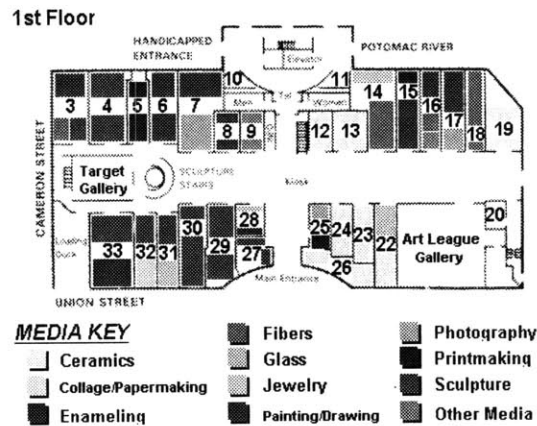
2.8 Aerial view of the Torpedo Factory



Torpedo Factory- Alexandria, Virginia

The US Navy built the Torpedo Factory during the 1920's along the banks of the Potomac River. Upon completion, for the next five years it produced and maintained torpedoes for the Navy. This stopped and it was later turned into a munitions storage site until WWII. Intense production of a specialized submarine borne torpedo resumed the torpedo activities of the factories. Ten additional buildings were added at this time. After the war, the US government used the factory as a storage site for a wide range of items: art objects and archaeological remains from the Smithsonian, congressional documents and German military films and records. The building was bought by the city of Alexandria in 1970 from the federal government.

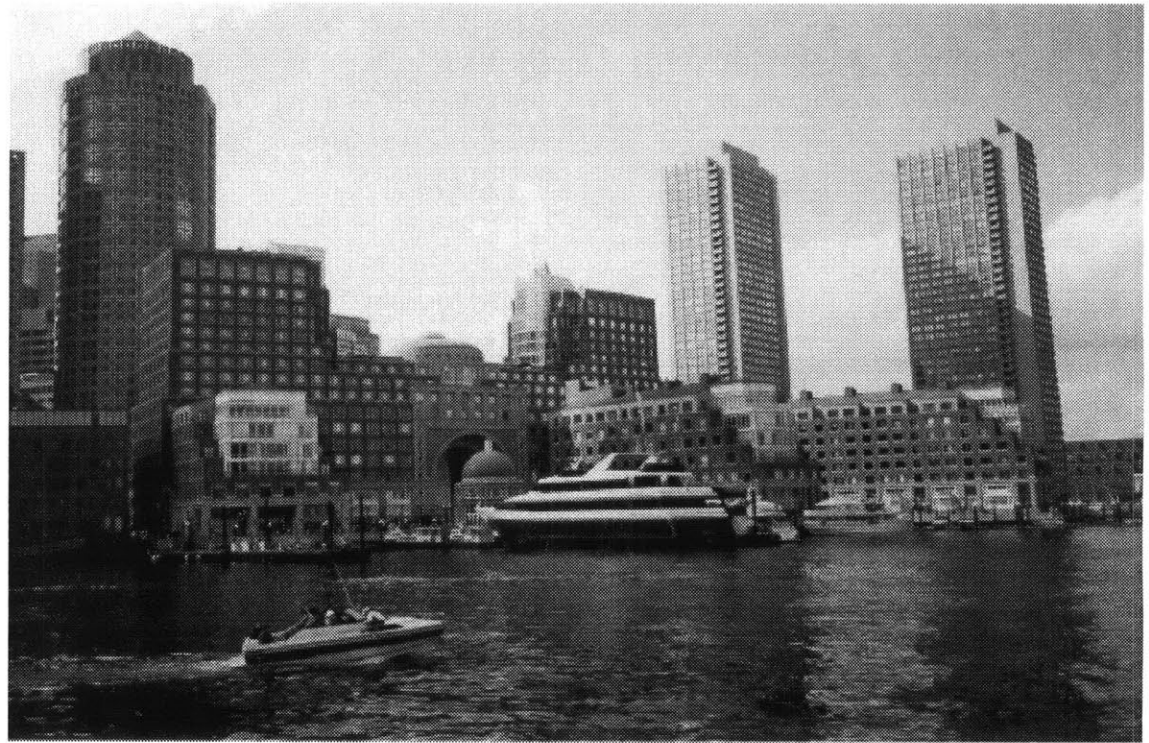
2.9 Typical floor plan



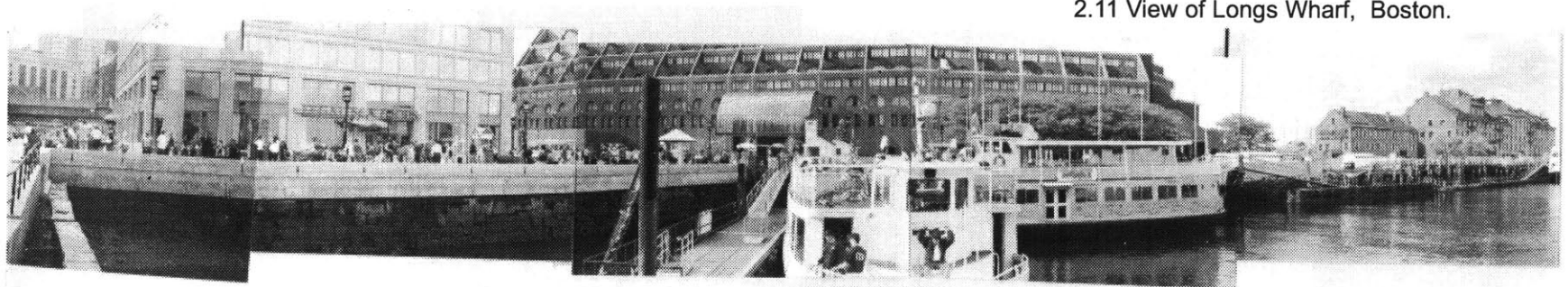
The renovation and restoration of the factory was done in 1973 as a cooperative work between artists and the city. One of the three main buildings of the block long factory has now become a main cultural attraction along the city's revitalized historic district. The rather simple architecture of the factory has touches of Italian Renaissance style to it. The building was cleaned, gutted, and given a new coat of paint. The Torpedo Factory houses five co-op galleries, event spaces, studios housing more than 200 artists, and an Art League school. The artists and crafts include mainly: painters, sculptors, photographers, jewelers, fiber artists, printmakers, stained glass workers, and potters. The interior of the building was reconfigured with partition walls organized around a main circulation gallery area. Artists occupy studio spaces above and have gallery shops on the ground floor. One of the innovative reuse strategies of the Art Center was to create a new way of interaction between the artists and the public. This was achieved in two ways, with the reuse of the large windows to allow the public to view the artists at work without disturbing them and the creation of the ground floor galleries.

Boston Waterfront

There has always been much comparison between the two cities of Boston and San Francisco. They share a similar scale, character, and maritime history. Though Boston is not as large and only covers 40% the square footage that San Francisco does, a comparison of the two waterfronts is insightful. The area encompassed by the historic Long Wharf and the Central Wharf are similar in dimension to the area enclosed by Pier 26 and Pier 28. The two wharves in Boston have been successfully revitalized with the presence of the aquarium, the recreational edges of the surrounding wharves, the historic renovation and reuse of the Custom House Block and the Chart House Restaurant, and the new Marriott Hotel.



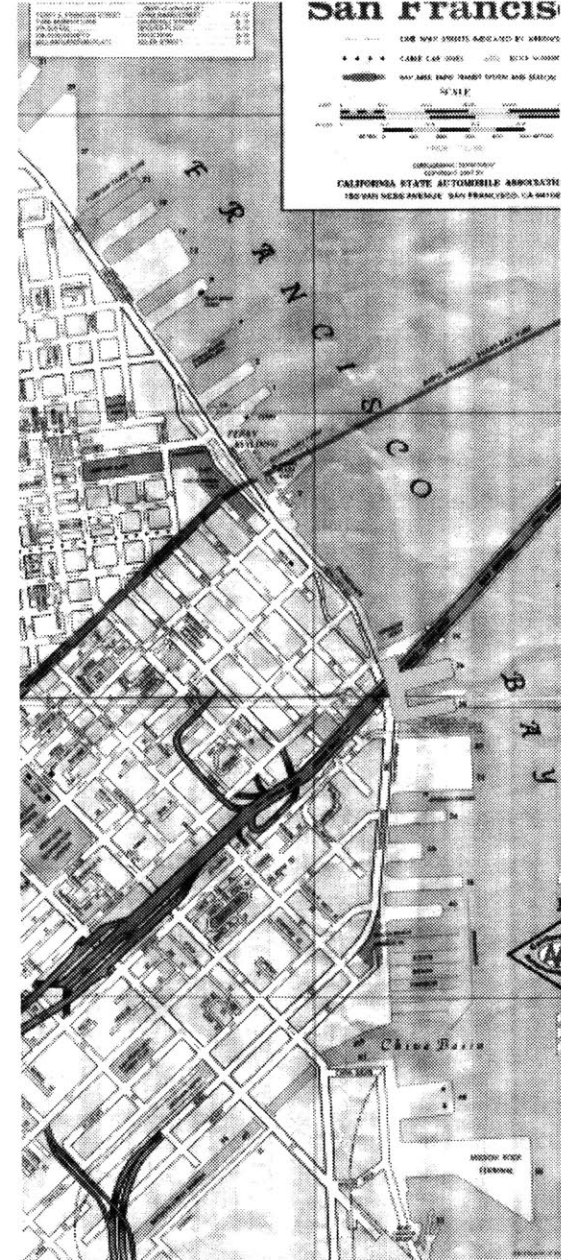
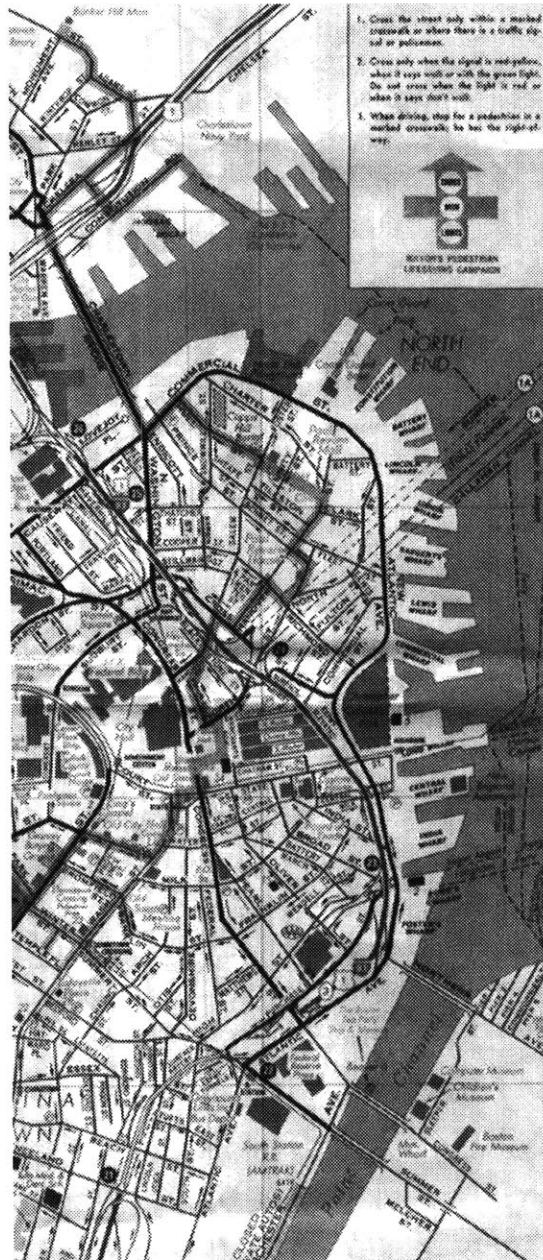
2.10 View of Rowe's Wharf, Boston.



2.11 View of Longs Wharf, Boston.

right: 2.12 Map of San Francisco's waterfront.

left: 2.13 Map of Boston's waterfront at the shown at the same scale as the San Francisco map.



Chelsea Piers-Manhattan, New York

The Chelsea Piers complex was completed in 1995 and reuses four piers on New York waterfront to create a recreational and entertainment complex. In its original use, the piers carried a strong presence on the Manhattan waterfront. The day the piers opened in 1910, the New York Times stated that they were “the most remarkable urban design achievement of their day.” The Chelsea Piers project and New York City waterfronts have similar histories and morphologies.

It is just one of many projects the city has created to revitalize its waterfront. Similar in age to the piers along the San Francisco waterfront, the four 84-year-old piers in total created 1.2 million square feet for public use. Warren and Wetmore, architects of Grand Central Terminal, originally designed the four piers, 59, 60, 61, and 62, in 1910. The piers were built to serve major ocean passenger liners. The five block longhead house once covered in pink granite and had grand staircases and elegant waiting rooms for the passengers. At the same time the piers were used for a transfer point for the shiploads of immigrants transferred to ferries to make the last portion of the journey to Ellis Island. The

pier sheds have steel rolling doors, and clerestory windows for light and ventilation. The piers went through periods of different uses. It was used as a departure point for soldiers during WWI and WWII and then as a cargo terminal in the 1950's and 1960's. By the late 1960's, the piers fell victim to the changes in technology to container freight. The shipping industry was drawn to the larger New Jersey berths, and airline activity handled the passenger activity crossing the Atlantic and activity in New York decreased dramatically.

The developers, Roland W. Betts and Tom A. Berstein have said of the project that it “has captured the imagination of many people in government and the community, because it makes productive use of the city's waterfront and revitalized historically significant structures.” Together the two developers began with a vision of developing a recreational complex that did not yet exist in New York. With the availability of the piers and the city's plans for revitalizing the waterfront, reuse of the Chelsea Piers proved to be an ideal solution.

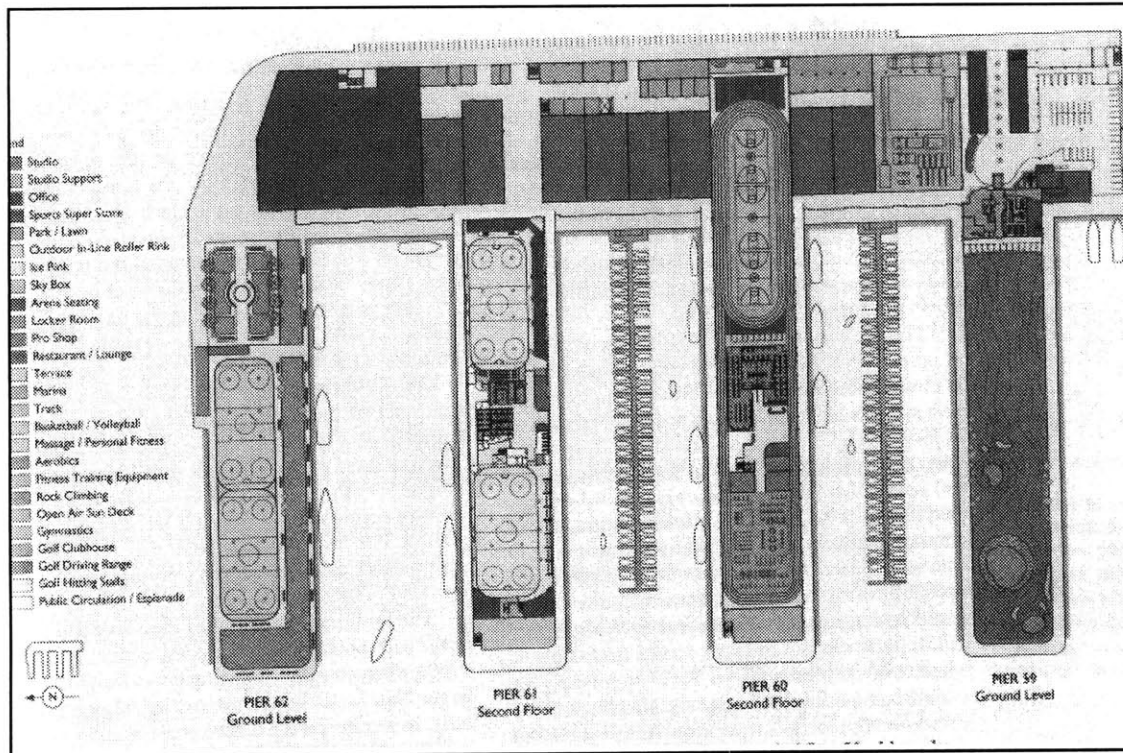
A variety of program elements cover the two piers. Piers 60 and 61 are listed as historic landmarks and still have the original sheds



top: 2.14 Historic image of Chelsea Piers, New York, early 20th century.

bottom: 2.15 View of the new Chelsea Piers complex, 1990's.





2.16 Plan of Chelsea Piers, New York.

covering them. A film studio occupies the head house. The majority of program elements make use of the existing materials and construction such as the steel doors to allow views out and the original steel truss are exposed covering spaces that cover the original width of the piers. The two open piers were covered with activities that show off the drama of the site.

Navy Pier- Chicago, Illinois

The pier was originally built in 1916, by Charles S. Frost as a recreation complex and transportation terminal. After decades of various uses and conversions, since 1995, it has returned to its original use of a recreational complex. Part of the original plan by Daniel Burnham, the 34-acre pier is 292 feet wide by 3,040 feet long and rests on the shores of Lake Michigan. When first built, excursion boats, steamers and cargo ships heavily used the pier. A pier shed covered nearly the entire length of the building. Located at the end of the pier was a pleasure palace which is described as having: "arcades, broad esplanades, an adaptable ballroom/concert hall with a high ceiling vaulted by metal ribs and two 165 foot concert towers that were lit at night for dancing to roof garden bands." In the 1941 it was turned into a naval training base, partitioning the large spaces into classrooms and offices. Then in 1946, the space was turned over to the University of Illinois. Other groups that inhabited it over the next few years include the police department and courts. After various interior conversions and years of no use, the pier was falling apart by the 1970's when the first plans for reuse began. Phase one of the project, completed in 1976, repaired the deteriorating structure and

restored the ballroom at the end of the pier. The original materials of steel structure, brick and terra cotta were repaired. The interior of the shed as well as the interior court area of the shed was cleared of the years of conversions. Landscaping and other street furniture enlivened the open spaces. A historic street-car even ran the length of the pier.

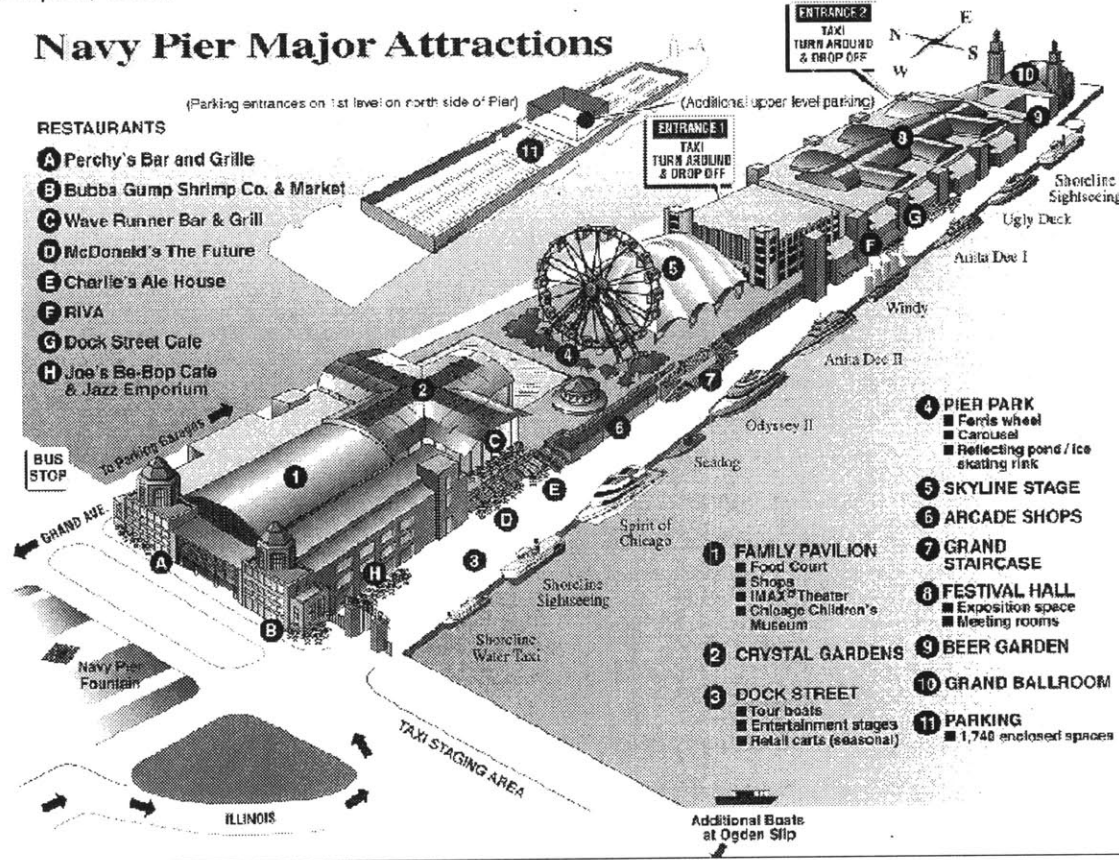
The pier fell into disuse though and the projected other phases of construction were never completed. A competition in 1991, won by Ben Thompson Associates, reincarnated the pier once more. Opened in 1995, it now houses 50 acres of shops, recreational activities, restaurants, gardens, and entertainment complexes. The pier was widened, some of the old sheds were demolished, new buildings were constructed, historic buildings were restored, and a new utility core was built. The new complex features include:

- 1) Family Pavilion with restaurants, an IMAX, a Children's Museum, and shops
- 2) Crystal gardens-a six story indoor botanical garden
- 3) Skyline Stage the city's only performance stage on the lakefront
- 4) Festival Hall-a flexible size exhibition hall and meeting

rooms

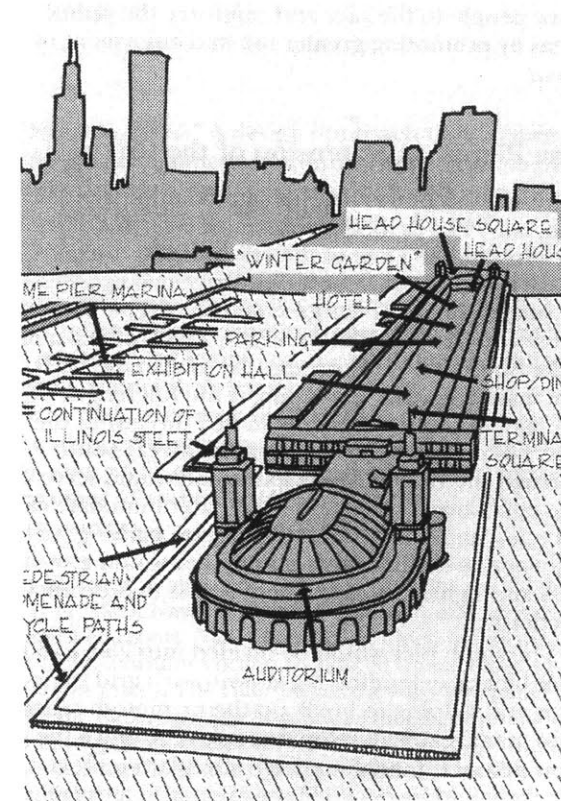
- 5) Navy Pier Park- a landscaped garden area with fountains, an ice-skating rink, and a Ferris wheel and carousel.

2.18 Axon and program at new Navy pier complex, 1995.



2.17b Axon of Navy Pier, Chicago.

2.17 Axon of Navy Pier, Chicago.



Attitudes towards Reuse

The nature of adaptive reuse unlike traditional restoration, historic preservation, or conservation allows physical remnants of the past to be given a new life and meaning, and become a contextual element of the present. In doing this, the element retains its relationship to the , but does exist only as a pristine and precious artifact. The original character remains, but it is adapted for present and future uses and can create a new sense of character to add to the old. The juxtaposition of its historic nature in the context of its new use will affect the individual's experience of the space addressing the collective memory of place with the experience of the transformed space.

Unlike the many examples of reuse found in other countries, American cities do not have a comparably lengthy history and culture to refer to, but there are still significant historical areas of our cities that are too easily being erased. Though old industrial buildings are the most commonly available candidates for reuse, similar solutions are always applied: offices, lofts, or pretentious restaurants or clubs that are either pastiche or bear little relation to the context. Part of the challenge of successful adaptive reuse is to find an

appropriate use for the building in addition to its economic viability.

The sense of place created in the bringing together of uses in old and new spaces can capture the experience of history, awaken memory, and inform and create a new place defined by the connection of the past with the present and the future of the place. The rapid growth of cities and the trends of removal vs. recycling in the last few decades, has affected many structures, ordinary and extraordinary.

As a whole the San Francisco Bay Area is a growing metropolitan area. As the growth continues in the city as well, the need for new housing as well as the desire to locate near the downtown area continues. The city's old industrial areas located adjacent to downtown are intruded upon. The ideas explored in this thesis are specific to the San Francisco, but applicable to many cities. The intention is that widespread erasure of a city's historic fabric will stop and new projects will not ignore the significance of the past held in more ordinary buildings. San Francisco has many noteworthy reuse and conversion projects, but successes to maintain the city's deteriorating unused waterfront are very few. There have been many reports and studies, and propos-

als as well as successes such as the efforts in the Fisherman's Wharf area and the recent Hyde Street Recreational Pier. For a city defined by its relation to the water on a peninsula, the city's edges cannot be made up of the same formula of retail facilities, tourist attractions, and recreational open spaces. Reminders of the city's past should not be removed if their presence has defined the character of the area for nearly a century. The city's diverse cultures, attitudes, and lifestyles should be reflected in the city's plans for the future.

There are no limits to the adaptive reuse of buildings. Though the more successful solutions address the challenge and the opportunity that adaptive reuse can offer to create continuity between the past and present and the changes of society. The quote by architect David Chipperfield summarizes this point: "We should not live in a bright shining future anymore than we should hide in a comfortable pastiche of the past. We must inhabit an ever evolving present motivated by the possibilities of change, restricted by the baggage of memory and experience."

design ideas

Attitudes to Design

Sense of place:

Being on the edge of the city there is a sense of release from the city; a sense of calm and detachment from the inner city bustle.

Industrial scale remnants - giant spaces and skeletal frames - coming together with the sky and the water. With an awe of being in endless expansive landscapes, where human scale is suddenly dwarfed and lost, juxtaposed with size-less elements. There is a sense of curiosity and serenity in this context.

The vision of this project is twofold:

1. To maintain the elements of the existing architecture that are integral to the collective memory and the experience of the place as an industrial area.
2. To transform and reactivate the unused pier area by introducing new uses and new architecture that creates a dialogue with the past.

The transformation aims to create layers of architecture that respond to present and future needs, and connect time and uses, and weaves the piers into the urban area around it. Through the experience of this transformed

place, the collective memories of place are recalled and produce a new context with a new meaning. In this way the history of the city's maritime industry will be kept, but also given a new life. The experience and memory will be the context of the new and the existing, not as a singular event, but as a larger continuum, as layers of inhabitation that connect, people, places, and histories. Thus the new place is just not a shell with infill. It is an old shell containing a new use and new layers.

Three Scales

With such a large site, and the focus to look at architectural design vs. urban design, three scales assist to understand and design the project. The urban scale refers to the areas of the Southern waterfront, South of Market and South Beach.

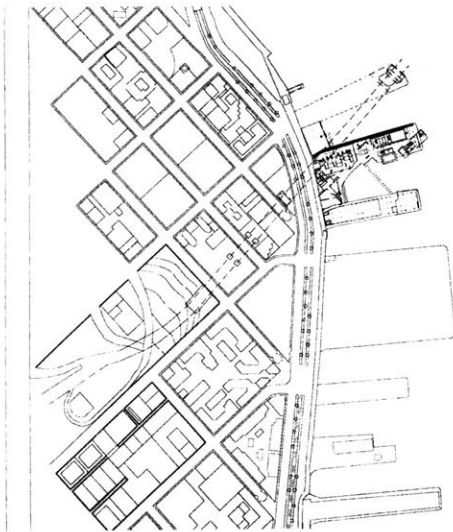
The urban scale studies are conducted at the scale: 100'-0"=0'-1". The goal at the urban scale is to design a means to reconnect the edge of the city with the rest of the city fabric. It has always been a separate edge, once defined by the traffic, the industrial activities

and the massive false fronts of the building facades. Visual and experiential solutions will be looked at, since a physical connection will always remain difficult due to the use of the Embarcadero artery and planning this lies beyond the scope of the thesis.

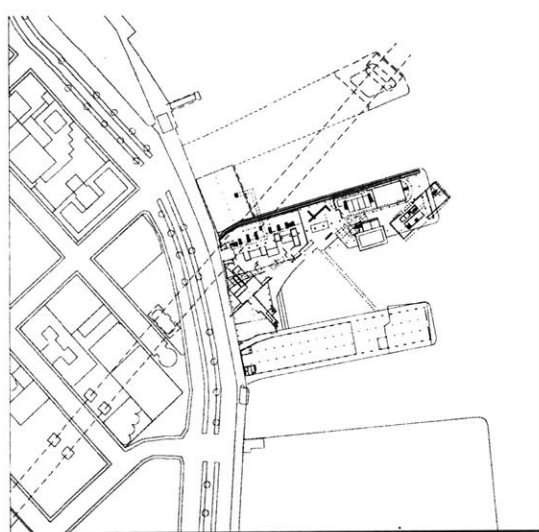
The site scale refers to the four buildings, Piers 26 and 28, and the adjacent bulkhead buildings 24 1/2 and 26 1/2, and the immediate area of the Embarcadero in front of these buildings. The investigations at site scale are conducted at the scale: 50'-0"=0'-1". At this level of investigation, the design creates a way for the four buildings to remain cohesive,

acting as a whole, as well designing them individually. Defining program and defining site and reuse strategies are the main emphasis. Focus is placed on the design concepts for two buildings, which are the location of the "building scale" investigations: Pier 26 and bulkhead building 26 1/2. Issues of defining place, path and entry will be looked at as well as how these issues are resolved in the connection of the different program elements and reuse strategies. The strategies and program defined in Pier 26 would also occur in Pier 28, but the design of this pier is not part of the thesis.

The building scale addresses the design of two of the three reuse strategy areas, the artist's studios and galleries and the end restaurant. These investigations are conducted at the scale: 20'-0"=0'-1". The reuse strategies are applied at a more detailed level of investigation involving materials and construction. Individual design concepts for each area will also be developed. At this scale there will also begin to be studies of character of the new spaces created from the fabric of the Pier 26 shed. Programmatic requirements are further developed, but the focus is on the connection of history, time and memory created from the transformation and experience of the spaces.



urban scal



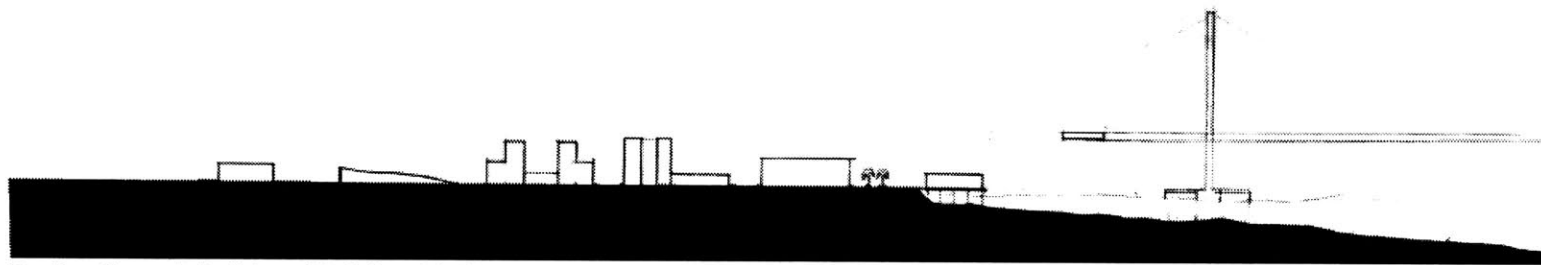
site scale



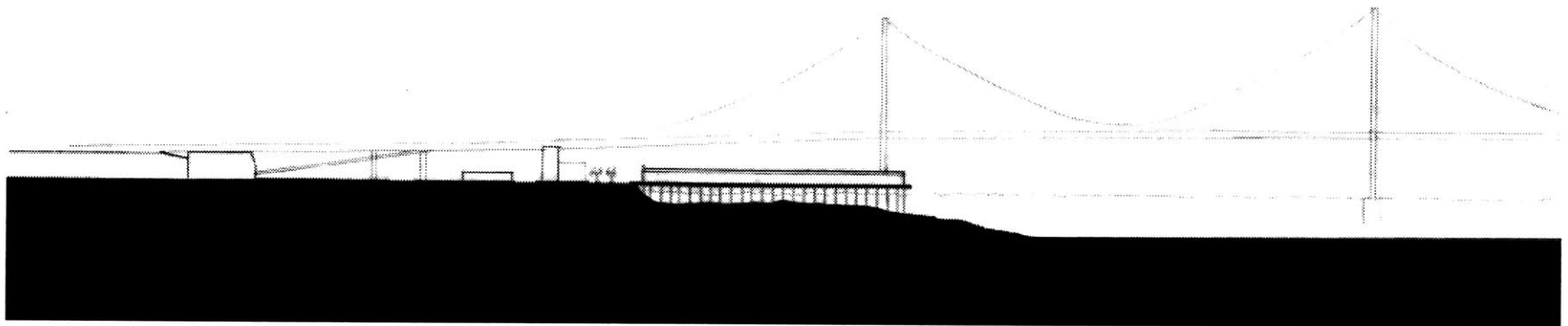
building scale

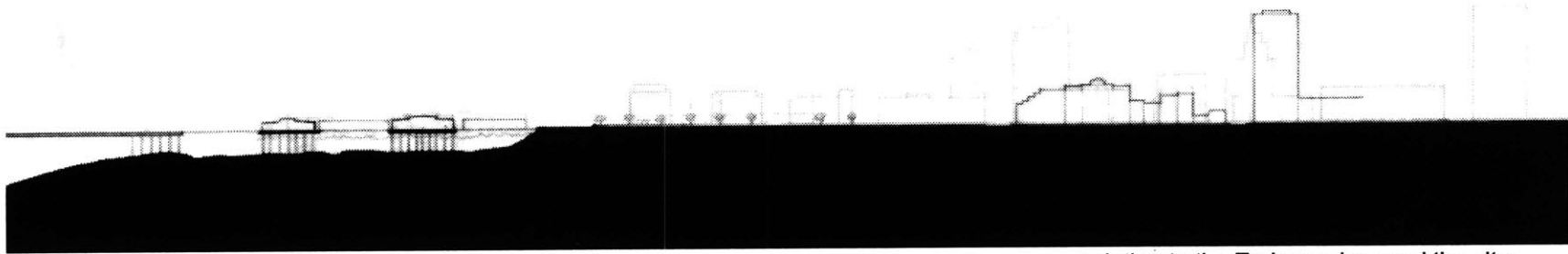
Site Sections

scale: 500' = 0'-1"

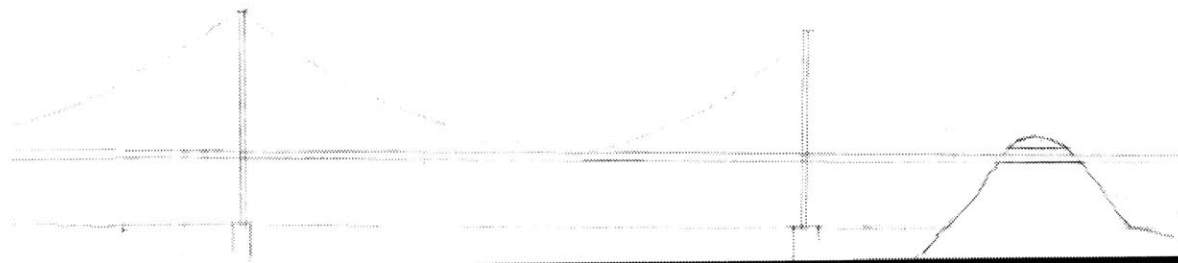


Section through Bulkhead Building 26 1/2





relation to the Embarcadero and the city:
Section through Pier 26 and Pier28 along the
Embarcadero



relation to the bay:
Section through Pier 26 and the bay to Yerba
Buena Island

Key Elements

To form a basis for the issues of reuse addressed in this thesis, significant key elements were selected to act as clues to inform the design and reuse strategies at the three scales of investigation. The key elements are used as clues to inform how to reuse the site. By understanding what was important to the site past industrial character, recognizing how it was used, and the relationship over time of the element to a particular quality of space, of use, or of a larger experience, will help evaluate the possibilities for its new life. These elements are significant to the site's character, integrity and life that have developed over the years. Their continued presence will ensure the continuation of the integrity of its original character.

The industrial edges and its relationship to the water:

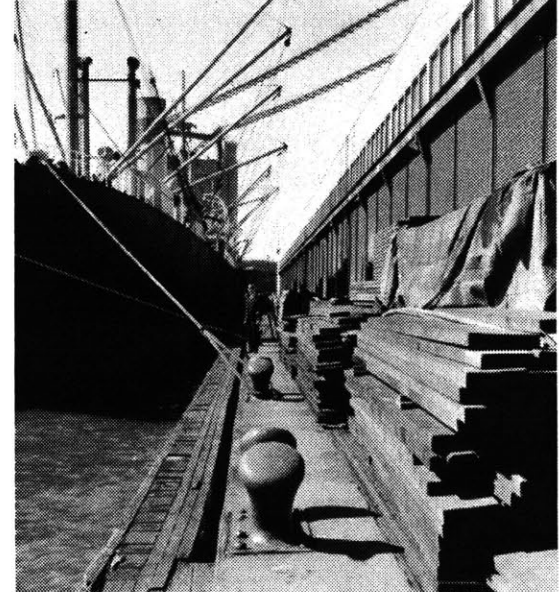
- the industrial edges of the piers in relation to the bay.
- change of the city's industrial waterfront edge to a recreational waterfront



2.19 1930's view of the Embarcadero, south of the Ferry Building

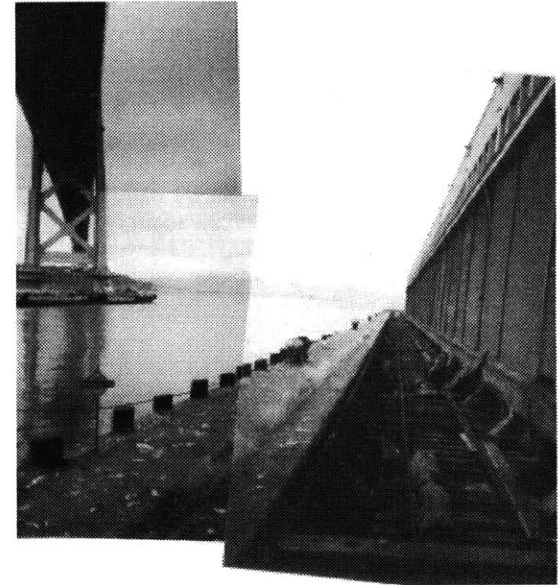


2.20 Current view along the Embarcadero near Pier 30-32.



2.21 1930's view of the south side of Pier 26

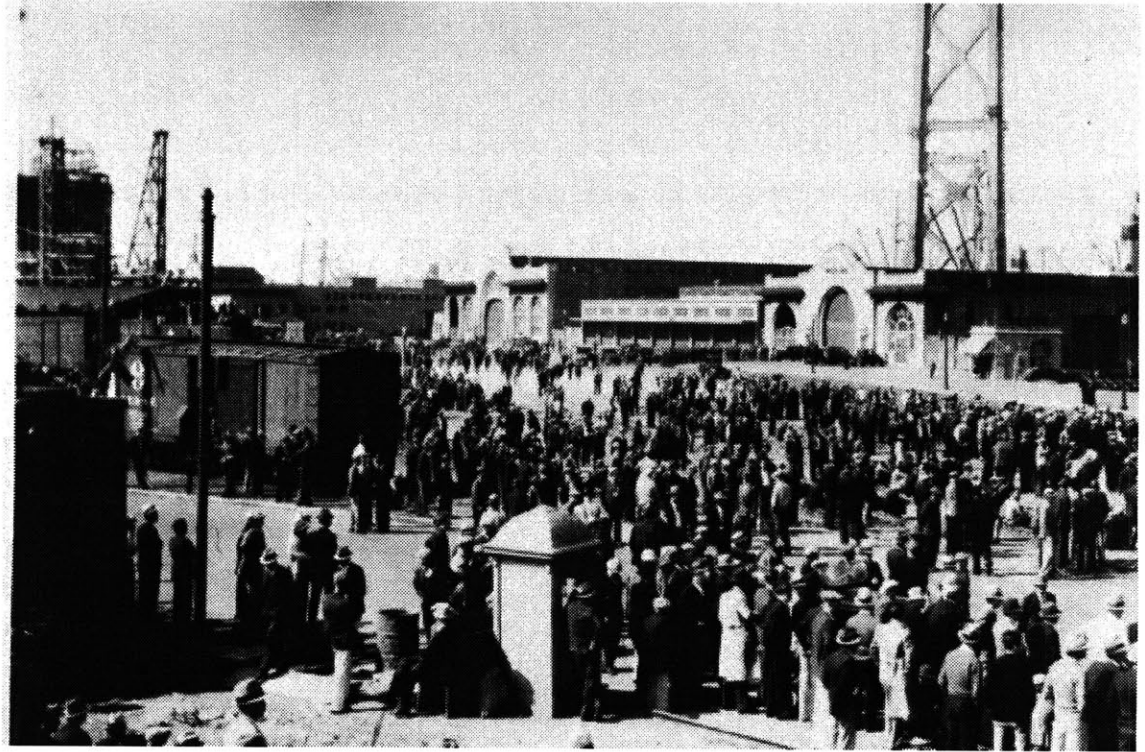
2.22 Current view of the north side of Pier 26.



Relation of the building to the Embarcadero Street:

- Past relation of a barrier like façade bordering on the undefined chaotic Embarcadero artery
- Current relation of the same formal front hiding an old industrial function bordering on an ordered artery geared toward vehicular traffic and pedestrian level recreation.

- Change from the entire street being the chaotic edges of the city that flowed directly up to massive facades that hid the shipping activity.
- New street rail in the middle of the street divides the outlet to the water edge from the energy of the downtown.



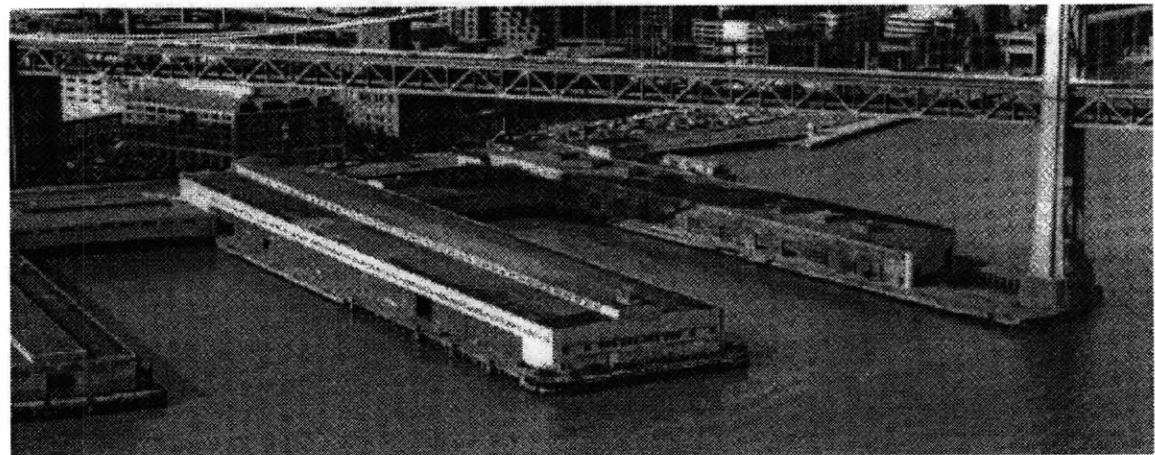
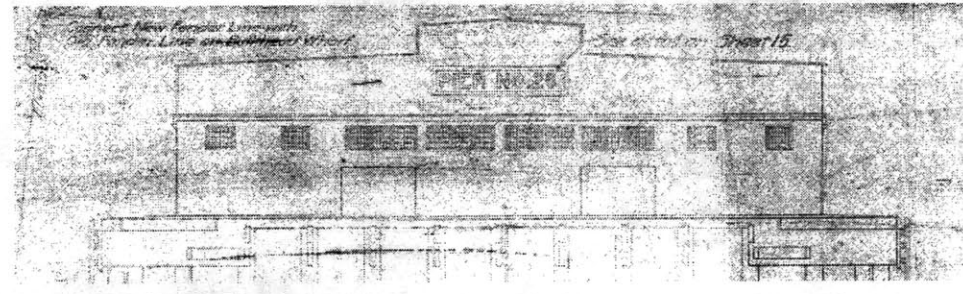
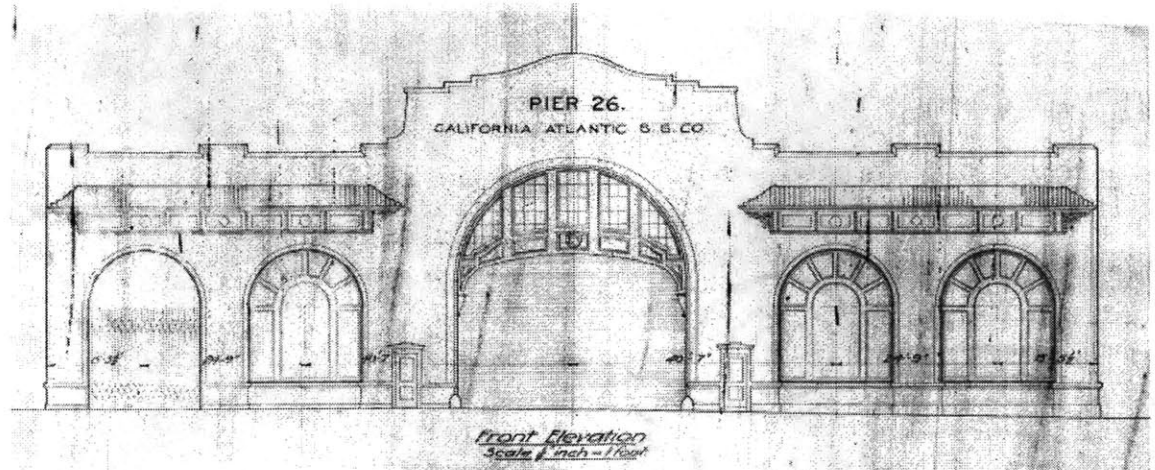
2.23 View from Brannan St. looking towards the Embarcadero, across from Pier 26 and pier28 during labor Union Strikes.



2.24 View taken in 1999 from Brannan St.
and the Embarcadero.

Relation of public facades to the context around it

- Front façade acts as a formal entry, with a symmetrical historical design. In combination with the connector buildings between the two piers, the wall of facades hides any connection to the water or the size of the pier that lies behind.
- Rear façade facing the bay acts as a secondary public face to all the maritime traffic that used to fill the bay, coming from the southern regions of the Bay area.
- Both facades mark a presence of occupation on the pier, thresholds of a manmade extension into the water. The existence of a shed on the pier creates a greater presence and a sign of inhabitation than an empty pier acting only as an extension of ground.



top: 2.25a Facade of Pier 26 from construction drawings

right: 2.25b Rear facade of Pier 26 from construction drawings

bottom: 2.25c View of end of Pier 26, rear facade.



The interior structure that defines the architectural space

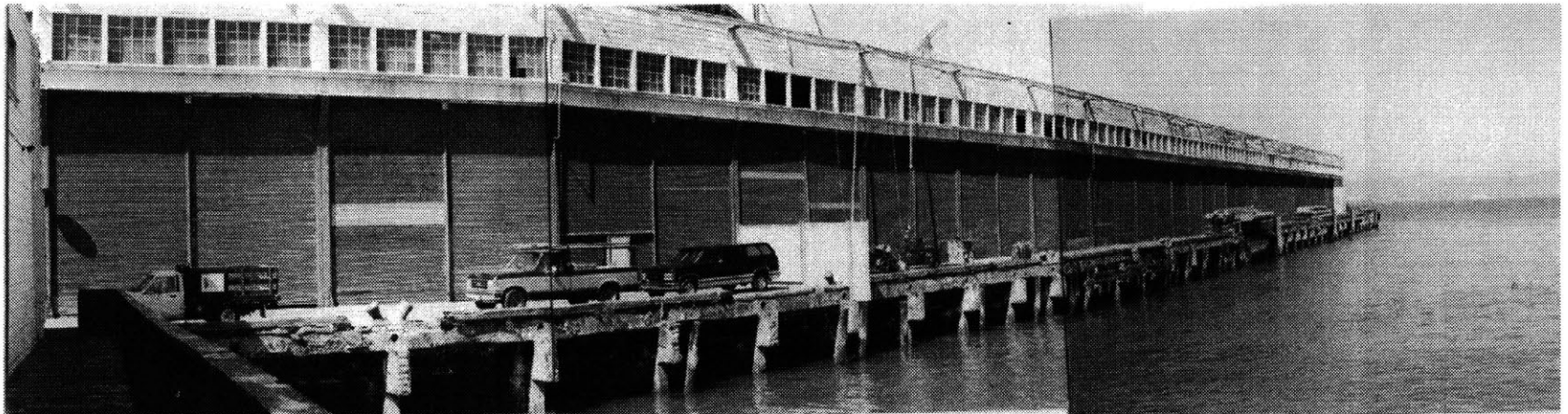
- One element that has not changed in its use or relation to its immediate context and thus still maintains the integrity of the original space.
- Designed to be purely functional space to accommodate storage of break bulk cargo. Large spaces were needed to store the varying configurations made of smaller individually shipped cargo.
- Defines space and circulation across the length of pier

2.26 Interior view of Pier 26, taken midway down the pier looking east, 1999.

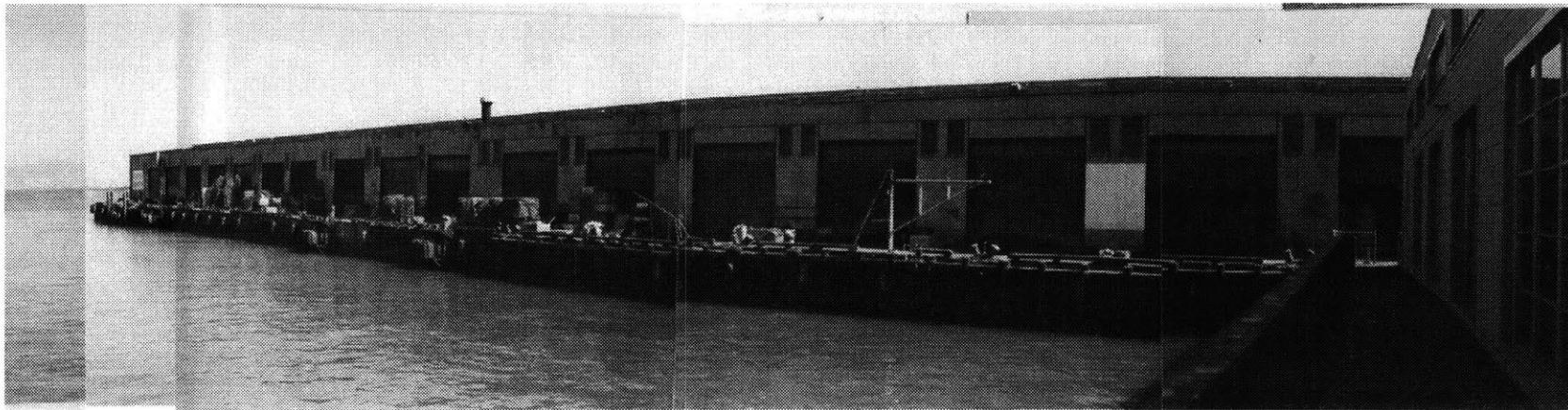
*The inner world of the spaces between the piers
and the combined whole of the industrial edges
and the space that it encloses:*

- Private industrial realm once busy with activity and people and cargo from all over the world filled with tall masts and ships, cargo, railroad cars, and sailors and longshoremen.

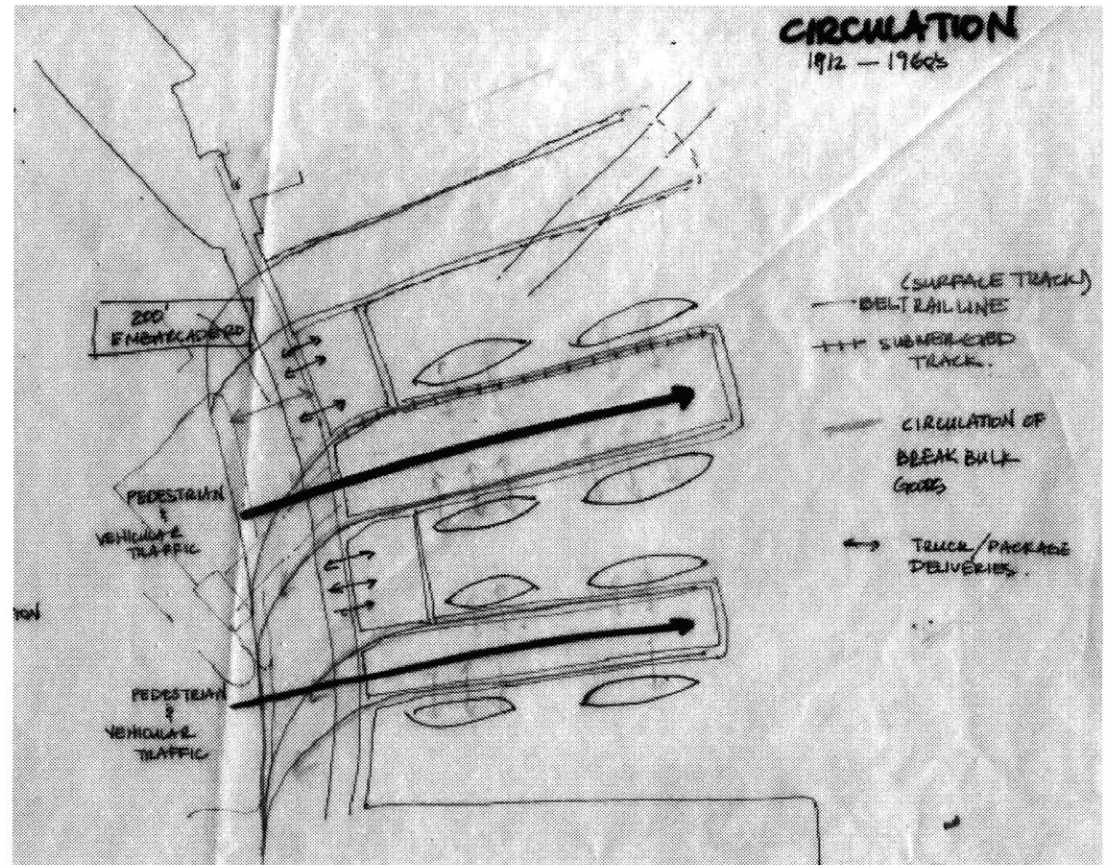
2.27 Current view of the "inner world", the space enclosed between, Pier 26 and Pier 28, from left to right. View taken from bulkhead building 26 1/2.

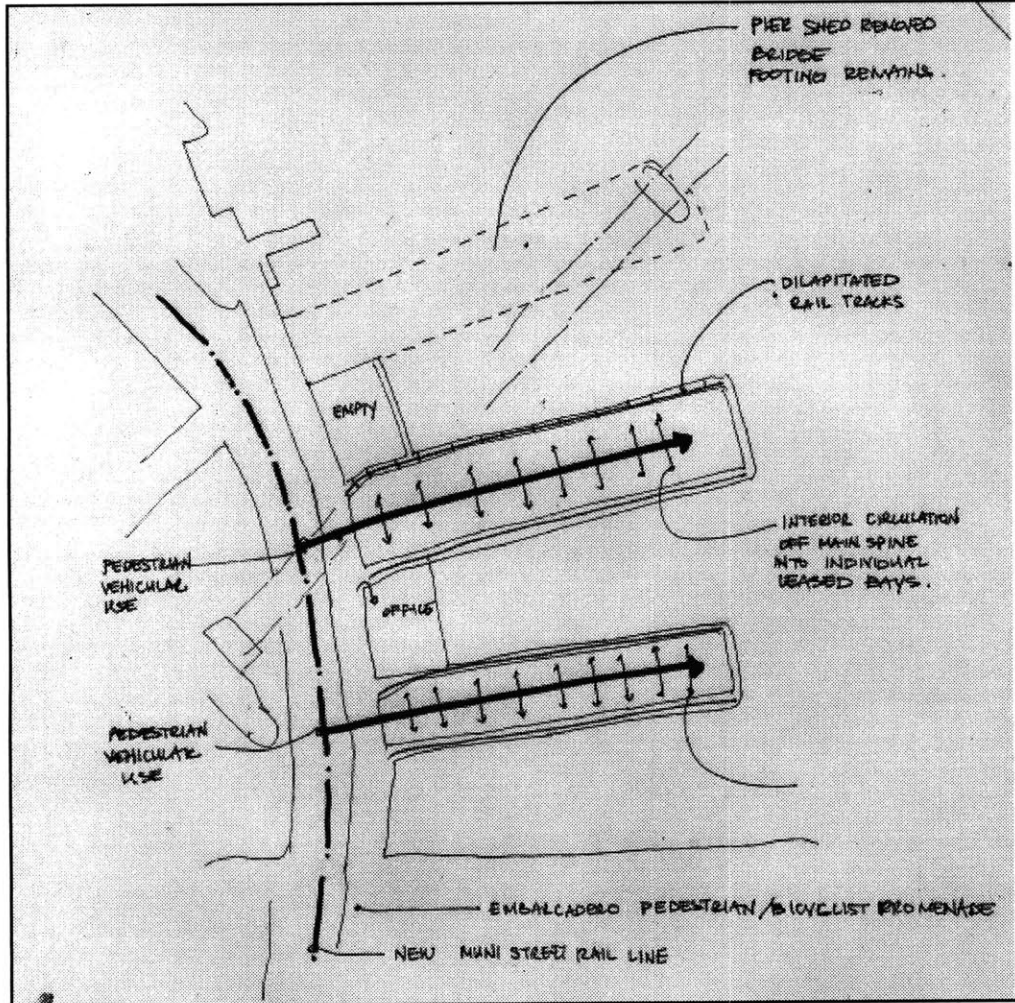


- Currently without any industrial activity, the enclosed area is sublime in its location at the edge of the city where the industrial remnants and the bridge overhead are out of human scale. In the space, the blue green bay water adds a sense of serenity as does its changing tidal levels.



Circulation of Site: 1912-1960's
scale: 300'-0" = 0'-1'





Circulation of Site: 1999

scale: 300'-0" = 0'-1'

Historical Significance

scale: 300'-0" = 0'-1"

High Significance

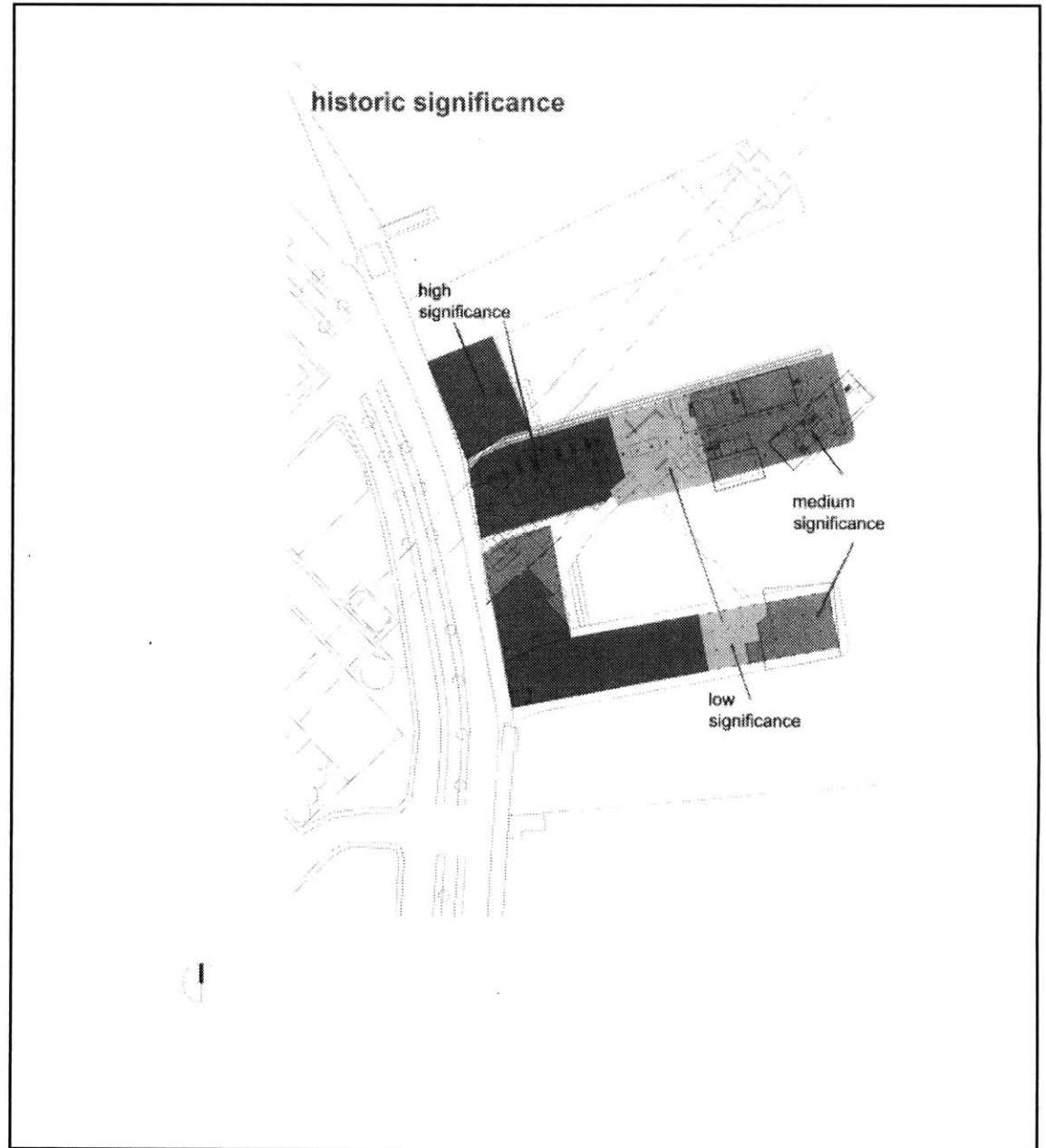
Street facades and the immediate space of the building area behind it: This area is important for its strong continued presence for the last 85 years on the street, on the waterfront, and as a defining piece of the wall of Mission Revival style buildings that once lined the area. It is one of few remaining examples of the density of the old waterfront, and the existence of a continuous wall of massive facades.

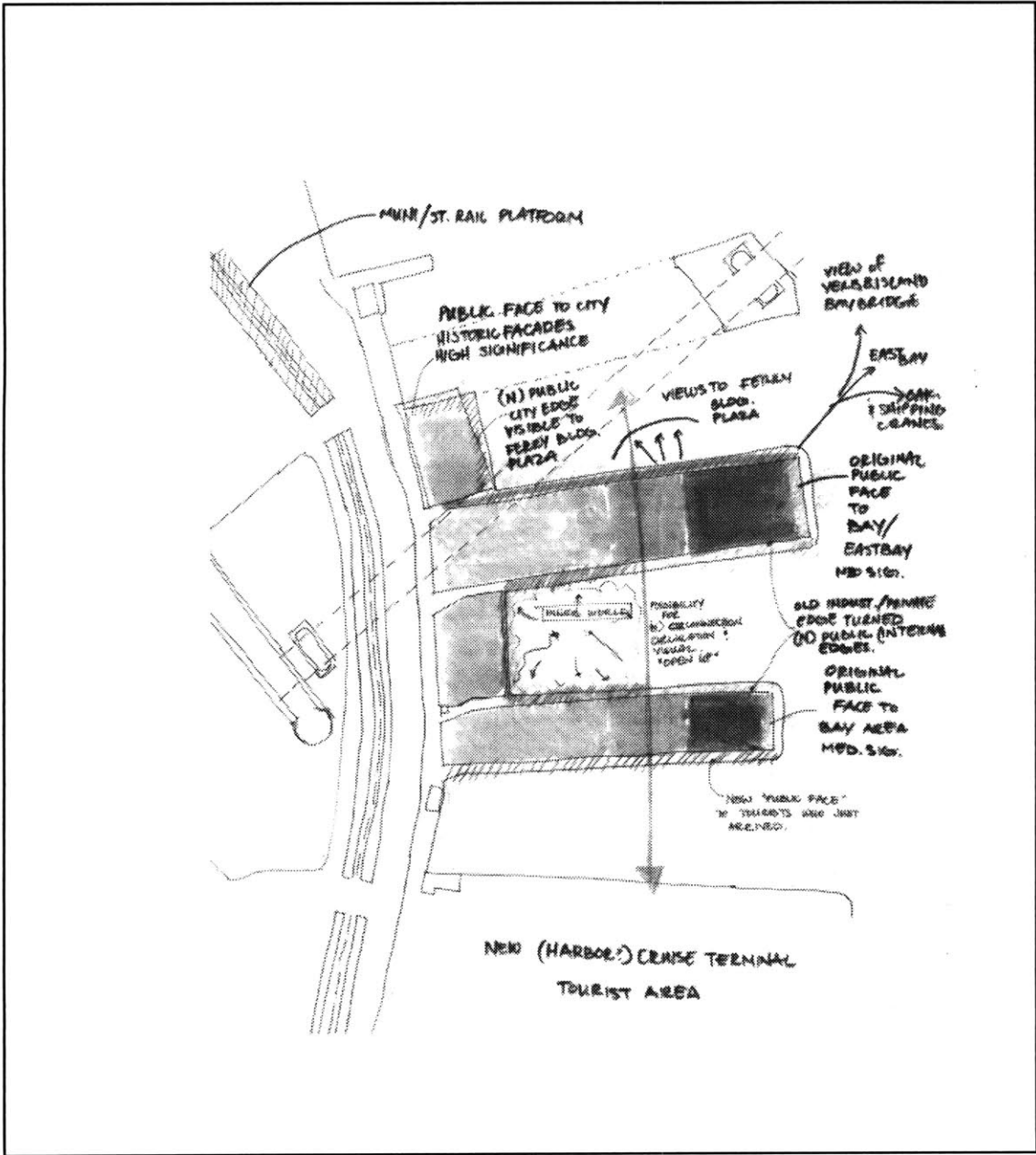
Medium Significance

Rear facades: mark the end of the piers and was the public face to the bay traffic. No particular style, wood frame construction, only signage with the pier number is a distinguishing element.

Low Significance

The repetitive bays of the interior of the shed space: There are no distinguishing features to mark one bay from the next except for its relation to the outside and its location on the pier.





Edge and Site Conditions

scale: 300'-0" = 0'-1"

Analysis of the varying edge conditions of the site and relation of edge conditions in relation to the areas of historical significance.

Defining Program

Defining what is appropriate for my intentions of reuse as well as how the site will fit into the future of the area and may even influence that future. With such a long and repetitive space as exists in the pier sheds, there is not a sense of preciousness from one thirty-foot bay to the next. But in appreciation of such an immense space as a whole and that defined in one bay, that is 30 feet deep by 78 feet wide, it was important to not eliminate this spatial quality by simply filling in the shed to maximize the reuse of space.

Entry Information Center, History Room,
Snack Bar, and Galleries

Artist Studios, Galleries, Exhibition Space,
Café

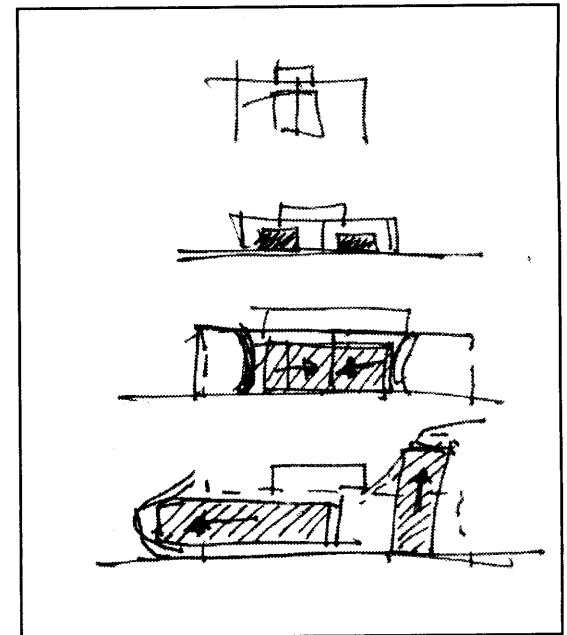
- Provides analogous uses to previous industrial use: movement of large cargo along edges, varying ways cargo occupied space, pedestrian circulation along central axis. In comparison to the idea of artists creating large artworks inhabiting an outer edges, having varying possibilities of studio layouts that fit within the pier structure, and pedestrian access occurs along the central column axis.

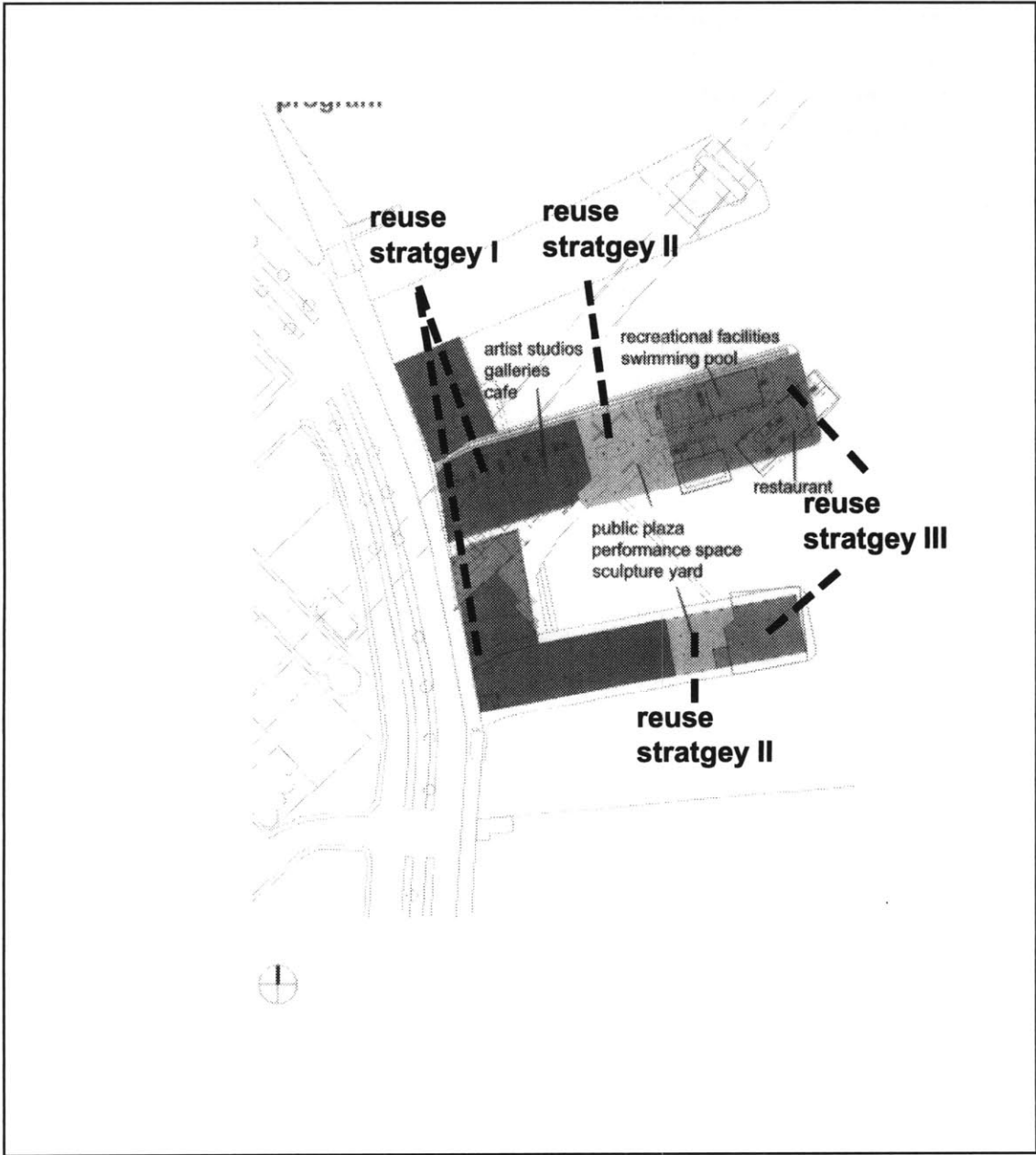
- Public art as an attraction, and the creation of art as an attraction
- Large open spaces advantageous for creation of large art or large equipment, as well as being well lit by natural light
- Least disruption of space without destroying character
- Relates to creative based culture of SOMA

Open Plaza, Sculpture Yard, and Outdoor
Performance areas

- Transition area, allows for extension of cultural activities into an out door recreational environment
- Connects the adjacent uses of art and physical recreation with spaces for combined activities such as a sculpture yard with interactive sculptures, and performance areas for formal and informal entertainers such as jugglers, mimes, dancers, singers, and other performance artists.
- A place for stopping along the recreational edge that is a completely unique enclosed relationship to the bay.

Early sketch of reuse strategies.





Recreational Facilities, Basketball courts, Swimming Pool, and Covered Running track

- As an extension of the Embarcadero recreational edge, facilities to appeal to those individuals and to further activate the pier with the activity in these facilities that are visible to the public
- Provide use to locals—not just a tourist site

Restaurant

- One main element to the pier complex, targets all general public
- Night time activity, lantern at the end of the pier
- Captures drama of end of pier-its views in a use that is highly influenced is about designing an atmosphere to relax and dine in.

Program in relation to areas of historical significance
 scale: 300'-0" = 0'-1"

Design Approach

As with any large urban scale project, my approach to the design derives from the sense of place and the context of its surroundings. In the case of adaptive reuse, more specifically, the history of the place held in the site and its contextual are the main influence for the design.

Issues:

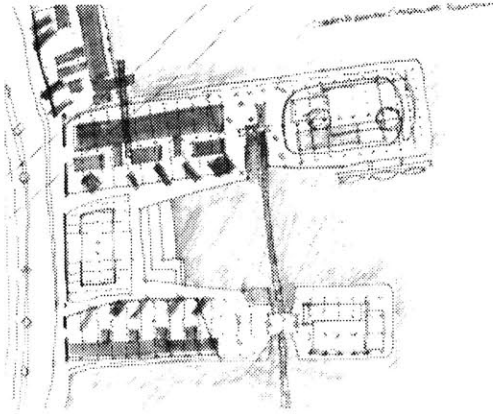
- Create a public recreational area that addresses the interests of the local residents as well as appeals to the city's many visitors.
- Address the issues of adaptive reuse and define a plausible use for the site that would address interests of the actual inhabitants of the area, city's visions for the area, and the intentions of this thesis (outlined earlier).
- Change of the industrial edges to the new recreational edges
- Creation of entry, path and place in order to reconnect the site with the urban context.

Goals:

- To awaken and make visible the experience of this edge to reawaken history of the site in the remnants

that still exist, in the areas that were not historically for public use and are industrial in nature and scale.

- Create a juxtaposition of old use and new uses.
- Extension of the recreational zone of the Embarcadero Promenade.



Design Evolution

Early studies of different site designs at 1/50" scale.
clockwise from left:

Study 1

Smaller massing with recreational facilities occupying the majority of the end of the pier

Study 2

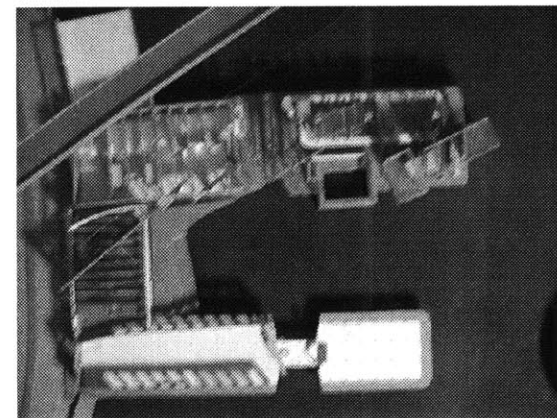
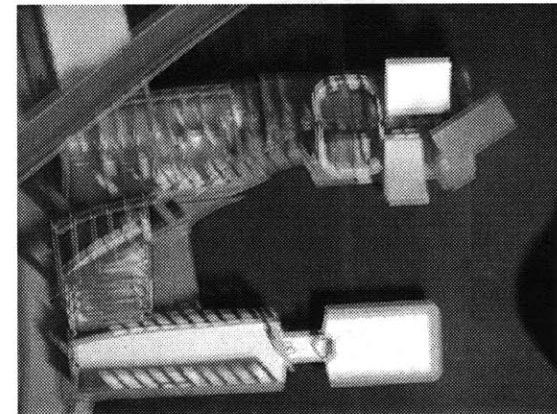
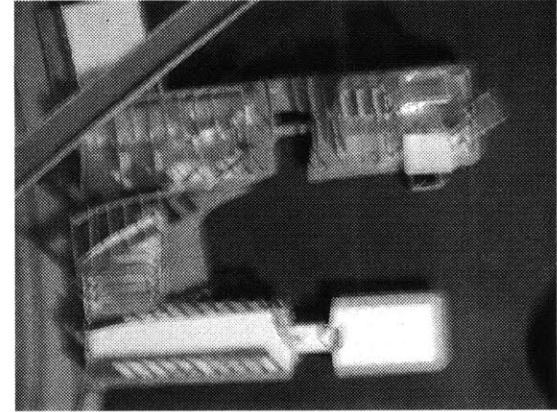
Smaller massing with recreational facilities occupying the majority of the end of the pier

Study 3

Additions stretching outward, recreational facilities reorientated and composed of smaller buildings running track smaller and insular to pier.

Study 4

Forms more lineara relating to pier form, running recreational facilities reduced.



Concept:

To apply the ideas of connecting past to present at the site, the design concept takes a physical element of the past and gives it a new logic and order through new interventions and new layers from the 21st century. It is not to be a literal historical marker, but a sign expressing the site's reuse intentions to connect to the past.

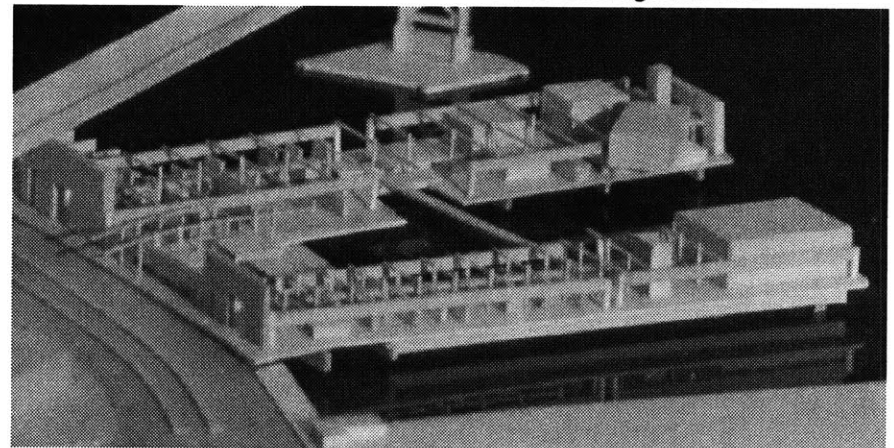
The old orthogonal geometry of the early 19th century piers and waterfront is used as the basis for the design concept, applicable at the three scales of investigation. As described earlier, these piers extended off the orthogonal city grid and continued the orientation of the street grid into the water. The street grid remains unaltered, but the pier configuration has disappeared with the construction of the 20th century seawall. The existing early 20th century finger piers are oriented perpendicular to the artificial curve of the sea wall. This geometry of the old piers and the street grid are used as overlays that express the concept. The concept is highlighted in the design of the silver curved metal roofs, smaller light metal canopies and the program areas that they are a part of, and address the following design intentions:

- To connect the presently unused

industrial site to the growing recreational uses of its context.

- To connect to the urban fabric of the city across the artery of the Embarcadero Street, making the site once again act as an extension of the urban realm, literally and experientially.
- To humanize the scale of the site with a readily understood language that does not compromise the existing industrial qualities of the site.
- To highlight the most public function buildings and areas and be a key element in the buildings general concept and in relation to its internal site context.

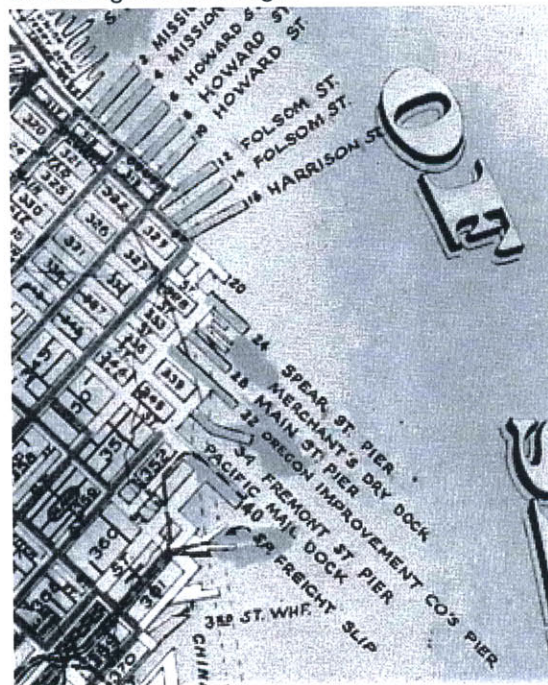
2.28 View from west of concept model, working with ideas of building within a framework of the existing structure.



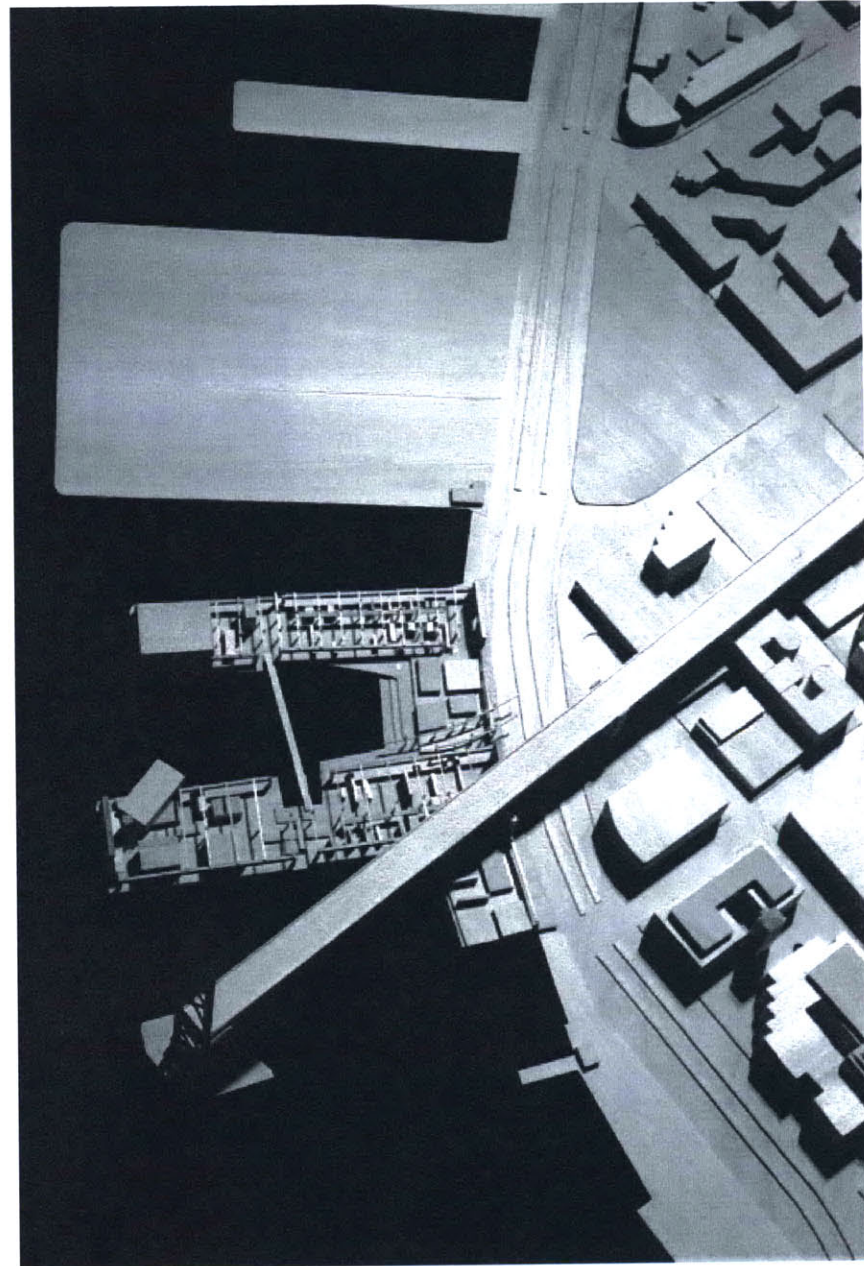


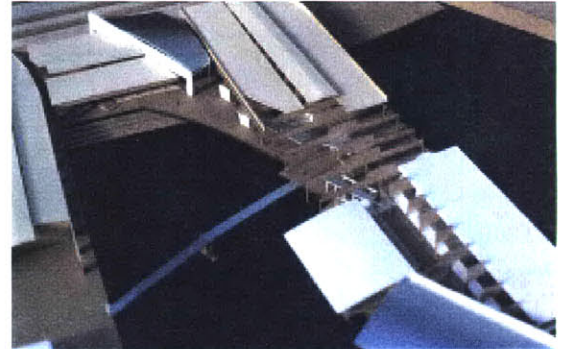
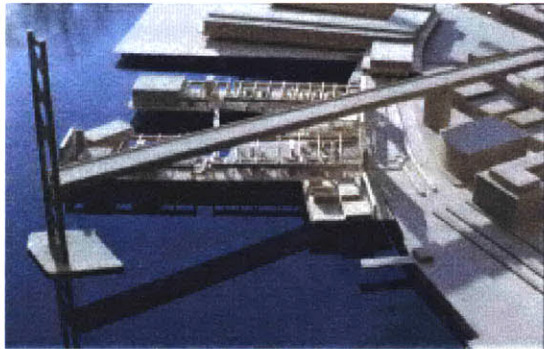
2.29 View from Bryant Street looking at Pier 28, highlighted.

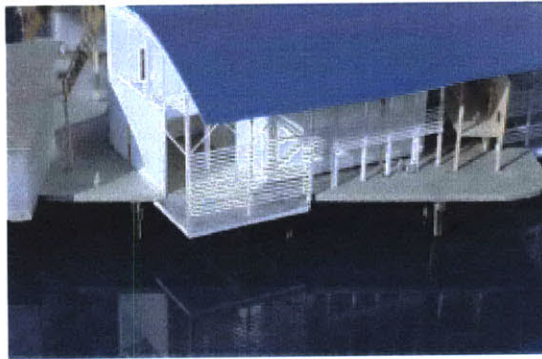
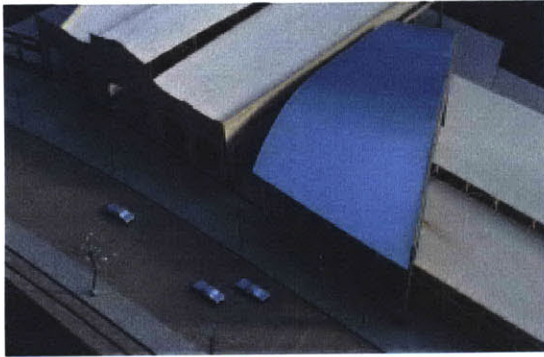
2.31 1896 map showing orthogonl piers extending from street grid



2.30 concept model
scale 100'-0"= 0'-1"







project design

overleaf, from left to right:

concept model, scale= 100'-0"= 0'-1"

site model, scale: 50'-0"= 0'-1"

entry and studios model, scale: 20'-0"=0'-1"

restaurant and end pier model, scale: 20'-0"=0'-1"

site scale

Design Concept

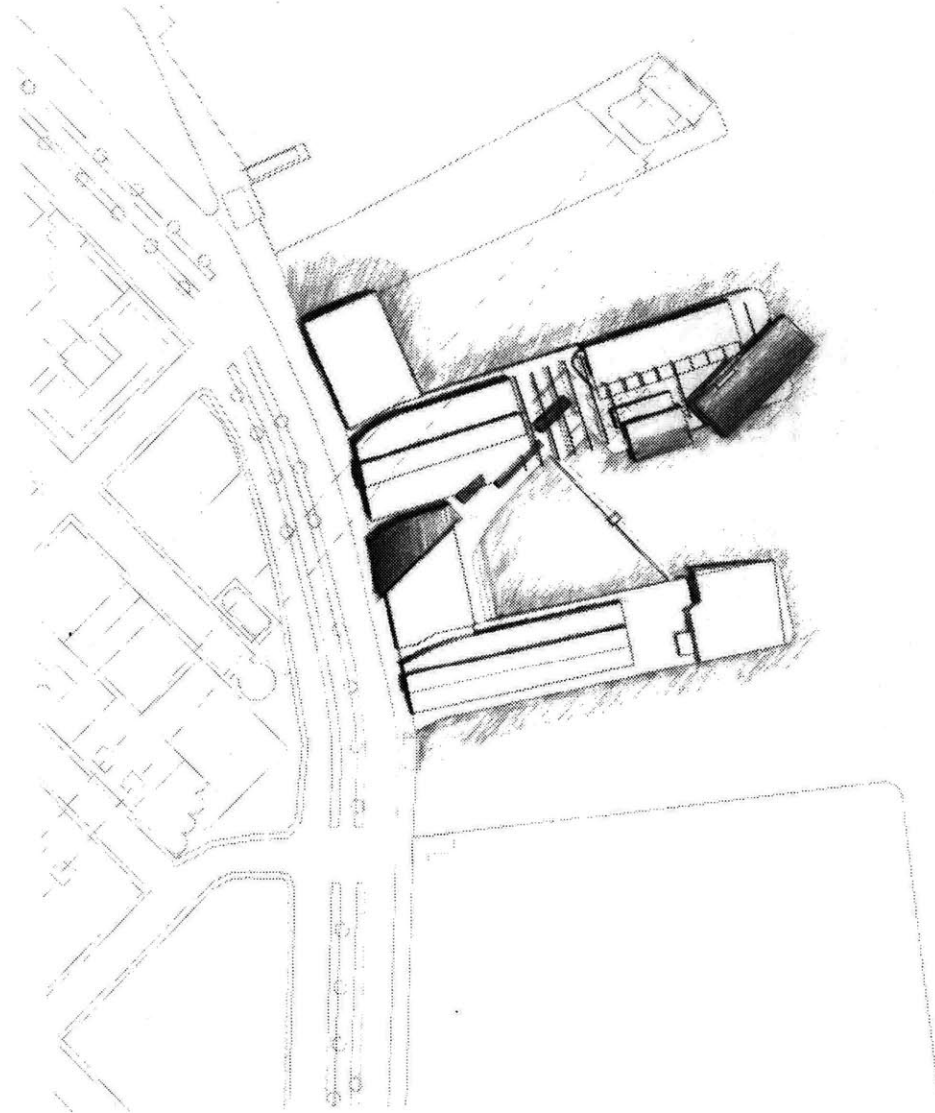
roof plan

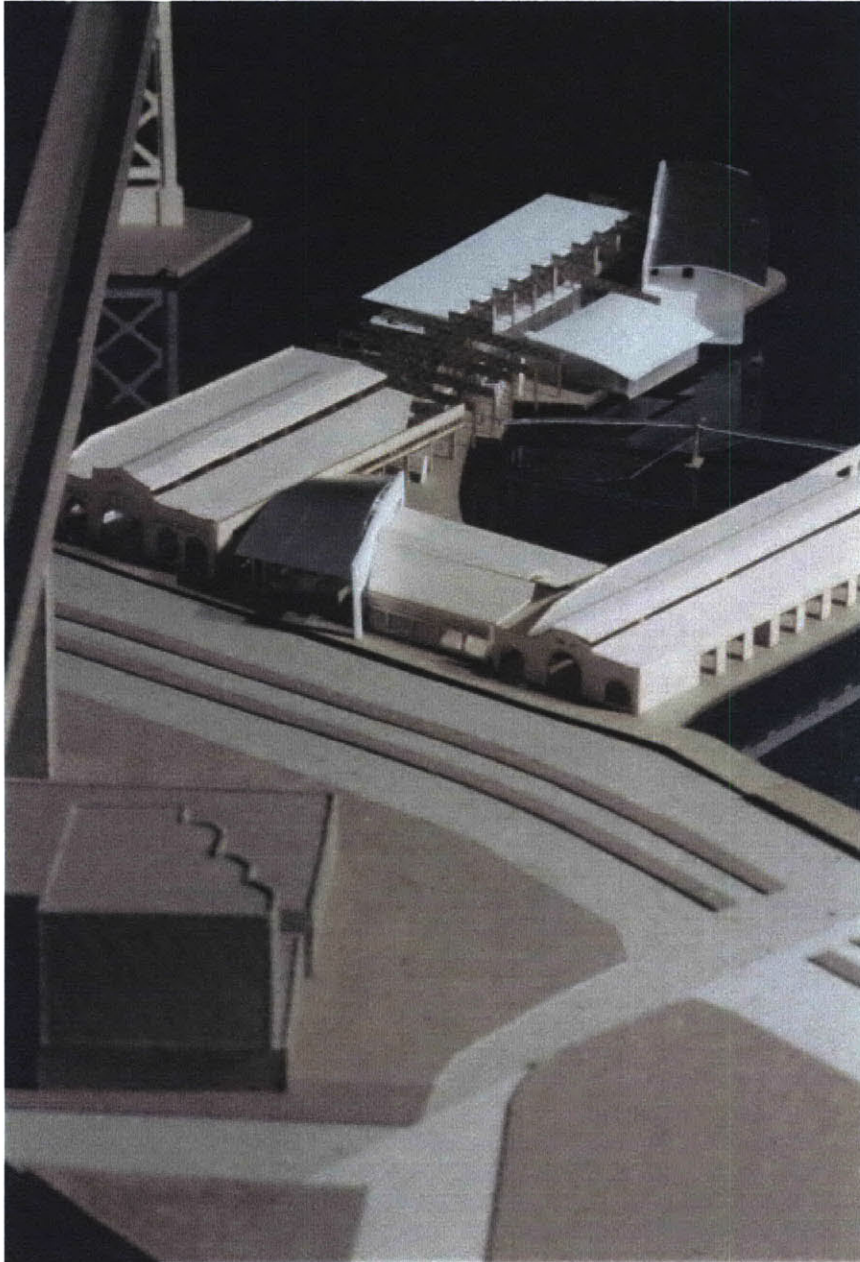
scale: 400'-0" = 0'-1"

The extension of the street grid defines the places along a path, created by the relationships created with the existing pier elements. The overlay of the street grid creates two connections: a new visual and orientational connection to the urban context and a connection to old waterfront form of and the history of the site. This concept is emphasized in the design of the two most public areas, the public entry to the site and the restaurant at the end of the pier.

The linear proportions of the pier are emphasized with the presence of the remaining structure along the entire length of the pier. Program and reuse strategies inform the breakdown of the mass of the pier in order to humanize the scale of the site, without straying from the overall original proportions of a pier.

The main archway entries in each pier facade are maintained as entries to the new program housed in the area immediately behind the facade. A public entry for the site is created along the old industrial edge of the Belt Railroad curve between Pier 26 and bulkhead building 26 1/2 and within the bulkhead building itself.





View of site model from Bryant Street showing relation of street grid to design concept .

model scale: 50'-0"= 0'-1"

Reuse Strategies:

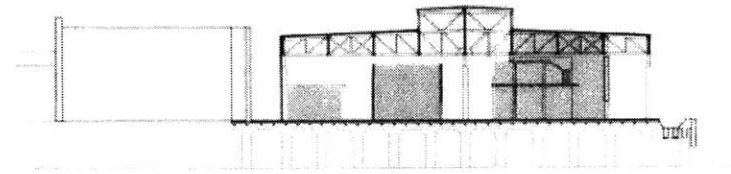
Insertions, Ruins, and Additions

Program: Artists studios, galleries, exhibition spaces and cafe

Design Implications:

- New materials to contrast existing
- New framework system, separate from the existing
- Analogous use of space to original warehouse function with a variety of spaces
- Key elements of rail, structure, and street edge left unchanged

insertions

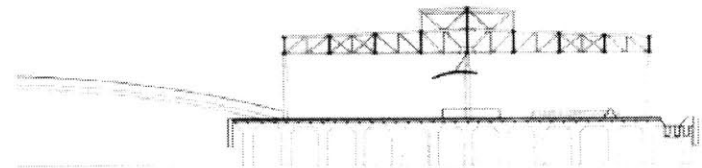


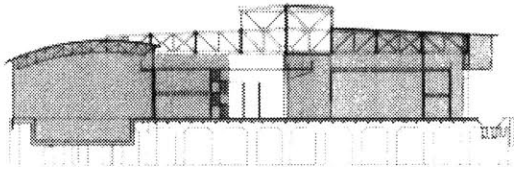
Program: outdoor exhibition space, performance space, public plaza.

Design Implications:

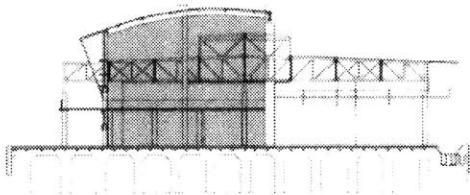
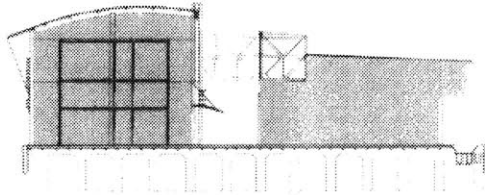
- Existing structure is revealed, skin peeled off. skeletal remains of building are left as objects, detached evoking nostalgia and memories of the past.
- Revealing of the structure opens space to the surroundings, acts as objects framing views.
- Creates places where the sky and water meet with the context of the pier space, instead of only at the end of the pier.

ruins





additions



Program: Recreational Facilities- exercise rooms, racquetball courts, indoor running track, swimming pool, and basketball court.

Design Implications:

- Existing elements remain if still useful, but are removed or transformed as dictated by the new uses.
- Existing enclosure of building is changed to accommodate new program
- Building forms contract and expand within the thresholds of the structure to begin to inhabit the space in new ways.

Program: restaurant, event space, and nighttime performance space.

Design Implications:

- The concept for the restaurant is led by its program and its ideal location, but existing elements still remain to mark the end of the original pier shed and create layers of the past in the new space.
- Existing elements are used to define the character of the many dining spaces, allowing for the old fabric to be incorporated and transformed to a new use and meaning.

Design

Program of Bulkhead Building 26 1/2:

Entry: 22,000 sq.ft.

Information Center 4800 sq.ft.

History Room 4900 sq.ft.

Gallery 9700 sq.ft.

Snack Shop 3400 sq.ft.

Program of Pier 26:

Studios and Galleries: 45, 000 sq ft.

Art studios (*varies*) 600-1000 sqft.

Artists Common area 800 sq.ft.

Administration Offices 1100 sq.ft.

Galleries (4) 5500 sq.ft.

Open Exhibition Space 9300 sq.ft.

Public Cafe 6000 sq.ft.

Workshops:

Wood shop 600 sq.ft.

Metal shop 600 sq.ft.

Media Lab 500 sq. ft.

Photography facilities 500 sq.ft.

Sculpture &

Performance Plaza: 24,700 sq. ft.

Covered Performance platform

Seating and viewing areas

Recreational Facilities: 38,000 sq.ft.

Raquetball Courts(4) 3600 sq.ft.

Excercise Rooms(3) 3600 sq.ft.

Covered Running Track 9000 sq.ft.

Locker rooms 6000 sq.ft.

Admin Offices 850 sq.ft.

Lounge area 1000 sq.ft.

Basketball Court 7000 sq.ft.

Swimming Pool 6700 sq.ft.

Restaurant: 18,800 sq.ft.

Dining areas 10,000 sq.ft.

Bar 760 sq.ft.

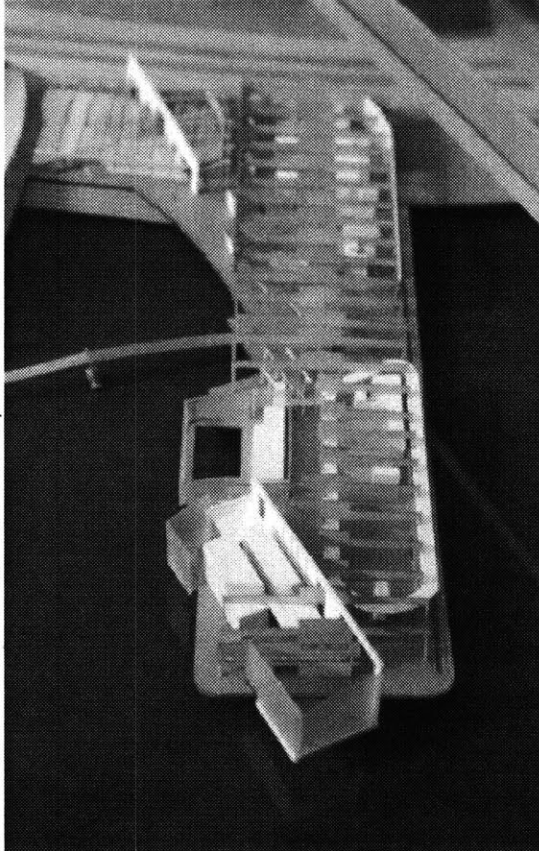
Kitchen 3000 sq.ft.

Event Space/ Banquet Room 2700 sq.ft.

Performance Area 3000 sq.ft.

Other Site Elements:

**Bridge connection to Pier 28
Belt Railroad Passenger line**



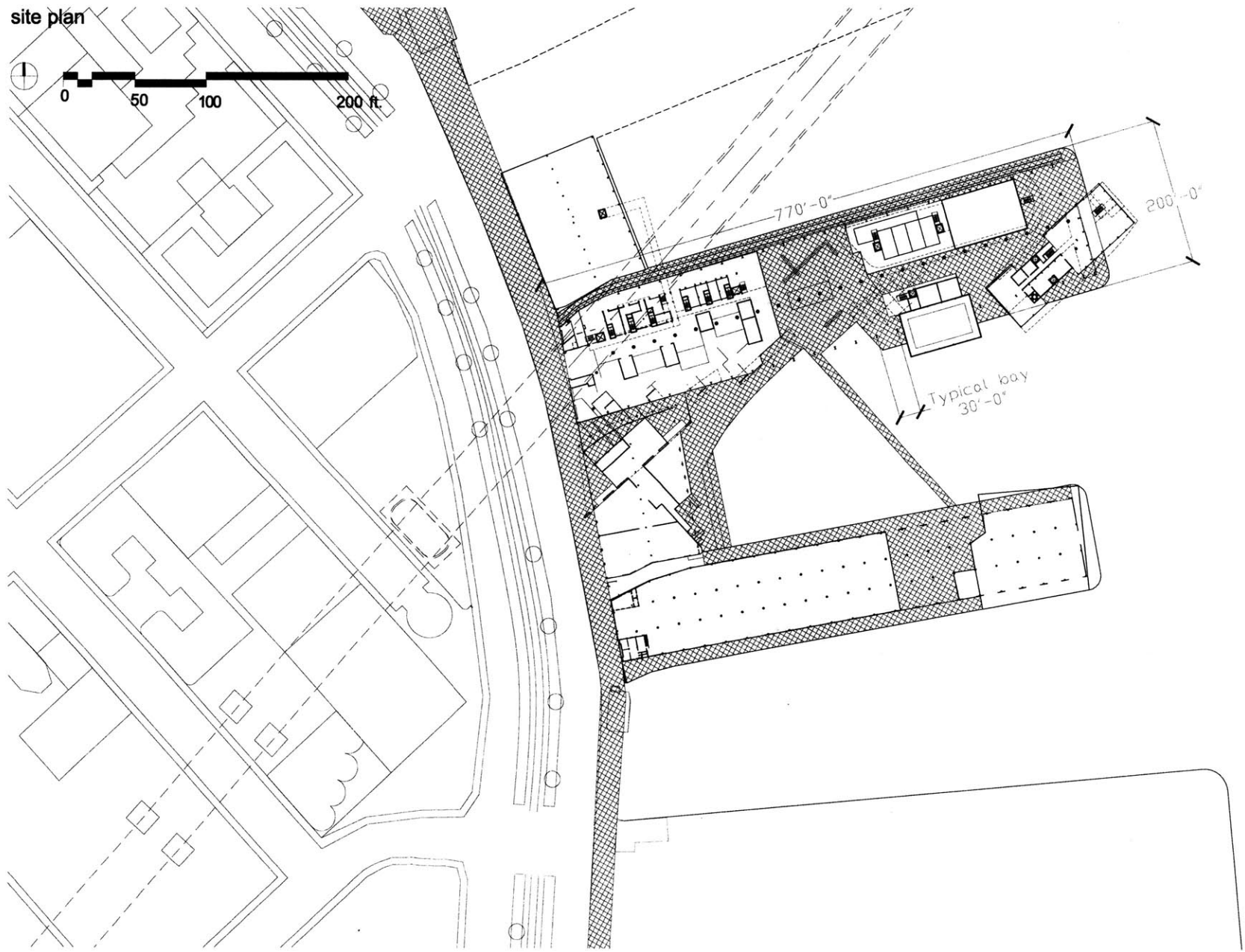
Overall Design

At this scale of investigation, a general site design including all program elements was designed for Pier 26 and Bulkhead Building 26-1/2. The focus of this scale was to develop the reuse strategies appropriate to this scale of intervention as a basis for a more detailed study at a individual building scale.

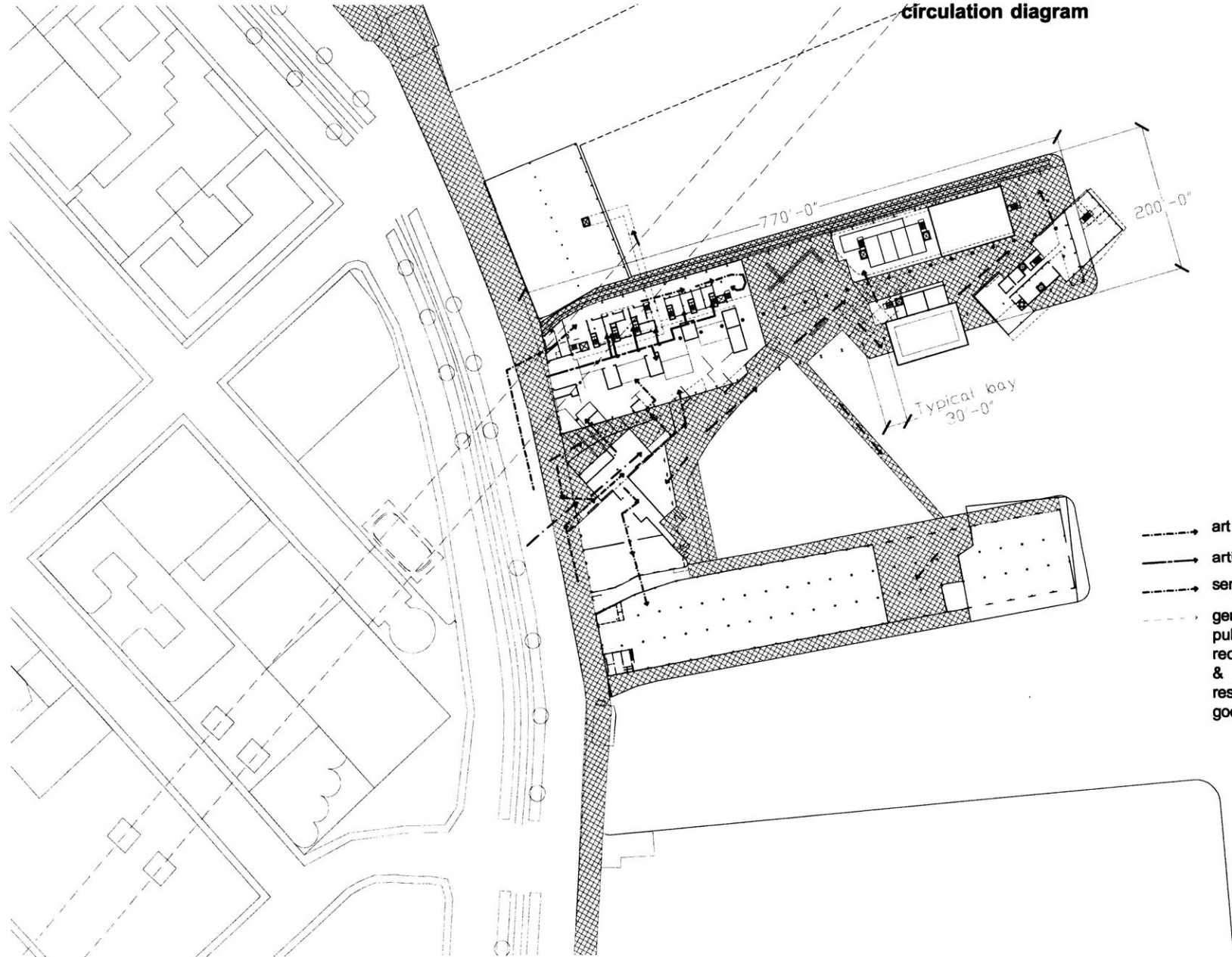
View of site model showing the change in section along the length of the pier and the increasing scale of intervention moving from the street to the end of the pier. The central column remains as an axis for pedestrian circulation connecting all the buildings and maintains a memory of the shed's immense length.

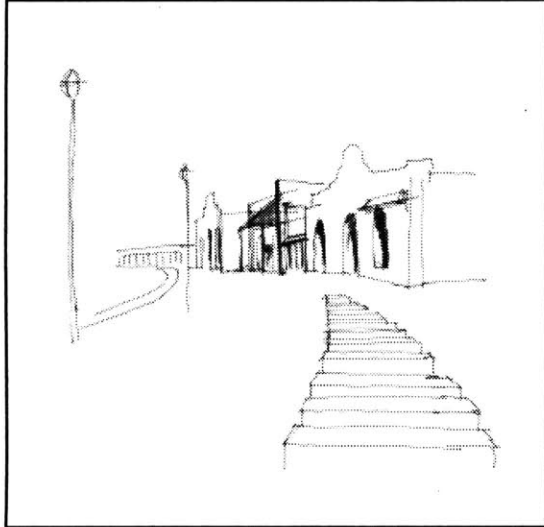
model scale: 50'-0"= 0'-1"

site plan

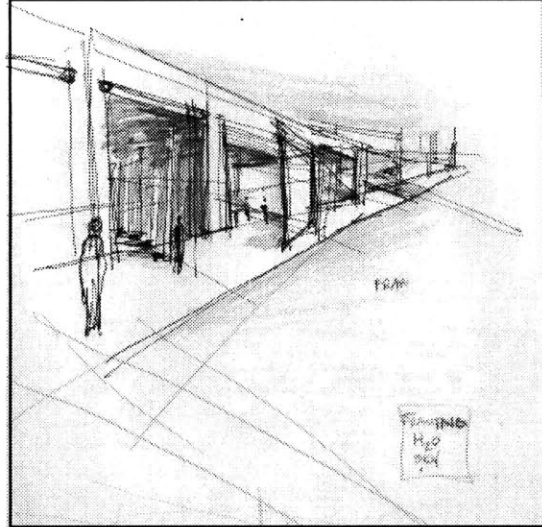


circulation diagram

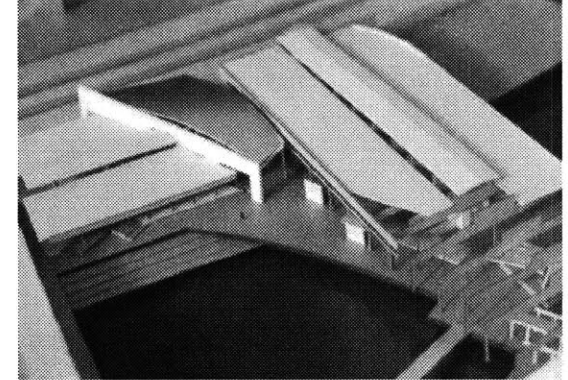




Sketch of entry seen from the Embarcadero



Sketch of the edge of the art complex entries, activating the edge and leading visitors to the mid-pier plaza space.



View of "inner world" of the site, the enclosed area between the piers.

Entry

The entry combines an enclosed information area for the site as well as an unenclosed pathway for recreationists simply wanting to reach other areas on the site. The curved Belt Railroad edge of the bulkhead building and is inhabited and opened up. The space defined by the curve becomes a small outdoor room between the two buildings. To create an urban scale gesture to compete with the entries of the pier sheds, the new form encloses the existing building structure within its tall volume.

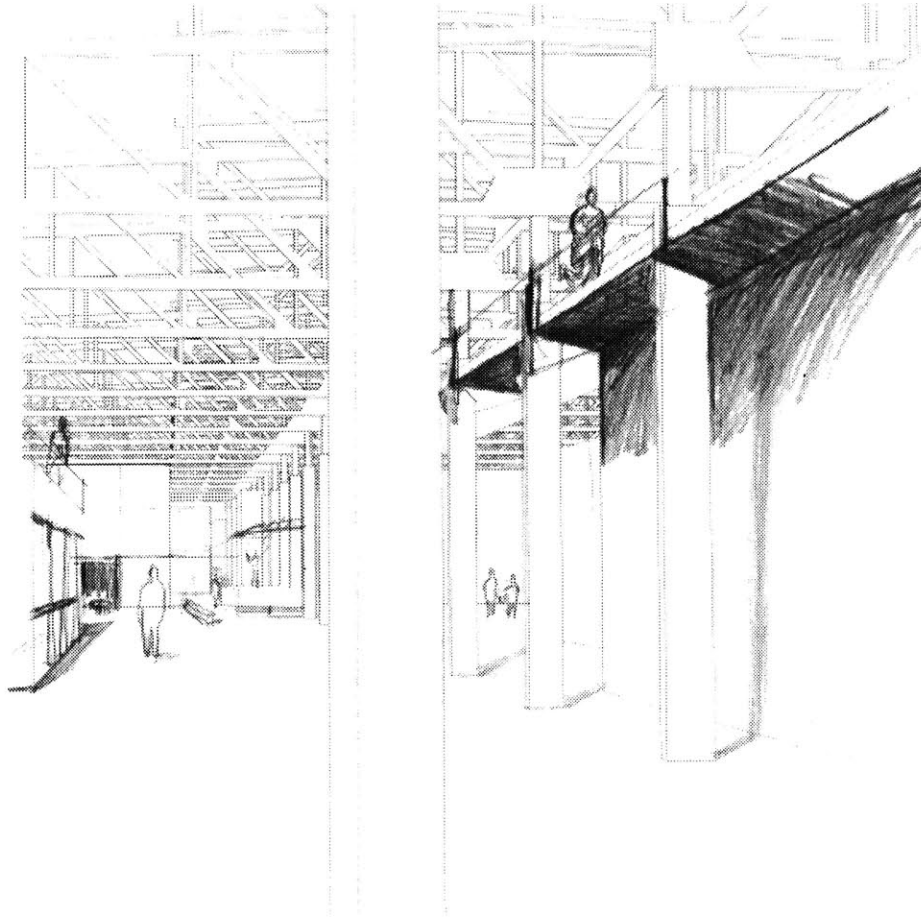
Place

Metal canopies in the same geometry as the street grid, combine to define the sense of place of the main mid-pier plaza. The canopies humanize the edges, relative to the scale of the huge exposed trusses, and mark the public entrances to the galleries, the Swimming Pool, and provide cover for the performance area. These roof planes culminate with the entry canopy to the restaurant and the roof of the restaurant. The memory of the past form of the waterfront is integrated with the the present form, connecting place and time.

Upon entering the site, passing through the bulkhead building, the edges of the bulkhead wharf are softened and ground plane of the wharf steps down to the water, letting the tidal action of the water activate the entry plaza.

The curve of the Belt Railroad tracks is also used to transform the edge of Pier 26, strengthening the sense of place of the "inner world" as well as to redefine the edge of the pier with a element of the new design.

sketch from end of pier looking towards the street



Path

The path is defined by the central column axis and the original industrial edges of the site: the edge of the shed and the pier, and the path of the Belt Railroad tracks.

Art Complex:

The Studios and galleries art complex is the main element on the pier, working with the issues of reuse to maintain a large portion of the existing space.

With the idea of art and the creation of art as a public attraction, the workshops and galleries define the edge of the public and private space. Translucent moveable panels fill the spaces between the elements making it possible to create openings to the studios when desired. Collectively these three elements occupy the space between the columns, sharing the sense of space defined by the huge scale of the structure above and the column supporting it, between the artists and the public.

The street grid geometry punctuates the public edge of Pier 26, marking entries into gallery and exhibition areas. The existing metal rolling doors are punctured and the planes are pushed in and out to allow entry.

Sculpture and Performance Area

Not a formal stage area, but allows for informal gatherings and use of the space for performances with the trusses as support if needed. Break in the pier creates visual connection to the Bay Bridge, Pier 28, and across to the new Cruise Terminal on Pier 30-32.

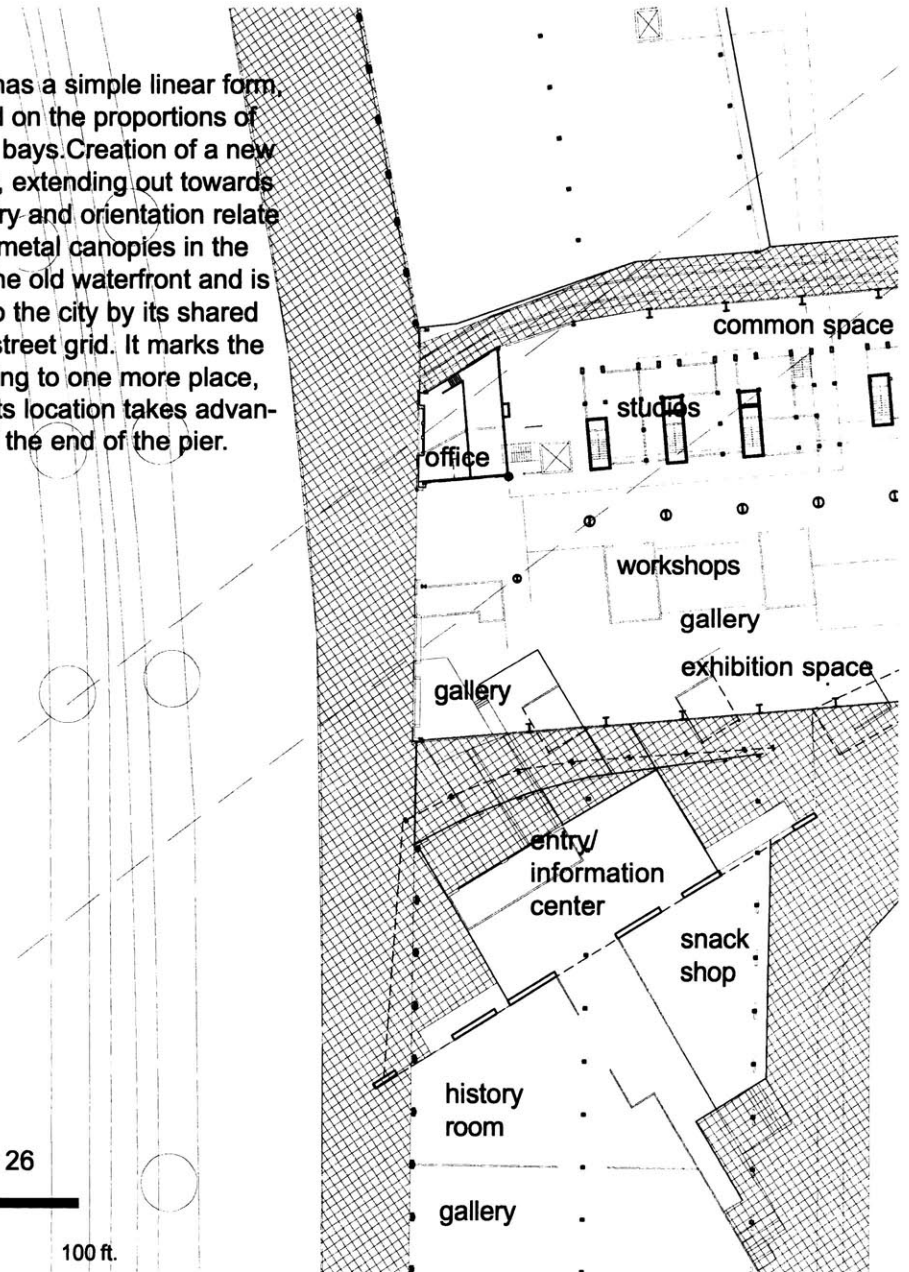
Recreational facilities

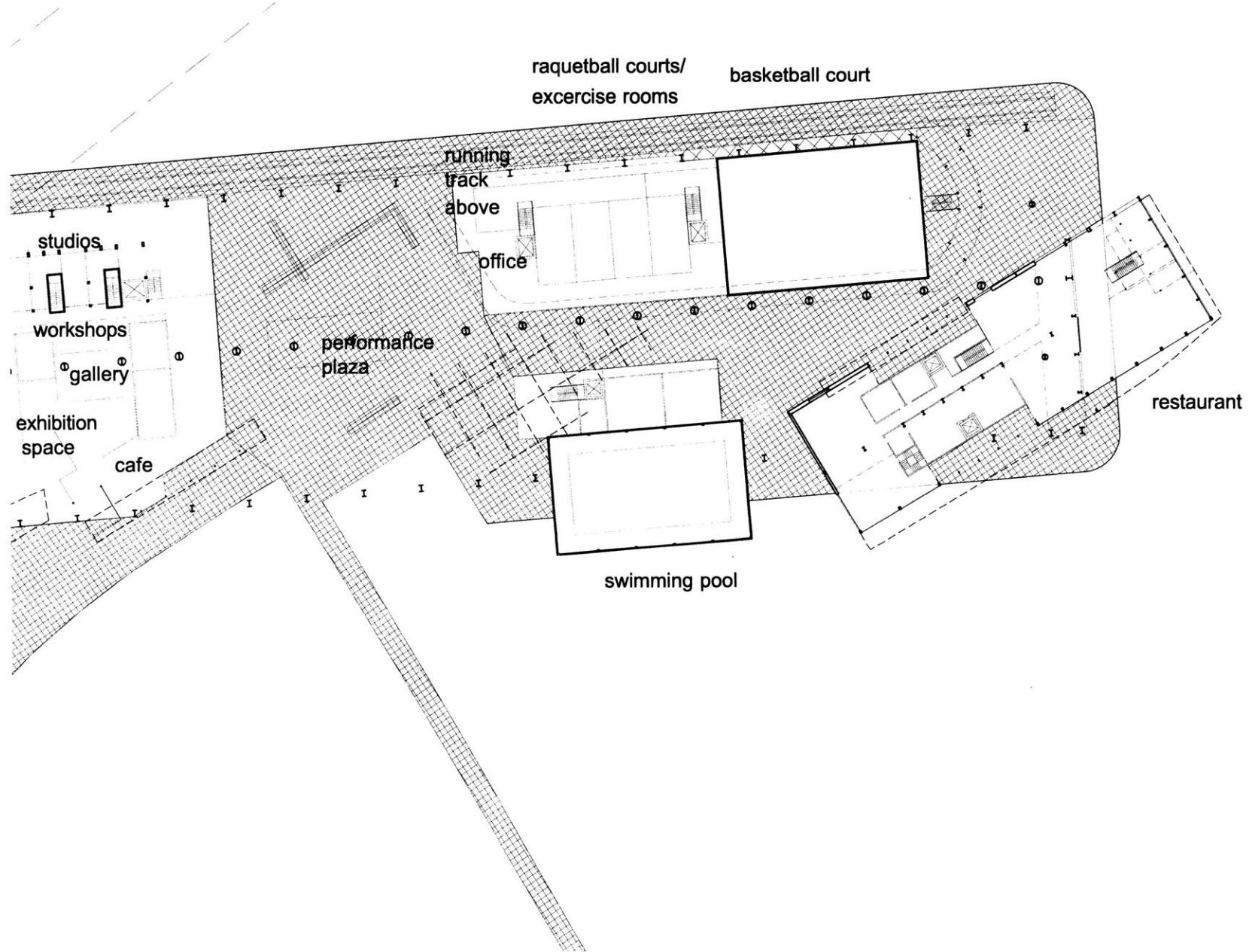
Recreational facilities are contained in half the side of the original shed. Running track creates unique viewing opportunity of the area.

Restaurant

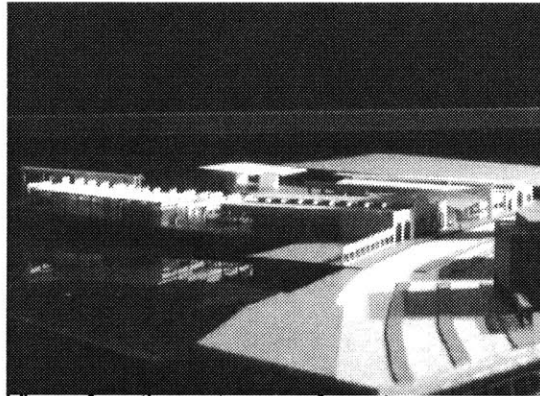
The end restaurant has a simple linear form, its proportions based on the proportions of the shed's structural bays. Creation of a new extension of the pier, extending out towards the water. Its geometry and orientation relate to the entry and the metal canopies in the same geometry as the old waterfront and is visually connected to the city by its shared orientation with the street grid. It marks the end of the path leading to one more place, the end of the pier. Its location takes advantage of the drama of the end of the pier.

enlarged plan of Pier 26

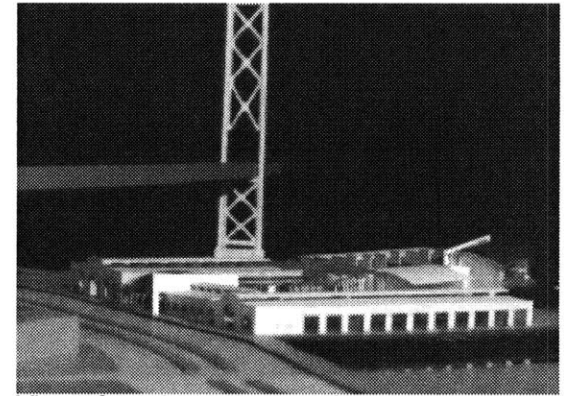




site model views:
model scale: 50'-0" = 0'-1"

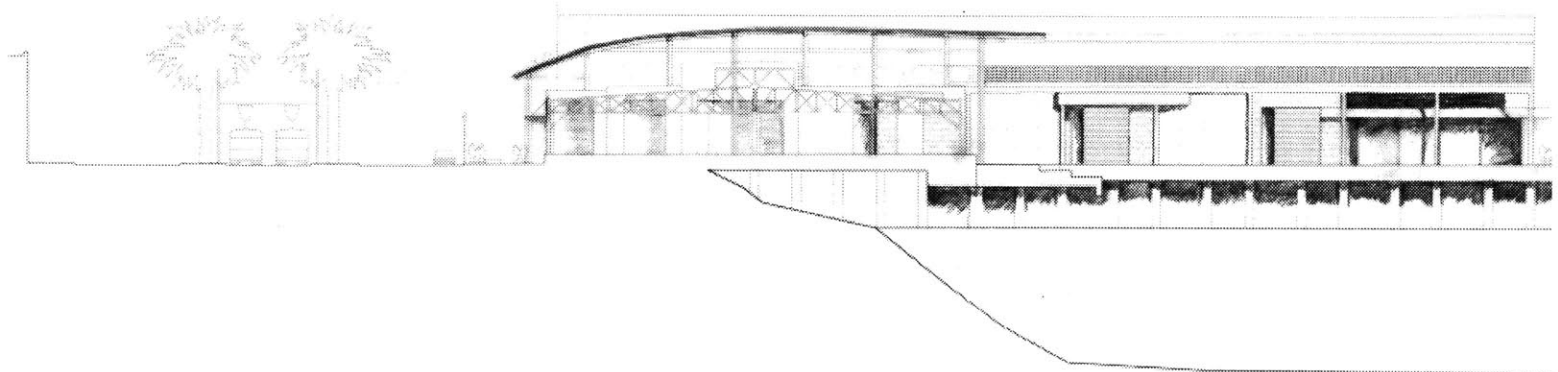


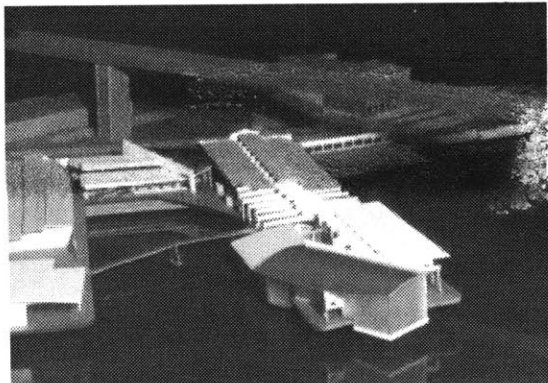
View of north west corner from the Embarcadero



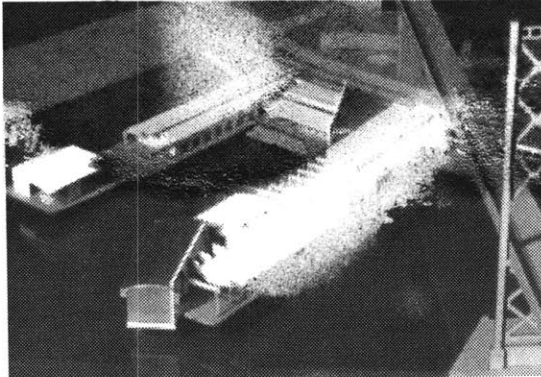
View of south west corner from the Embarcadero

south elevation of Pier 26
scale: 60'-0" = 0'-1"

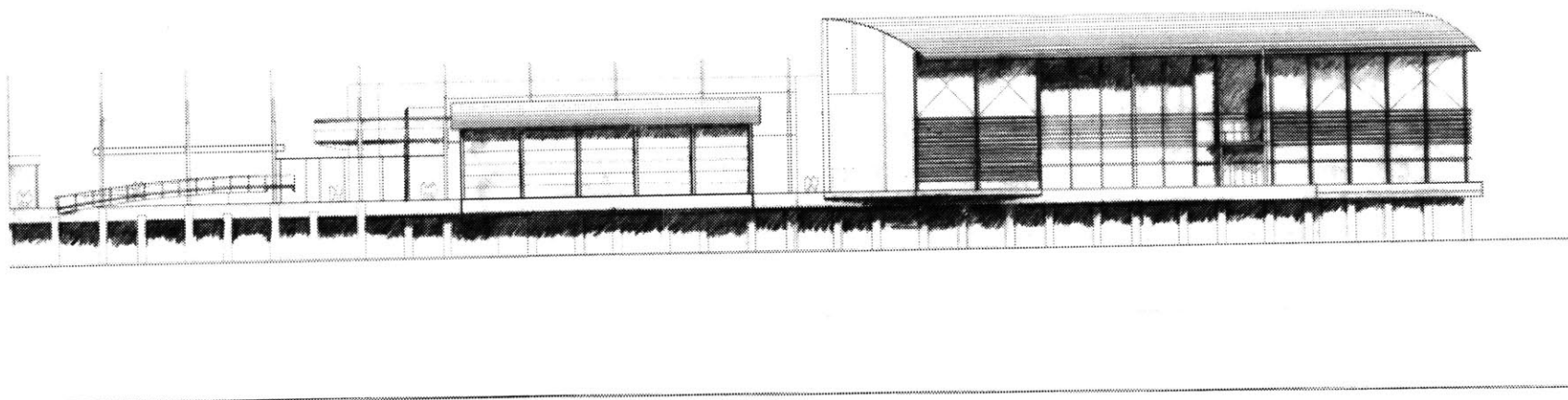




View of end of pier into "inner world"



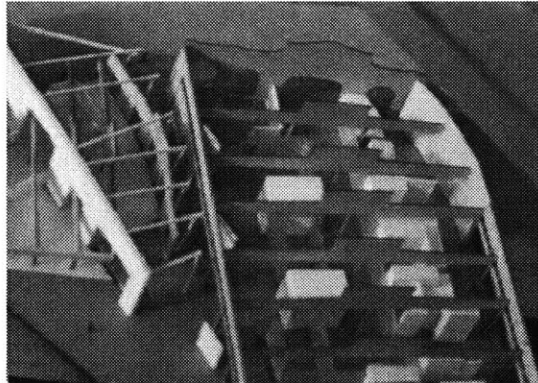
View from the north



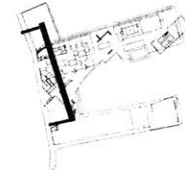
SECTIONS ALONG THE SITE

The studios, galleries, and workshops of the art complex are inserted into the framework of the truss and column. The layout though is not laid out to structural grid

The structure of the entry surrounds the existing structure of the bulkhead building, leaving them exposed, and object like inside the large volume.

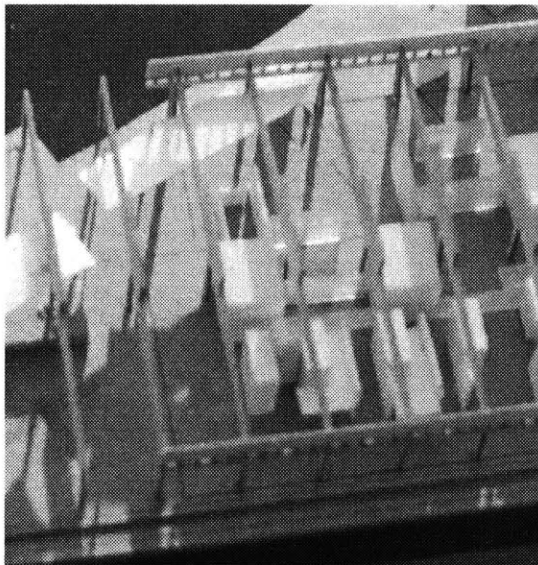


**insertions:
artist's studios and
galleries**

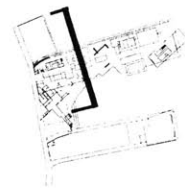


The art cafe edge of the building is a hybrid of the strategies of "insertions" and "ruins." At the public edge, the facades of the cafe moves inward and the walls of the shed are left empty, framing the entry into the plaza, entry into the cafe, and framing the views of the bridge behind it. The metal canopy is beneath the 24 foot high door frame and humanizes the entry zone into the arcade created between the shed's outside wall and the wall of the cafe.

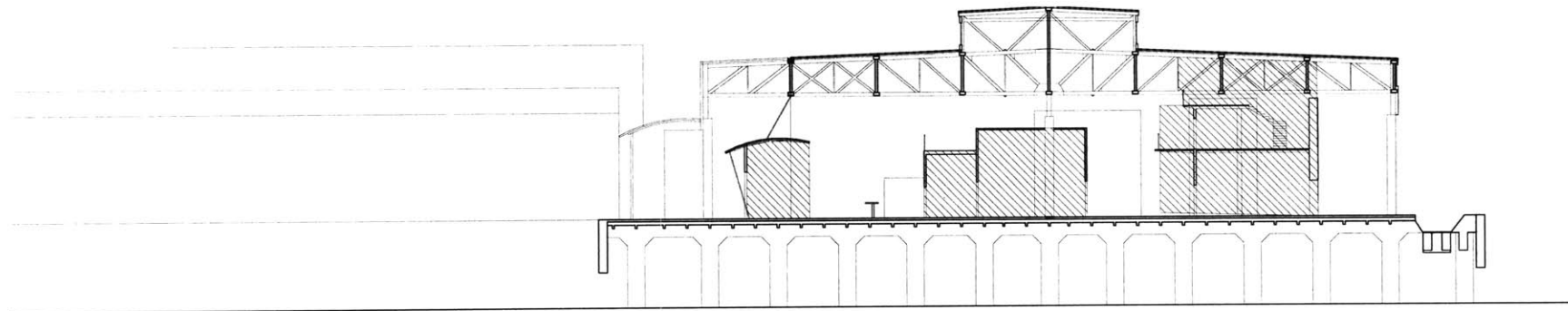
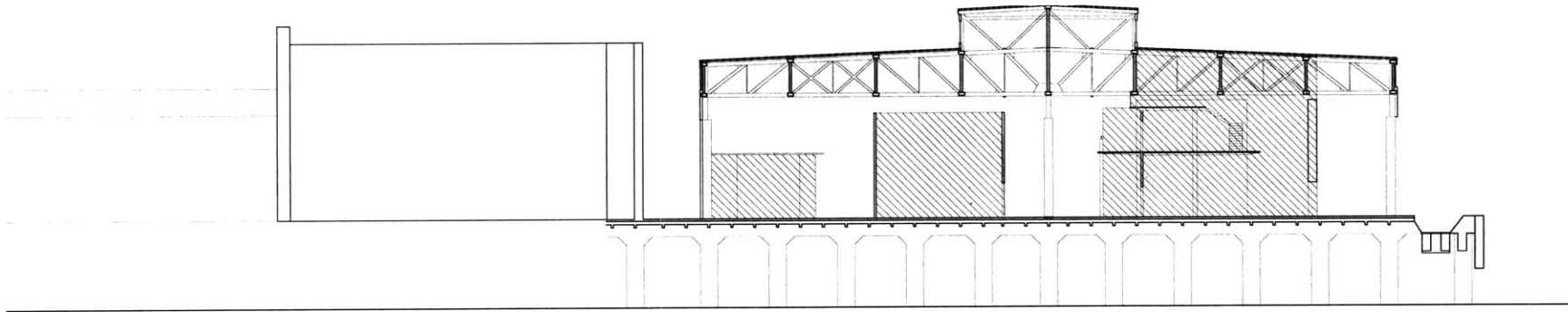
The cafe is a public place serving the mid pier plaza but also serves as an area for the visitors of the art galleries, and the use of the artists and their potential customers and clients.



**insertions:
artist's studios and
art cafe**



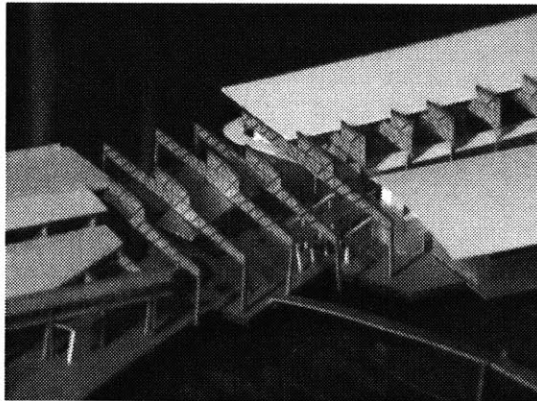
section through art studios and exhibition
space
scale: 40'-0" = 0'-1"



section through art studios and art cafe

The original building skin is peeled away to expose the trusses as ruins. These remnants of the industrial past frame views of the sky, water, and city and define spaces within their bays. The area also marks a place where the original large space of the shed can be experienced, but in a new way without the limits of the outer skin of doors.

The plaza is also reformed with the entry of connection landing of the bridge onto its edge. The deck of the pier is also peeled away leaving the ruins of the floating piers with the columns still attached.



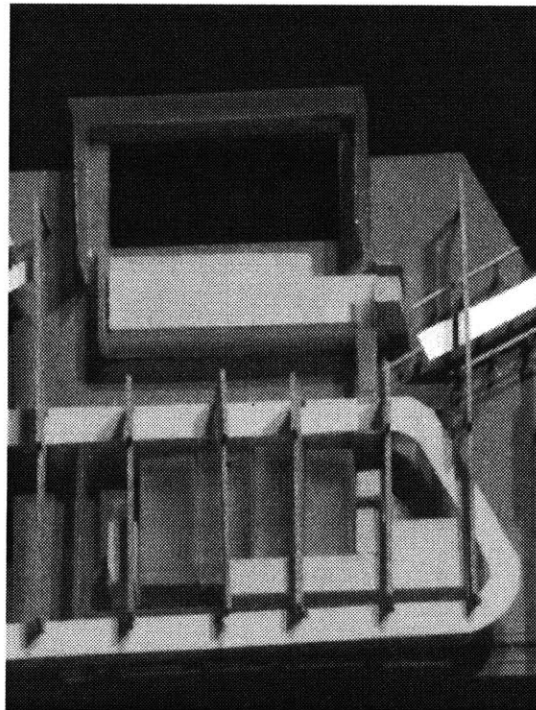
**ruins:
performance area
and
sculpture yard**



The recreational facilities create a new way to inhabit the space defined by the trusses. Running track: Path circles around directly under the bottom of the truss, on the inside of the pier. On the opposite side it is contained partially within the threshold defined by the truss, and cantilevers from the existing columns. Raquetball rooms are defined by their own dimensions and not to the layout of the truss overhead. The exercise rooms above fit within bays of the truss.

A semi-covered trellis structure continues the metal canopies defining the entry way to the recreational buildings from the mid-pier plaza.

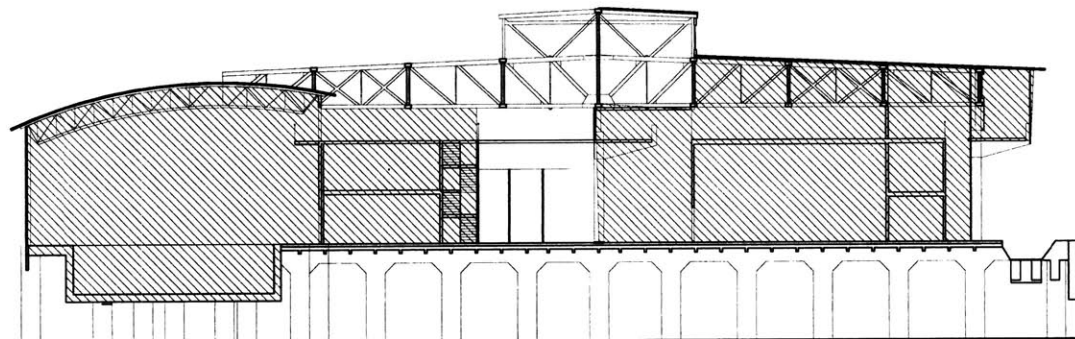
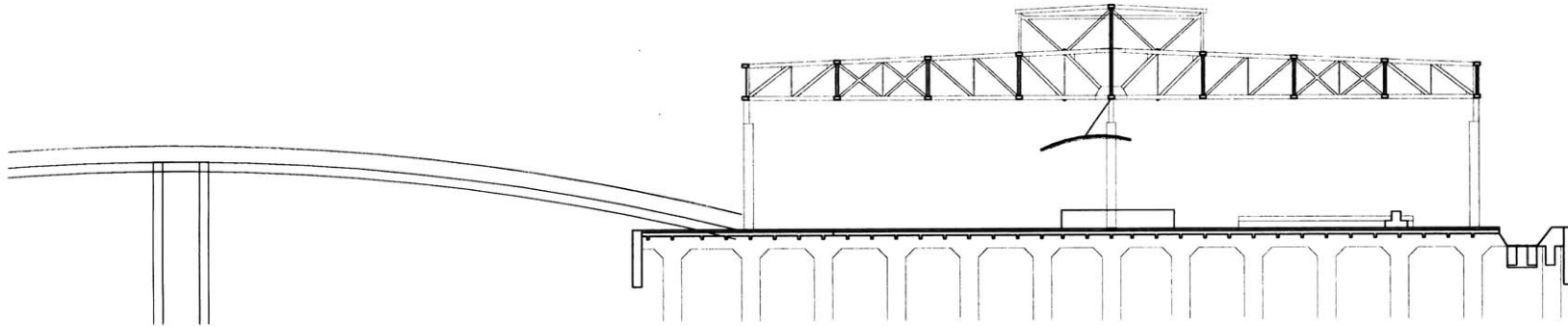
Swimming pool: The pool extends out from pier as a separate building. Sectionally it is low and fits within the 34' height defined by the top of the exposed truss.



**insertions
&
additions:
recreational facilities**



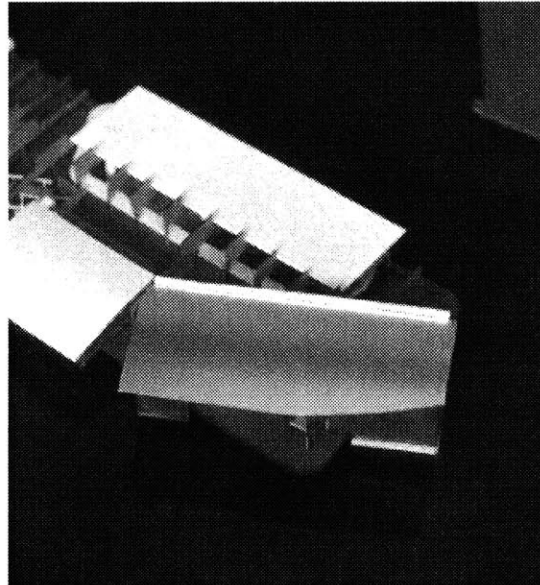
section through performance plaza and bridge
scale: 40'-0" = 0'-1"



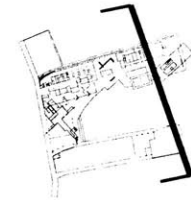
**section through swimming pool and
recreational facilities**

The combined area of the recreational facilities and the restaurant combine to create a dialogue of old and new, juxtaposing the new facilities inserted into the exposed old structure, and the new restaurant engaging the space of the pier in a new orientation.

The end plaza where the Belt Railroad passenger line ends, is defined by the edges of the existing shed structure, the new insertions of the recreational facilities, and the new forms of the restaurant. The space provides one last piece of the pier that offers the best view for last, the view opening to the bay that surrounds it.

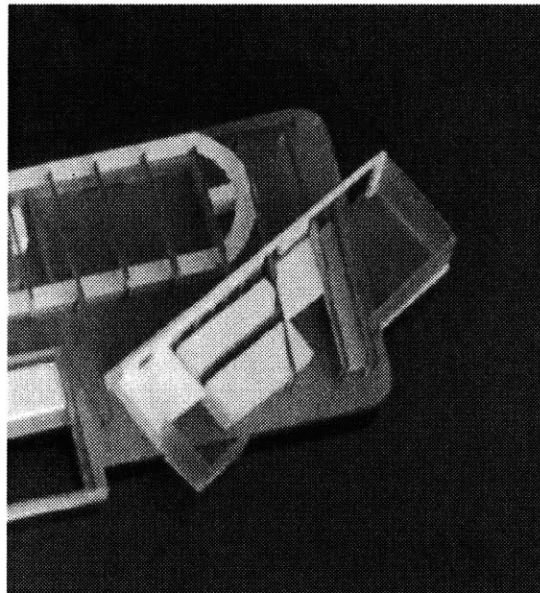


**additions & insertions:
basketball court
and
restaurant**

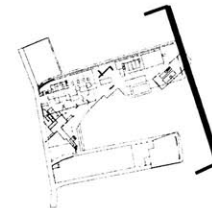


Existing rear facade, trusses, and platform remain retaining their original role as well as defining a new space within the addition. The restaurant reuses the existing key elements of the site when possible, but is not confined within them. The building is for the most part an addition to the site, but combines with the existing elements to create a space defined by the presence of the old and the new.

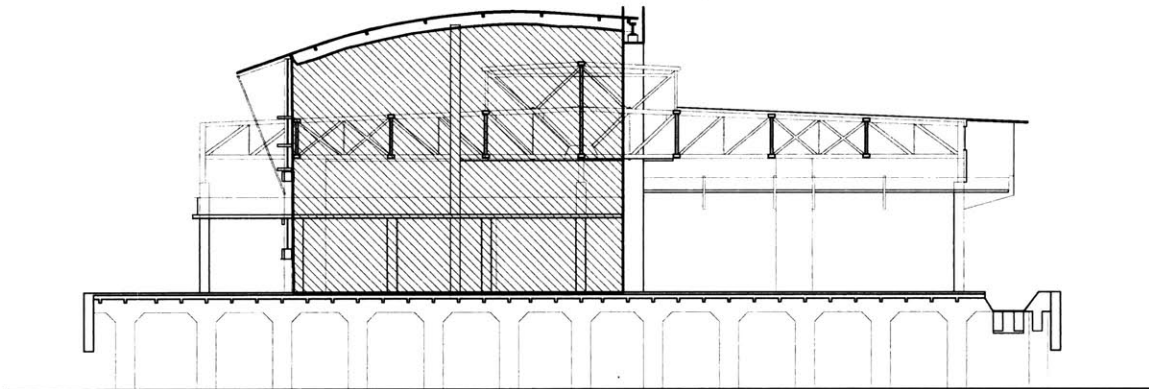
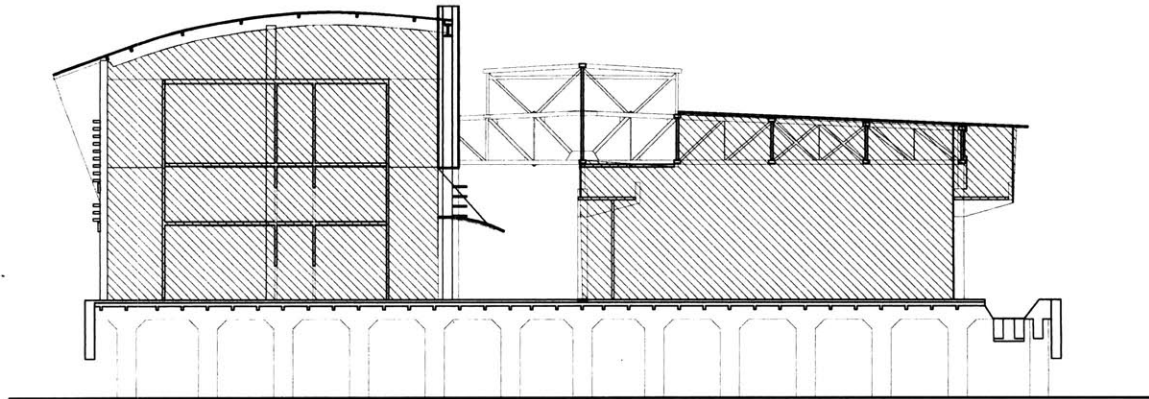
Its orientation, massing, materials and construction are similar to the site entry. Also similar are its relation to its surroundings, moving from the entry place of the restaurant, moving through the narrower space between the buildings and arriving at a place of release of space, opening to the bay.



**additions:
restaurant**



section through swimming pool and recreational facilities
scale: 40'-0" = 0'-1"



section through swimming pool and recreational facilities

building scale

insertions
and additions:
entry

Reuse strategy:

The entry is created using the strategies of addition and the rest of the bulkhead building is redesigned with insertions. The existing bulkhead building structure, the edge defined by the Belt Railroad tracks and the geometry of the old waterfront are combined.

Sense of space:

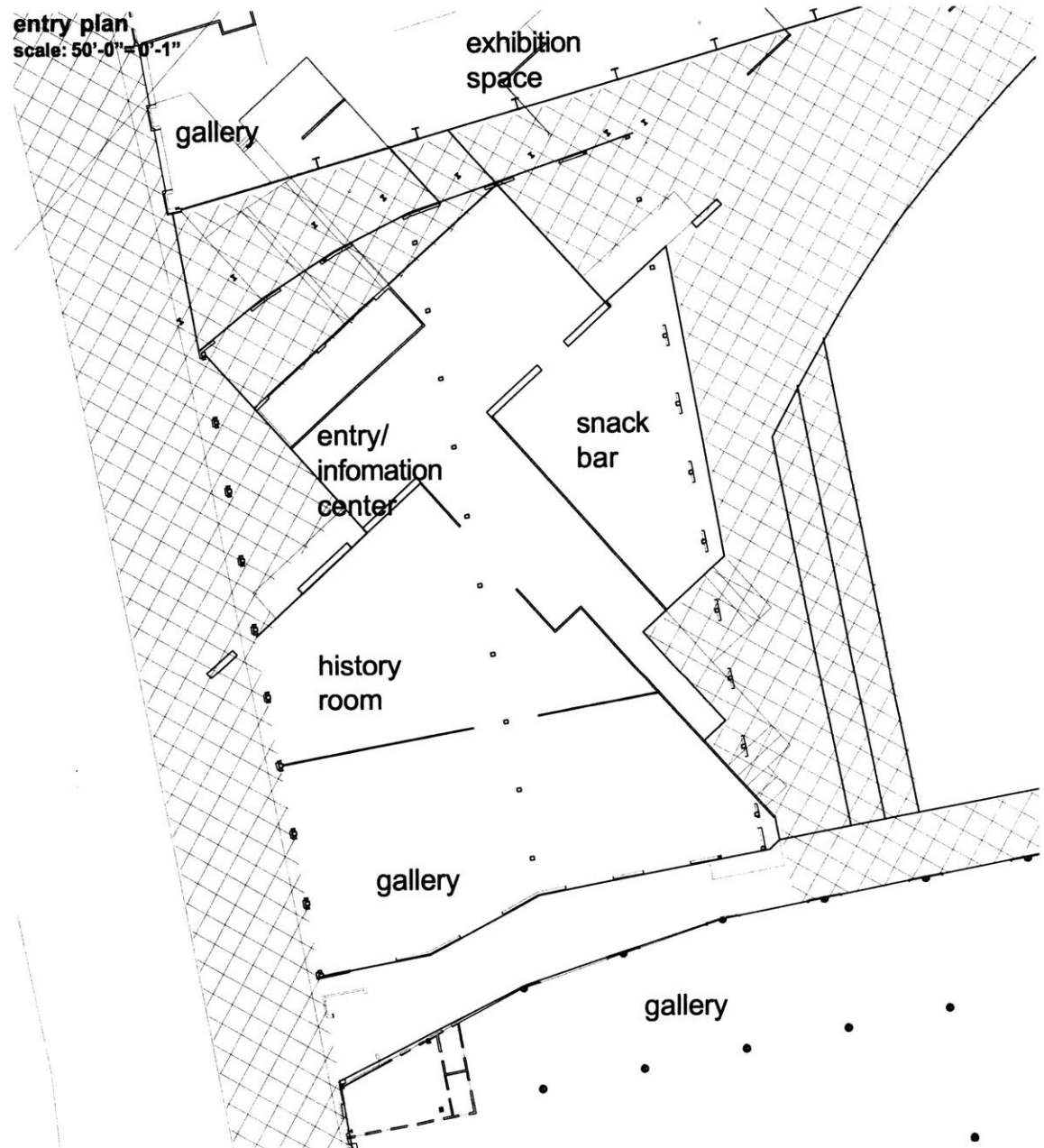
The wide to narrow space accentuates the difference of place that has always been defined with the threshold of the bulkhead buildings. The site is then suddenly revealed as one passes along the edge created by the Bel Railroad curve and a sense of removal from the city is felt upon passing beyond that threshold. At its widest at the street the opening is 40 feet wide, at the narrowest it is 15 feet wide. This sensation is further emphasized with the gesture of the large entry wall.

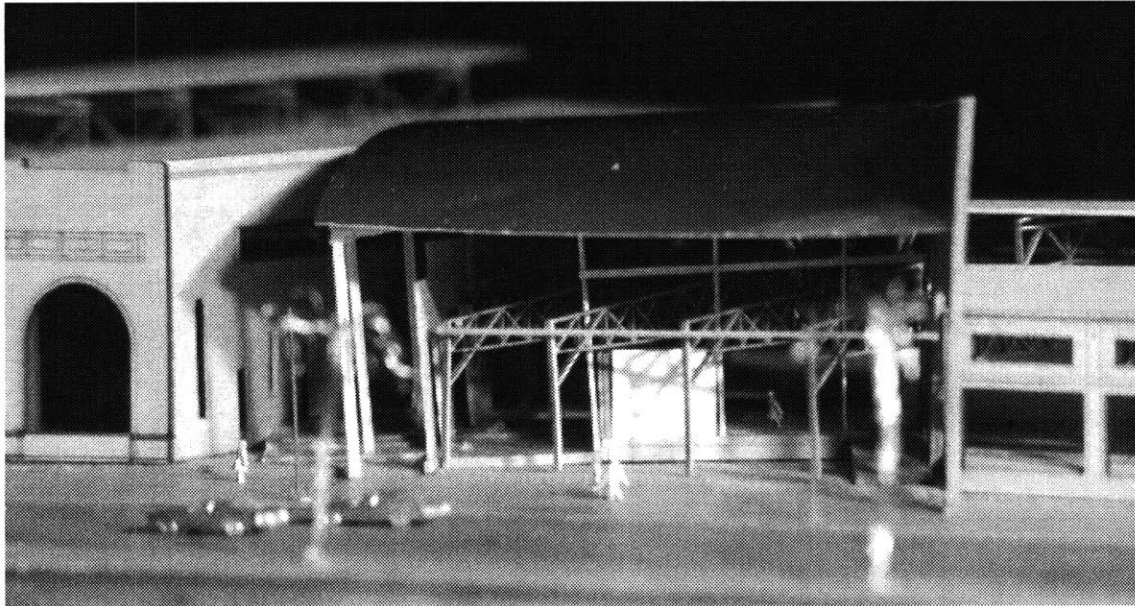
Addition:

A new curved metal roof is used to enclose the exposed existing roof trusses. Large web joists extend from the support of the entry wall to a row of columns that run nearly parallel to the curve of the building. Glass is used to enclose the inner areas and to allow a glimpse of the world behind.

Urban Gesture:

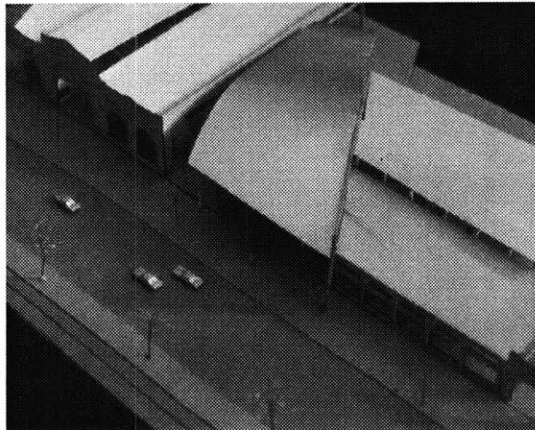
The public entry responds to the scale of the street and the existing entries of the two pier buildings. The mixture of reuse strategies reveals to the street a hint of the interventions within the site.



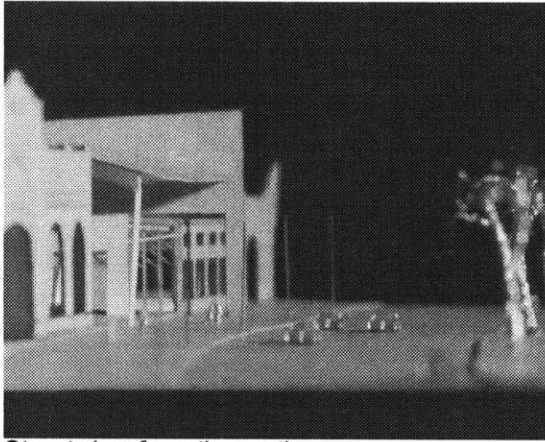


Street view of entry area

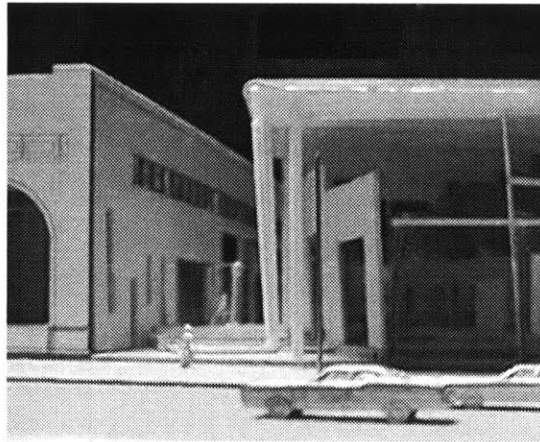
View of entry roof from above



The existing trusses are exposed and the outer skin of the building is partially peeled away at the location of the entry. The exposed structure maintain the rhythm of the street facade and the continuity of the four original buildings' unified presence. The new metal roof curves down dramatically at the street edge to create an entrance canopy similar to the canopies found on the existing buildings.

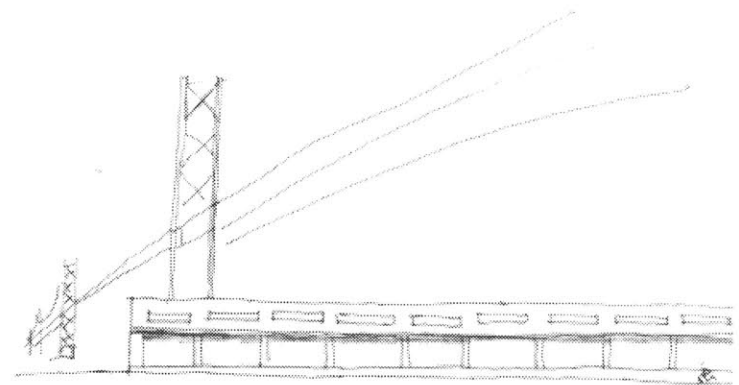


Street view from the north



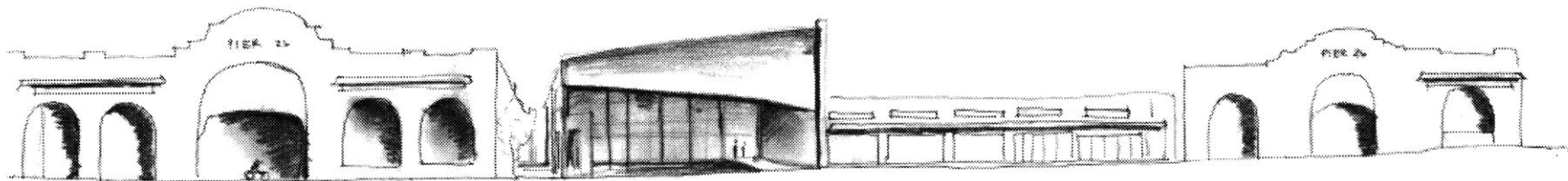
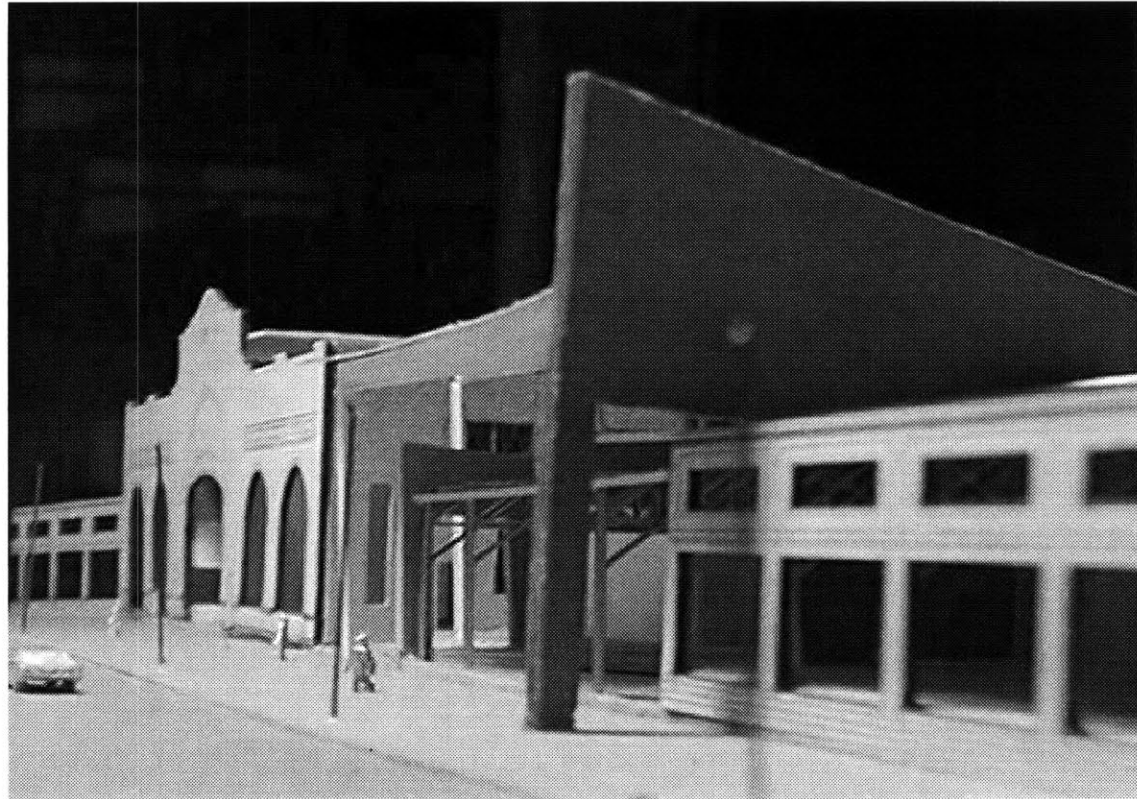
View of entry through the Belt Railroad curve

The existing three foot height of the bulkhead building platform is used with the curve of the building to create an outdoor room of steps and sitting areas that establishes a entry point creates a path to one of the galleries inside Pier 26. The addition of the new roof and the columns adds another layer of definition to the space.



right: Street view from the south

bottom: Elevation sketch of new entry.



insertions:
studios and
galleries

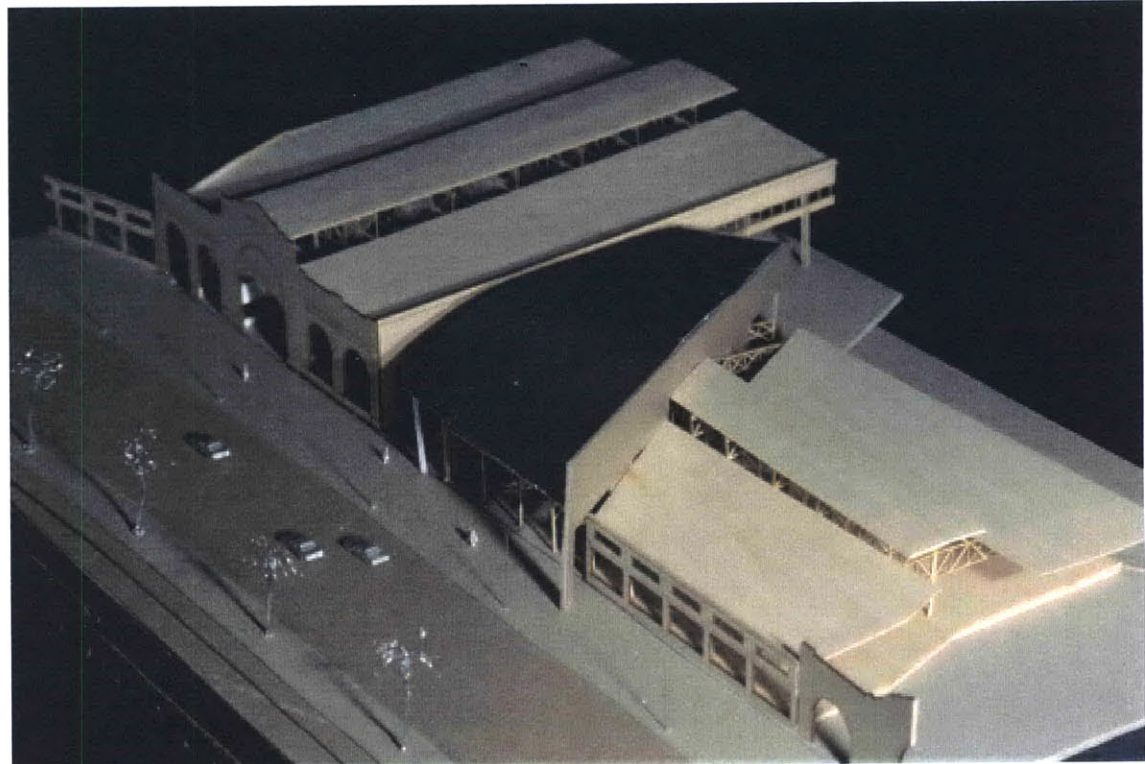
Insertions:

Located in the zone of the highest historical significance, the key elements of the front facade, the interior space and structure of the shed and the Belt Railroad rail and its imposed curvature on the buildings are maintained. New architectural interventions are inserted into the existing fabric of the building. No major alterations of the existing building are made. A new structural framework is designed based on the criteria of the needs of the program, and limited to the space defined by the shed's structure.

Design Issues:

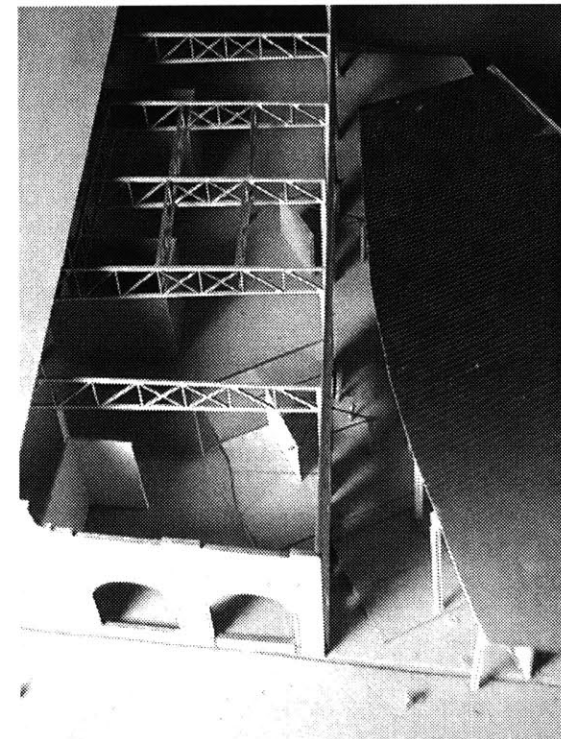
Considering programmatic concerns, the site conditions, and the creation of a public zone in the enclosed areas of the site, the studios and artists areas occupy the northern portion of the shed and the public areas are on the southern side. The definition of the areas shared by the public and the artists is made flexible with moveable panels and the less private elements of the workshops and the galleries.

Formal enclosed galleries fit in-between the workshops and at the very visible front of the building behind the main window. Informal exhibition space for large pieces are defined by moveable panels on tracks, and are laid out according to the overlay of the street grid and the reference to the old waterfront.

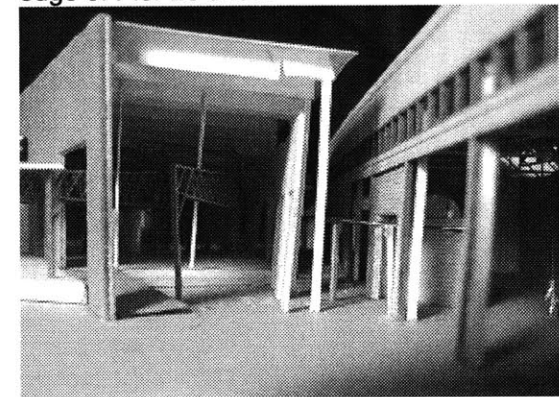


Entry and Art complex section model
model scale: 20'-0" = 0'-1"

opposite: partial plan of front section of site
scale: 50'-0" = 0'-1"

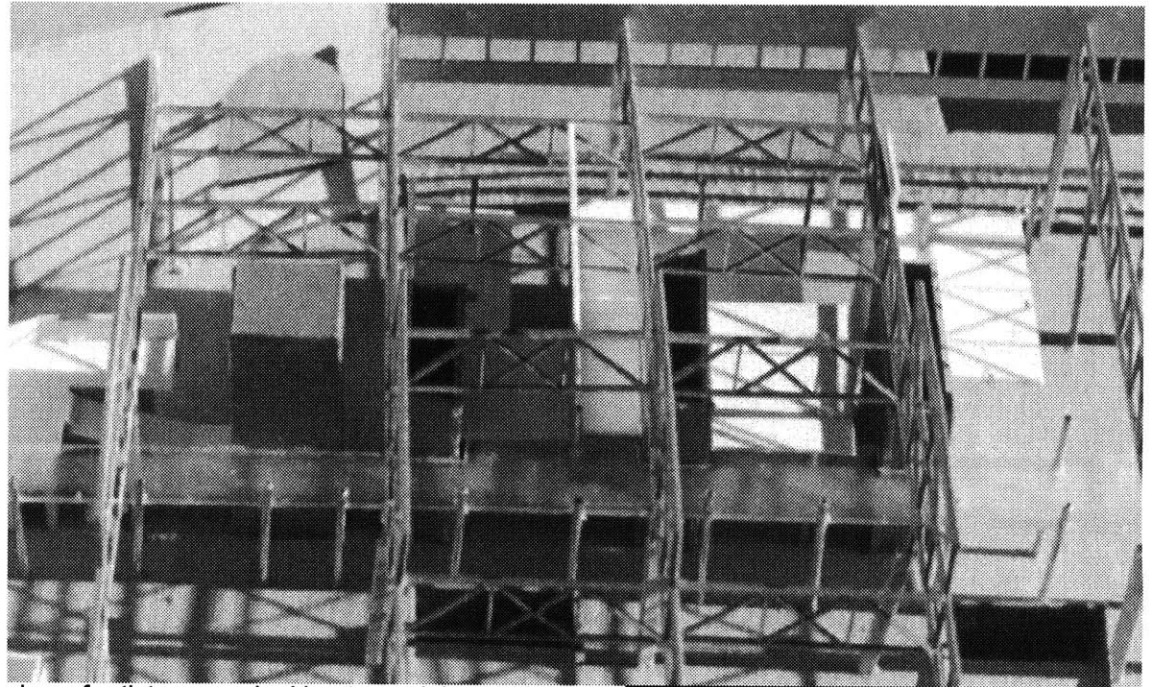


Views showing relation of the outdoor room created in the space between defined by the Belt Rail road curve, the entry wall and the edge of Pier 26 shed.



The new framework includes the following main elements and works mainly with the boundaries created by the truss :

1. primary structure that defines the boundaries of the layout:
 - concrete block enclosed internal stair, utility and storage cores define the south edge
 - concrete columns defining a separation of studio space from the service and artist circulation to the studios is on the north side.
2. horizontal element to establish possible second layer of studios at that height:
 - light metal grate walkway supported by metal columns defines a path at a 15 foot high level and meets with the internal stair cores to allow access at that level.
3. Internal column grid:
 - varying grid of 8-12 foot wide bays defines clues for large entryways and additions of internal mezzanines.



view of artists space looking toward the north

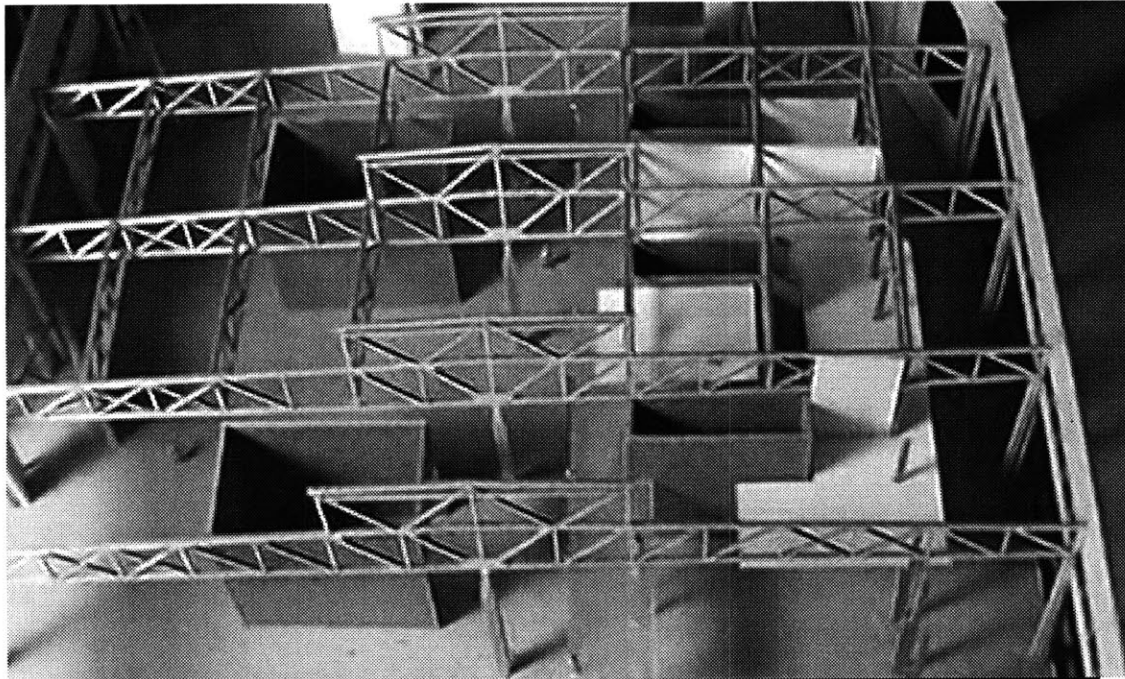
primary structure: creates a hard edge for boundaries of studios

horizontal element: second level walkway established for possible 2nd level studios

internal column grid: to allow for internal mezzanine levels



new structural framework

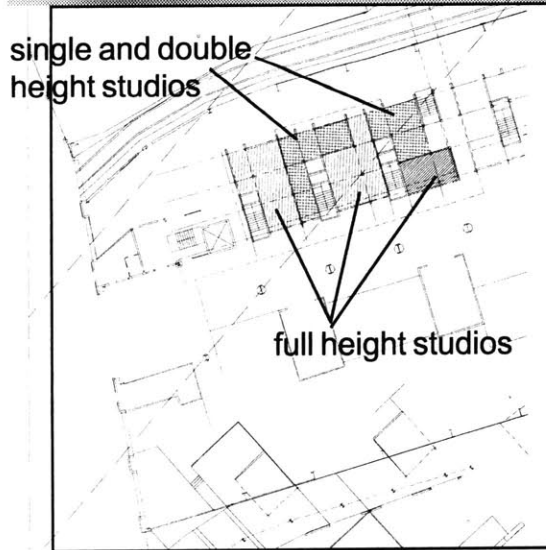


Sectionally there are a total of three possible levels to occupy within the spaces of the trusses. The studios are defined as either a single height 15 foot space with a double height space above, or a full height space from the existing floor to the roof. What is modeled is just one possible layout of studio space possible.

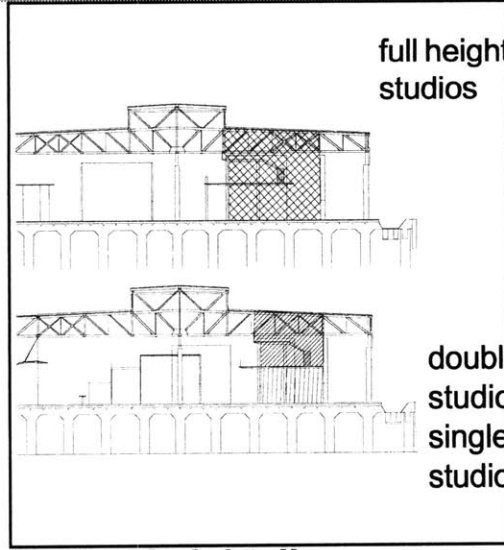
The option to occupy space within the space of a truss bay is available to those located in the double height or full height studios. At that level there is the added limitation of crossing through the main truss as well as crossing the 20 foot wide bays created by the purlin trusses running in the opposite direction.

The actual dimensions of the truss section are as follows:

- a 27 foot clearance from the ground to the bottom of the truss
- a 7-9 foot truss depth reaching from the bottom chord to top chord of the truss below the roof joists.
- five purlin trusses run every 20 feet across from the north wall to the axis of the central column and vary in height to match the changing height of the truss.

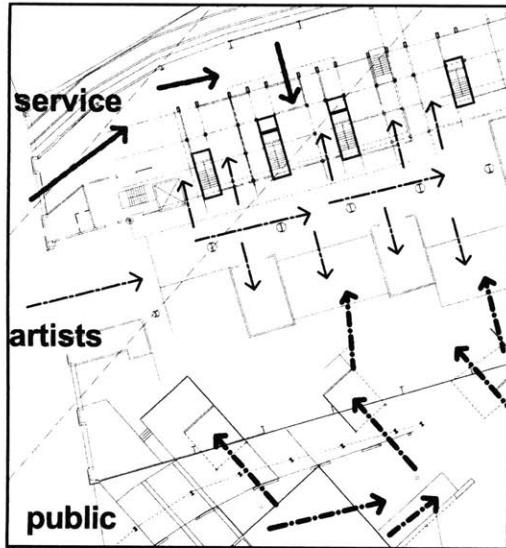


possible layout of studios



section height diagram

top: view of model looking towards the street



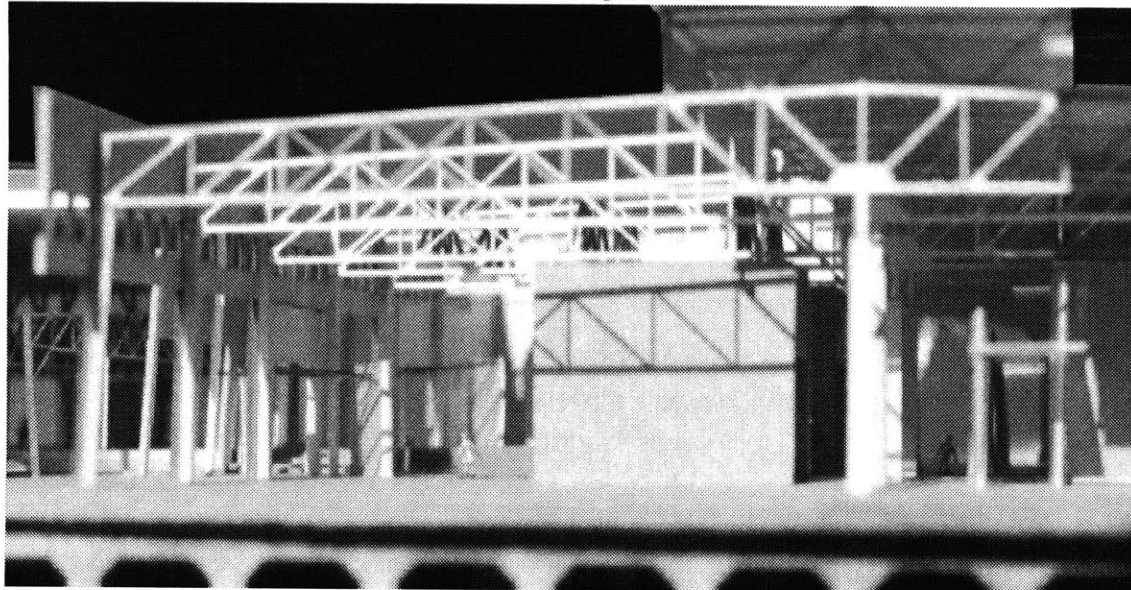
new structural framework

The circulation is linear with an axis defined by the central column, The circulation is analogous to the site's original circulation and use of the space as a warehouse, with the movement along the outer edges and cross circulation across the edges.

Each artist is given two entries into their space, one large entry from the north side for large deliveries and one on the south side along the artists public circulation zone.

Circulation across the axis is allowed to permeate across when desired by the artists. Translucent panels allow views of the activity on either side.

View of public space, exhibition area, and galleries

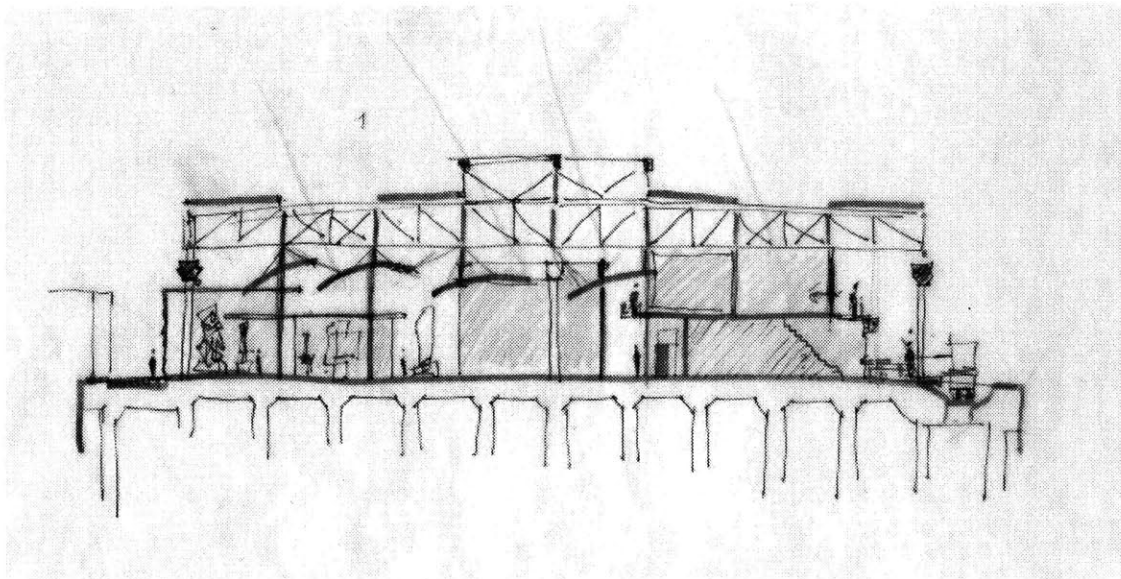
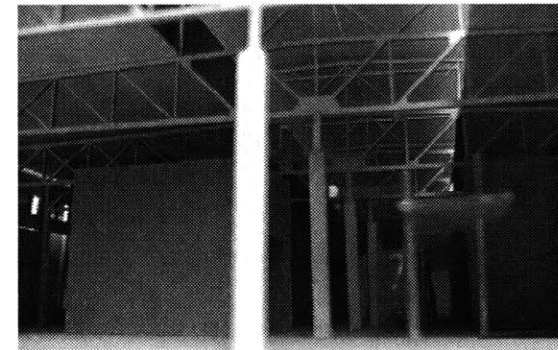


right: View of artists circulation, north edge of pier

middle: View along central axis, workshops on the left, artist studios on the right

bottom: View of public edge

below: Study sketch of section showing public space, exhibition area, and galleries



additions:
restaurant

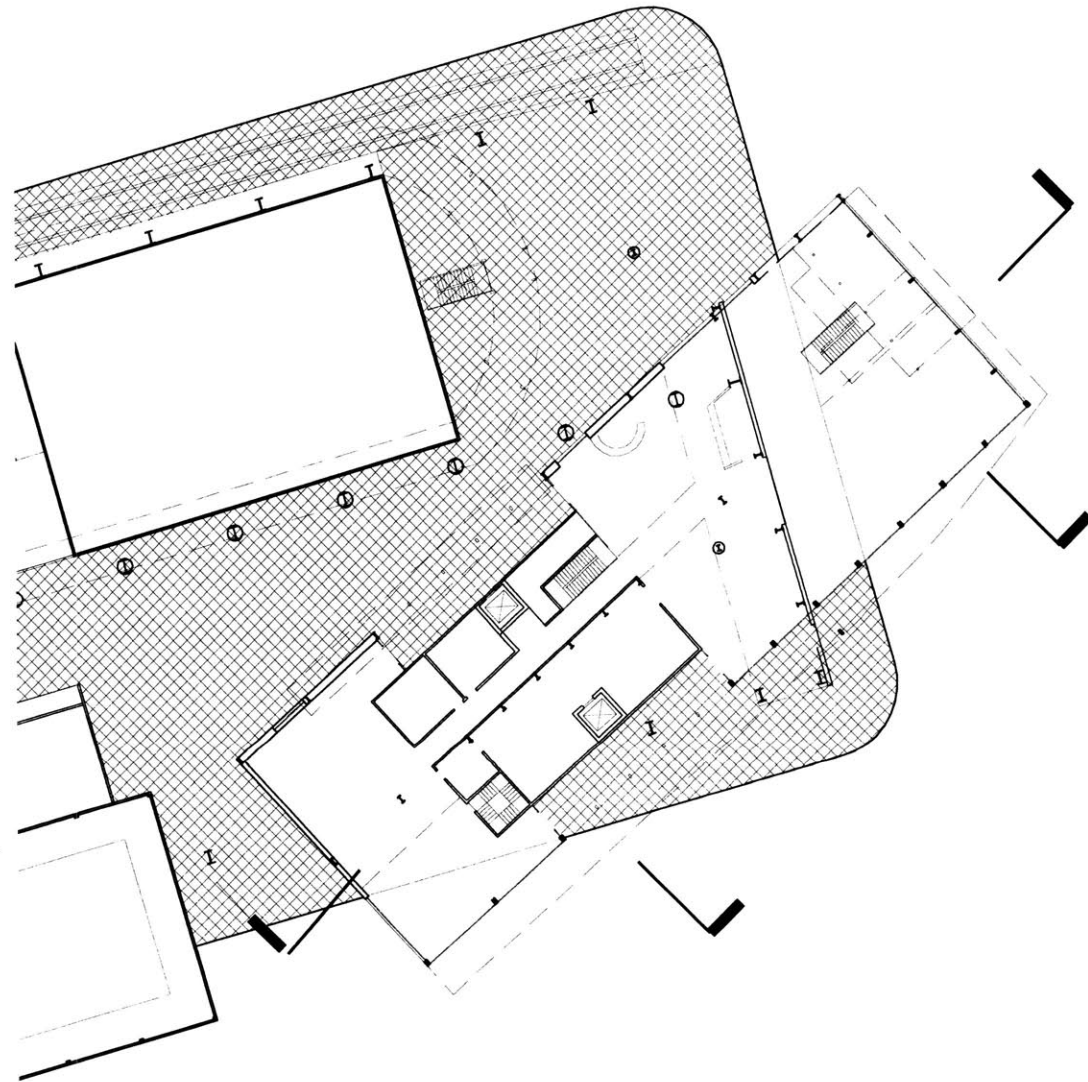
Just as the entry marked a point of beginning of new interventions on the site, the restaurant complex acts as a punctuation at the end of the site. With its strong presence at the end of the pier, its extension also alludes to the future as well, the future of the waterfront. The end restaurant is similar in language and concept to the site entry.

Additions:

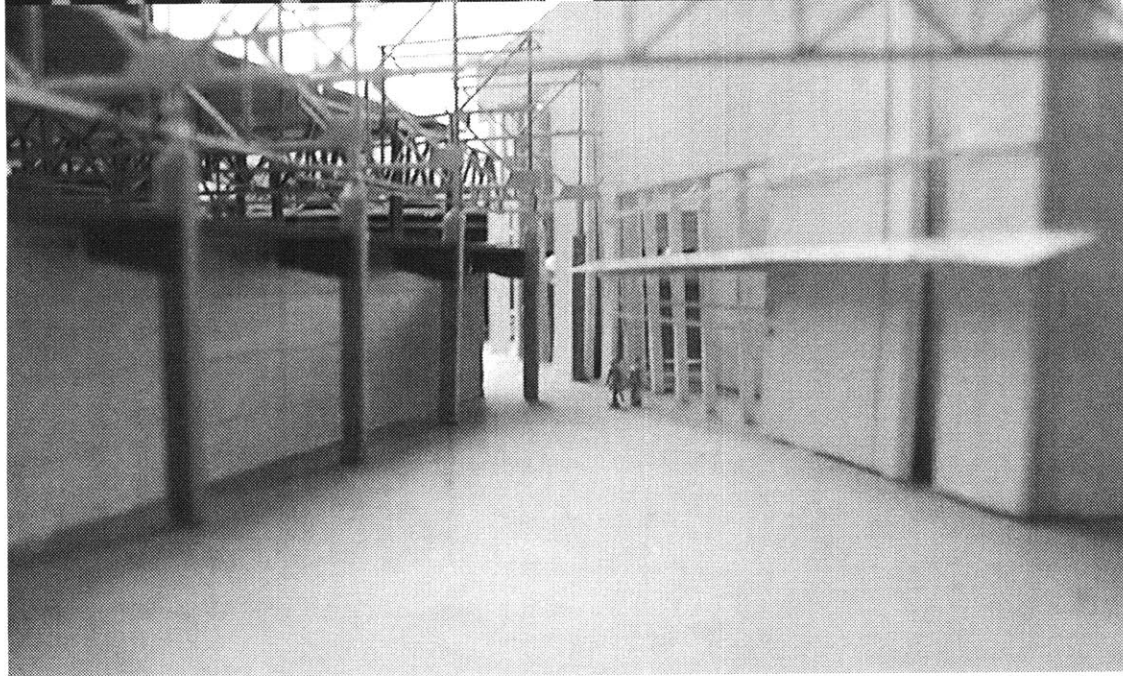
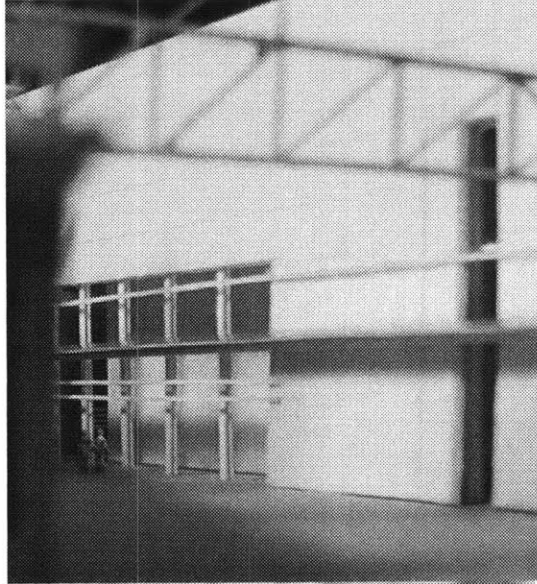
The new use dictates what is needed and remains. The existing elements are maintained if there is a relevant use for them.

Design strategy:

The combination of the additions with the selected elements of the pier create a variety of “settings” for dining and that offer new ways to experience this portion of the site. The definition of these spaces with the reuse of the following elements creates a situation of experiencing the past in the context of the present: the pier edge, the structure of the shed, the interior shed platform, and the rear facade of the shed.



restaurant plan
scale: 50'-0" = 0'-1"

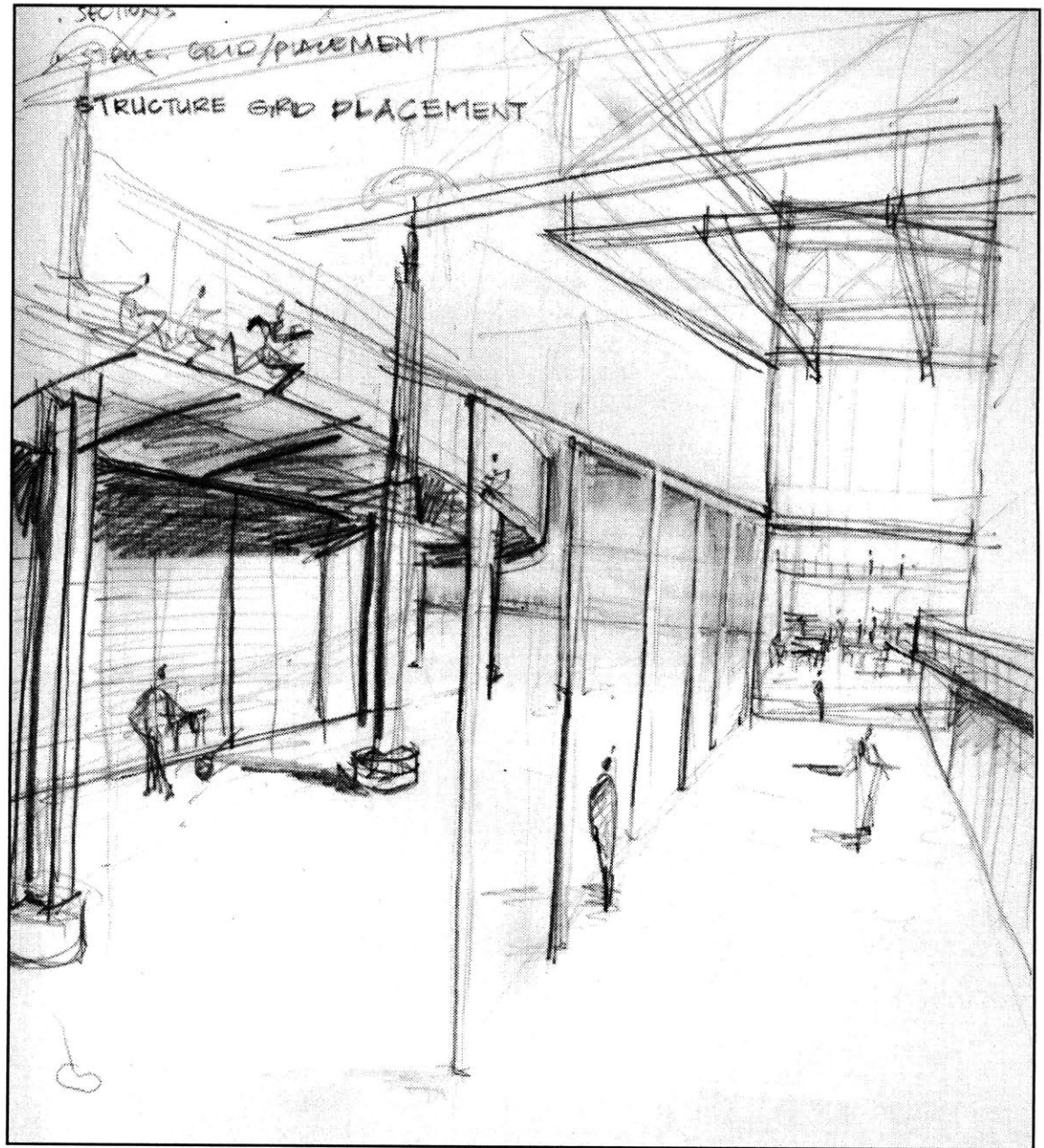


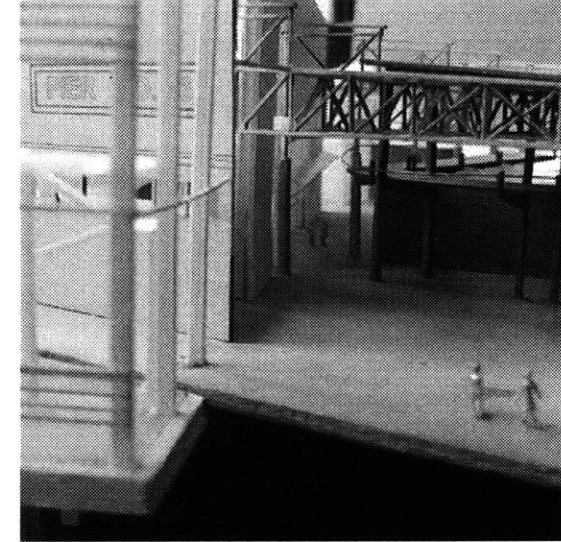
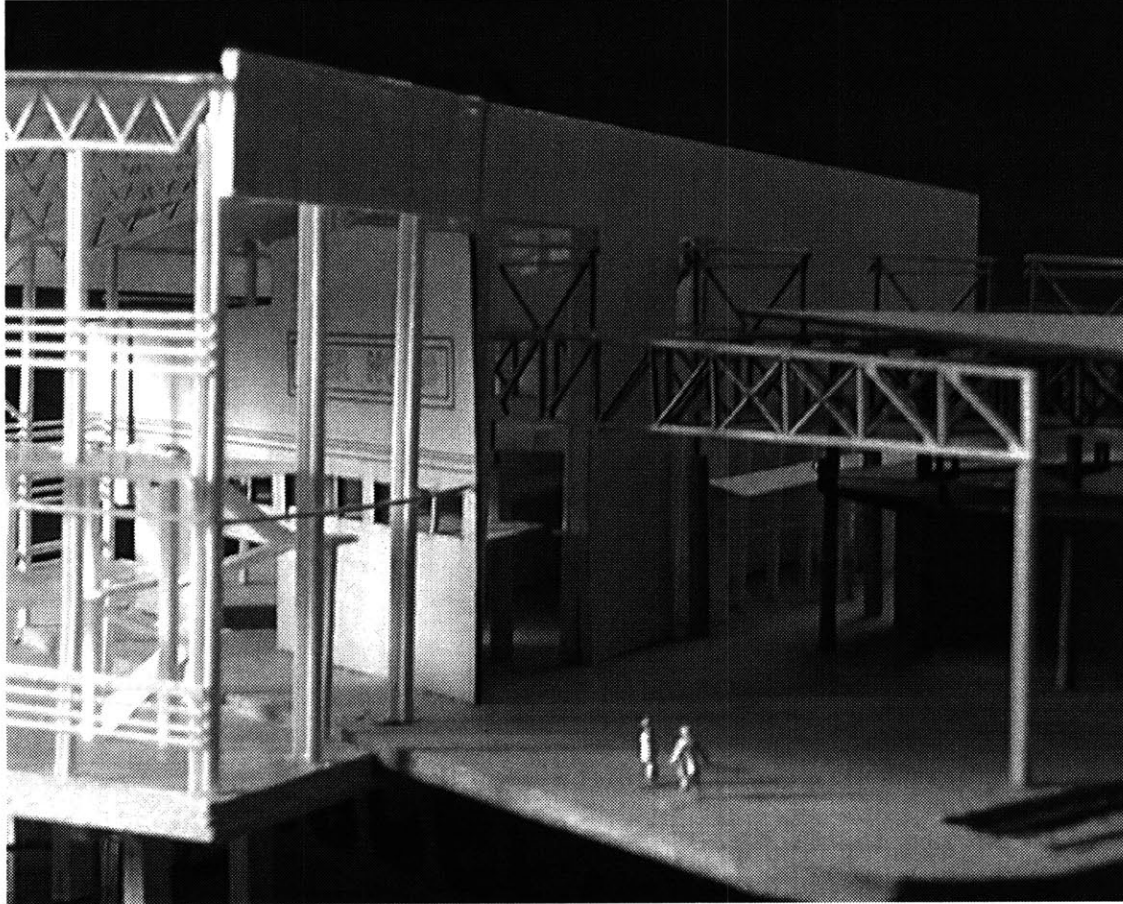
The intersection of geometries of the old pier orientation and the existing organization of Pier 26 create the entry into the restaurant. The dialogue between the old and the new, by the entry arcade of the restaurant and the arcade created by the shed's central columns and the running track, allows the space of the pier to flow into the restaurant.

A silver metal canopy marks one more entry and continues the concept definition of path and place. The canopy adds an element of human scale in relation to the 27 foot space defined by the bottom of the existing trusses. Similar to the entry, the use of a massive plane hides the views and spaces behind it. The intersection of the geometries create a final path, similar to the wide to narrow space at the entry leading to a final place of release at the end of the pier.

left images: view of entry arcade
entry to restaurant
model scale: 20'-0" = 0'-1"

Sketch study of the arcade entrance relation to the grand space of the main dining area and to the recreational facilities to the left.

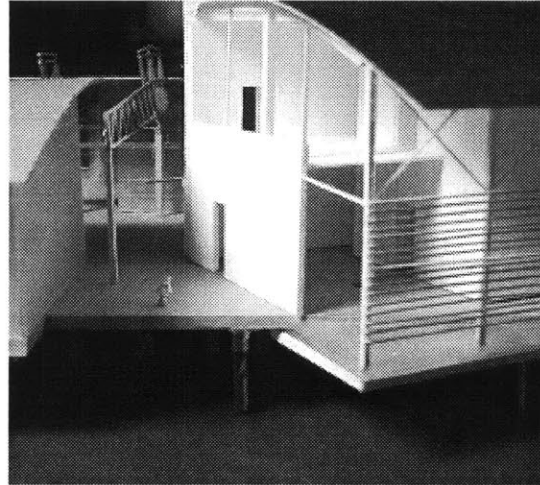




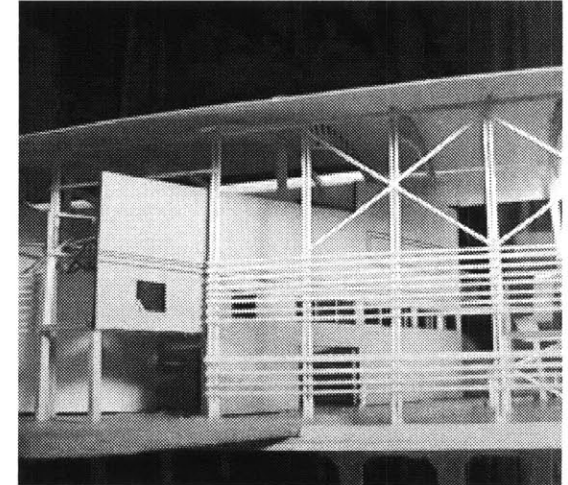
above: view of space between restaurant and recreational facilities.

left: view of release at the end of the pier. The existing platform and rear facade remain visible to the outside and retains the memory of the building's presence to those inside and outside the restaurant. Also the remaining exposed structure and the end of the reused Belt Railroad lines defines the end of the pier and act as reminders on its past.

The introduction of such a large form oriented differently from the pier redefines the relationship to the edge of the pier, to the truss and the orientation of the pier and its shed structure



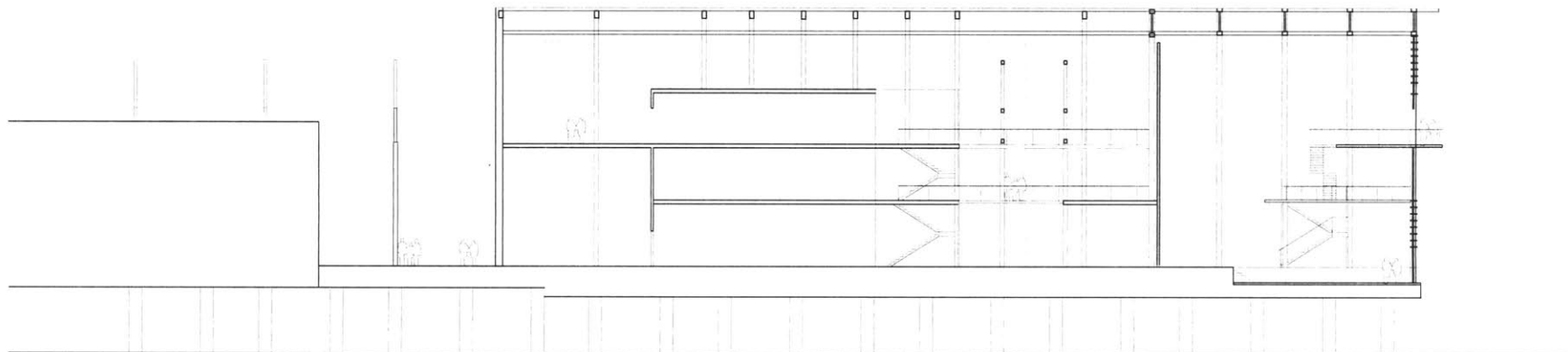
View of space between swimming pool and the banquet room area of the restaurant. The remaining existing structure also serves as a reminder the full extent of the width of the shed.

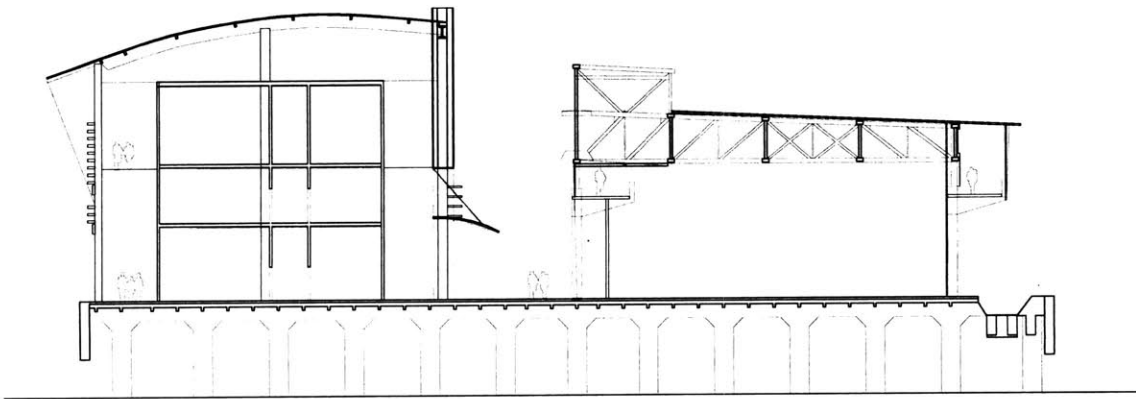


View of the new end relation of the pier facade and the pier edge, now partially enclosed by the restaurant.

The section view of the restaurant showing the relation of the internal core to the outer rooms and the extension of the building stepping down to the water.

longitudinal section through restaurant
scale : 40'-0" = 0'-1"





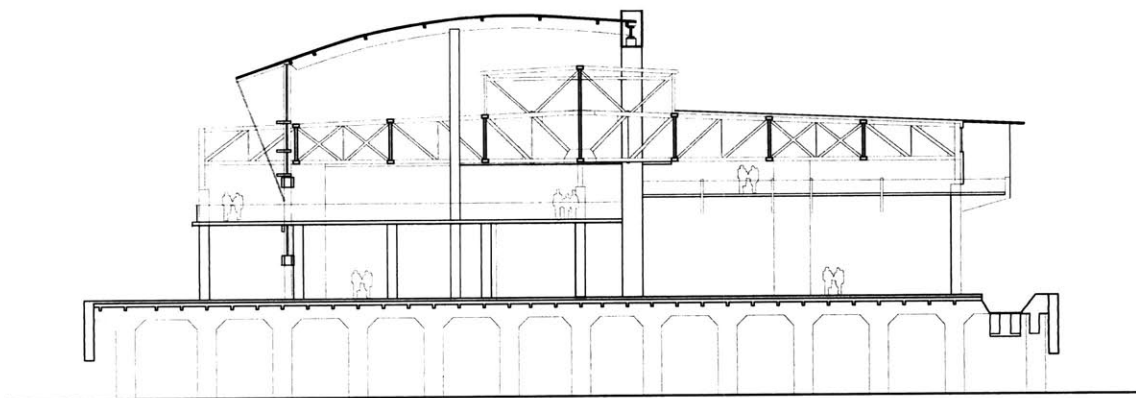
Form:

Having derived the form of the restaurant from the proportions of the existing shed, the building is laid out in a similar 2 bay, three column grid. The interior of the space is occupied with the interior service core and the outer edges of the space are kept open for the enjoyment of the views.

Materials:

The juxtaposition of solid and voids used to further dramatize the experience of the restaurant. The path through the massive entry wall, the service core, and lastly the remaining rear facade, leads to spaces defined by transparency. The large glass volume is a dramatic setting to heighten the viewing experience of the main dining area.

The sections show the changing relationship between the restaurant and the section of the existing shed maintained in the area of the basketball court and running track area adjacent to it.



top: section through core and arcades on either side of the restaurant
scale : 40'-0" = 0'-1"

bottom: section through main dining area of the restaurant
scale : 40'-0" = 0'-1"

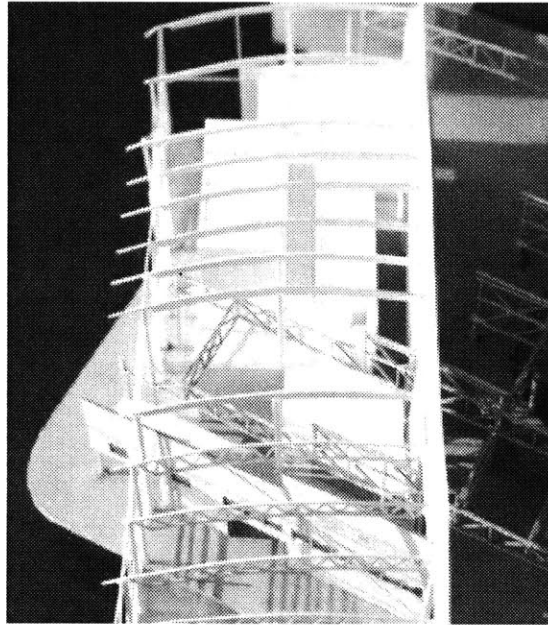
Existing Structure:

Two existing structural bays remain as does the structure of the end platform and the rear facade. The other structure in the bays between the swimming pool and these remaining ones were partially removed.

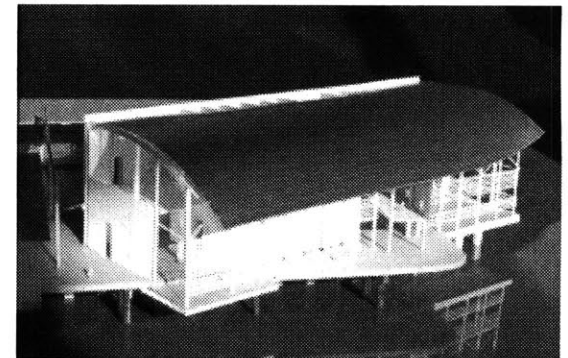
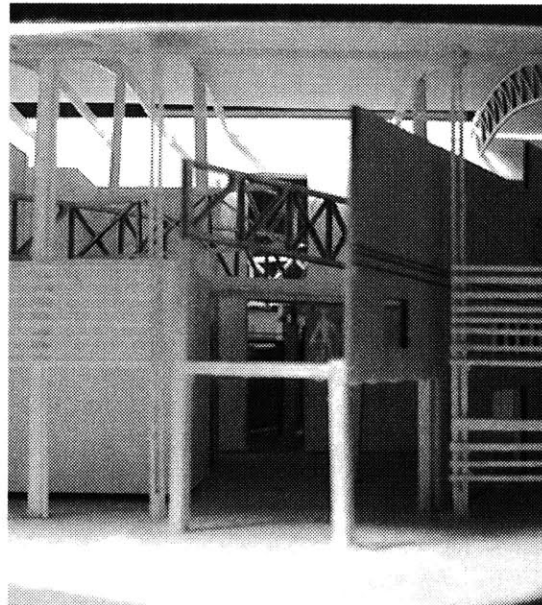
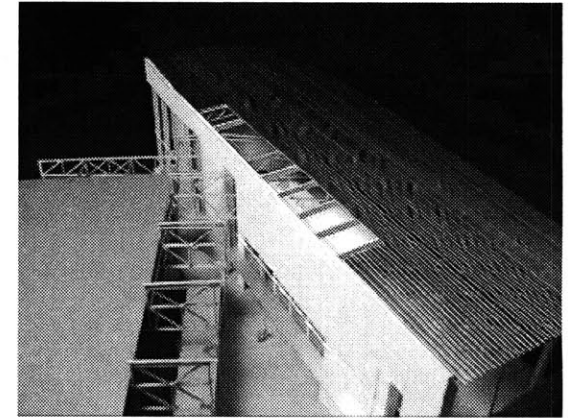
Additions- new Structure:

The new structure is composed of three main supports: the entry wall, a central steel column where needed and an outer steel column in the plane of the facade.

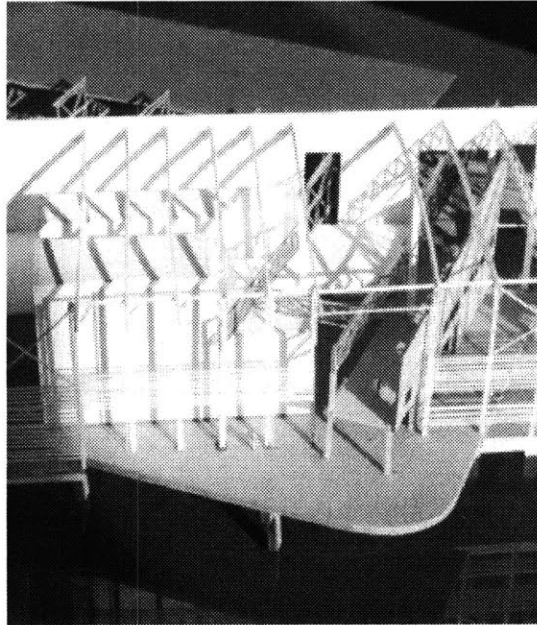
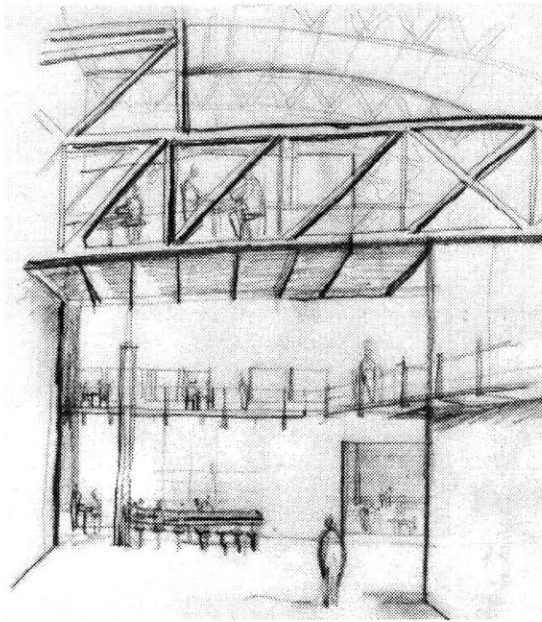
The roof is supported by either a beam or a web joist supporting the same curved section that encloses all the spaces. The deep web joists are used in the large dining area to facilitate the large span. The beams are used in the other area to make a clear distinction from the existing trusses that still occupy the space. The single gesture of the section emphasizes its presence and relation to the old orientation of the piers. The new curved metal roof dips down on the southern side towards the water and provides shading. Louvers cover the southern and eastern elevation to provide further shading.



top left: View of interior core
top right: View of skylight over entry arcade and the continuation of existing structure into the restaurant.

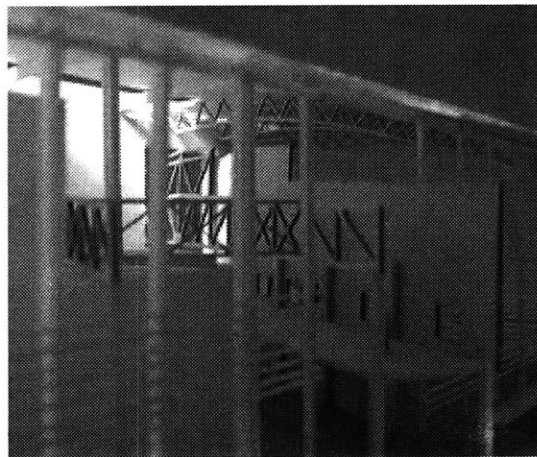
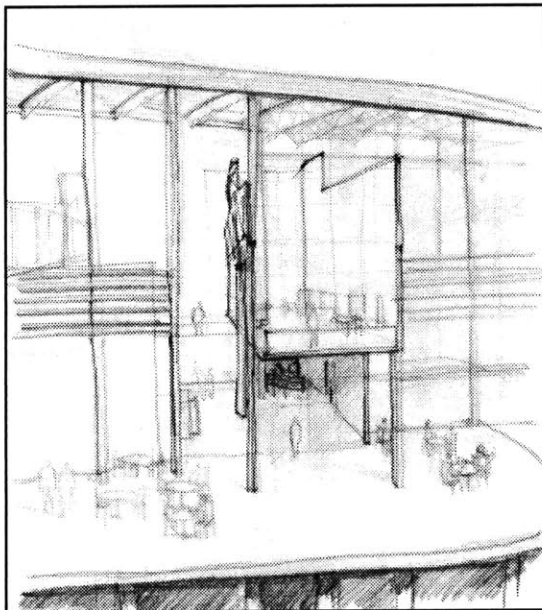


bottom right: view of curved roof dipping towards water
bottom left: view of intersection of old and new roof structure.



At the end of the pier the idea of creating new ways to experience the past are explored with the transformation of the existing elements and the additions of the restaurant. These elements maintaining their integrity and character but acquire a new function and a new meaning.

The space between the two trusses has been transformed to partially support a new floor level that is connected to the space of the night performance area above the banquet room. The area would be used for seating. The platform at the end of the shed, is used as a mezzanine dining area. On the exterior, the exposed portion creates an entry to the outdoor dining areas and a balcony.



top left: Sketch of new spaces created from the old

top right: View of new floor level between the trusses.

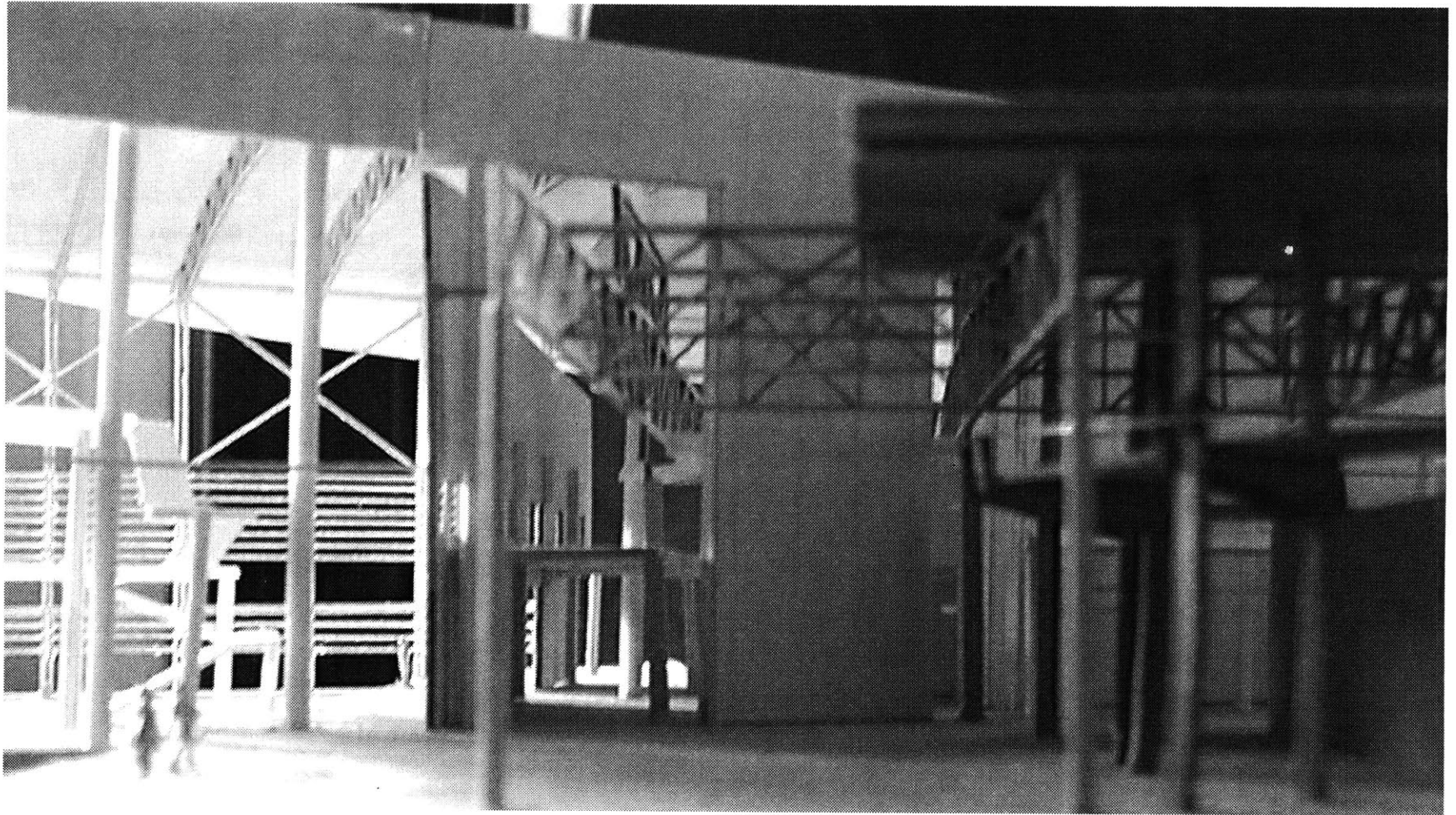
bottom left: Sketch of outdoor eating areas and the new ways to inhabit the pier edge in relation to the restaurant

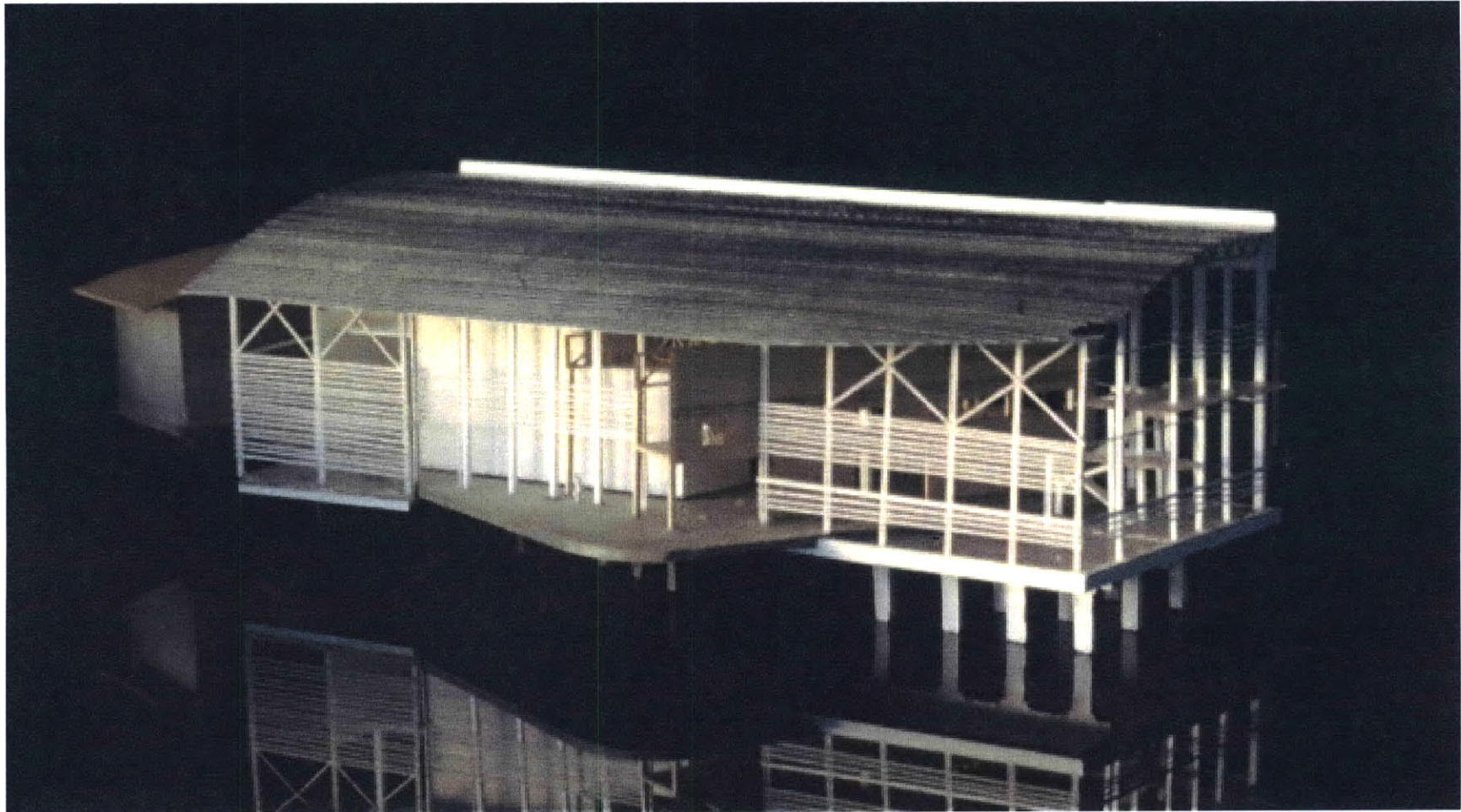
bottom right: View of dining mezzanine with views outward.

below: View of restaurant from the end pier plaza. The existing pier platform and trusses remain within the restaurant, defining one last bay of continuous space that integrates the end of the pier with the interior of the restaurant. There is a continuity of space and a

dialogue created between the old and new within and without the building and in the open space.

opposite: south elevation of the model



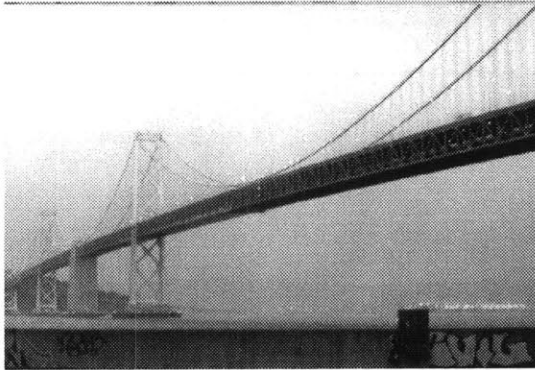


End views

top: View of the Port of Oakland's shipping industry across the bay and the large ships that frequent the bay.

bottom: View of the end of Pier 26 and its relation to the Bay bridge and Yerba Buena Island in the distance.





End views

top: View of the Port of Oakland's shipping industry across the bay and the Bay Bridge lit in the early evening

middle: view of the Port of Oakland's shipping industry across the bay and the Bay Bridge at sunset

bottom: Close-up view of the port of Oakland from with the Bay Bridge tower in the foreground.

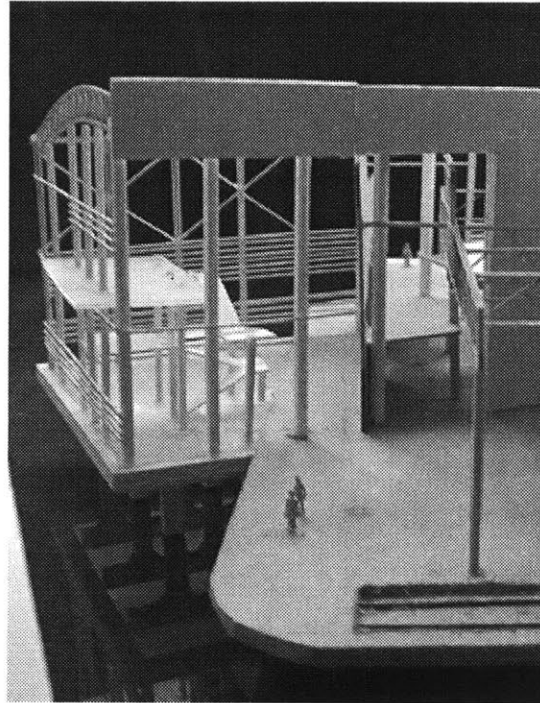


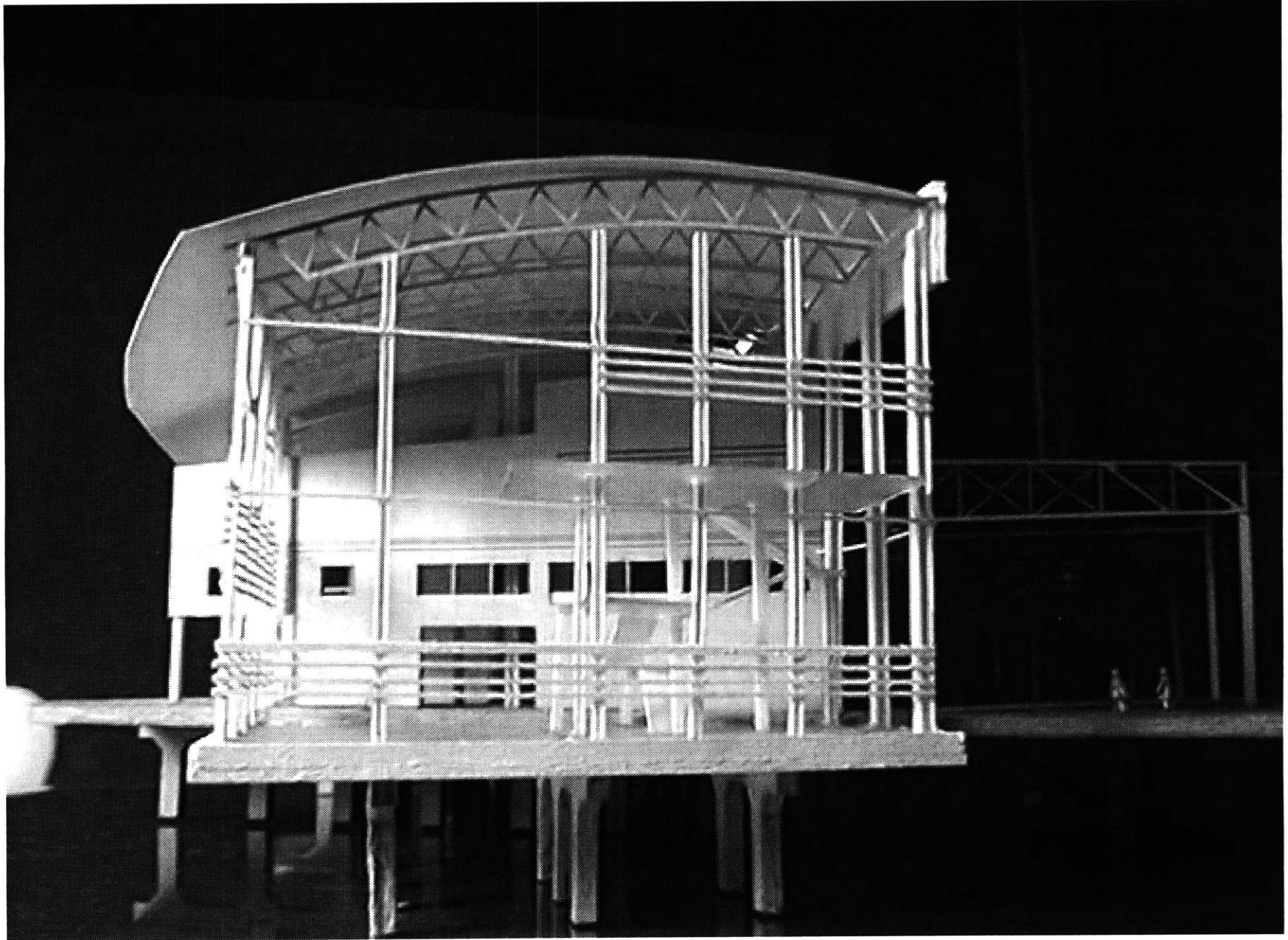
The glass box of the main dining area extends out into the water emphasize the relation of the pier to the bay. Though the volume encloses the existing facade, the sensation of contained space on its other edges is not as apparent. There are expansive unobstructed views of the By Bridge, the city to the north, and across the bay at night, sunset and at all times of the day. And at night the volume itself becomes an attraction, like a lantern at the end of the pier.

opposite: The fluid space contained in the large glass volume of the main dining area creates a setting for enjoying the views the end of the pier.

top: View of new mezzanine levels inside the volume of the main dining area.

bottom: view of the restaurant extending from the pier. New structural piers are added to glass bottom extension.





conclusions



top: 3.1 View of of the waterfront of 1999, looking up Embracadero from in front of Pier 30-32.

bottom: 3.2 View of the Mission Style facades that lined the waterfront in 1915, as seen from the same location as the above photograph, with Pier 30-32 in the foreground, and Pier 26 and pler 28 inthe distance.



Conclusions

I have learned a great deal from this thesis and it is of timely relevance to conditions in many waterfront cities. Much about San Francisco's history has already disappeared, with the deterioration and removal of its waterfront areas. The collective memory of place of the waterfront is not widely known beyond what is seen at the city's admitted main tourist area of Fisherman's Wharf. The city plans as described in the Port of San Francisco's Waterfront Land Use Plan do address the need to maintain the remaining character and history of the area. The future of the waterfront seems assured, but it is unfortunate that so much was already lost and erased. Not much of the history has been publicly available. As my search for the history of the site proved, there is no central comprehensive history of the waterfront- of its development and its use. What does exist are resources that are unconnected and scattered throughout several institutions of the city. In writing this thesis and presenting the Port of San Francisco with a copy, I offer what I have collected about the site, of Pier 26 and its immediate context, for their use. As far as I have been informed there are no proposals yet for this site, though it has been marked as having historic value due to the Pier shed's facades and will likely be kept. But there is a request for proposal for retail or commercial use of the adjacent Bulkhead Building 24 ° , which may change the site substantially. And with the arrival of a cruise terminal and a mixed used complex on the adjacent empty Pier 30-32 site and its corresponding sea wall lot, there is ample opportunity for related projects to be proposed for Pier 26 and its adjoining buildings.

No design project is ever completely conclusive. From reviews and discussions, it was noted that further explorations of the "ruins" and public plaza area could dramatically reorganize the design of the two areas adjacent to it, the studios and the recreational facilities.

The two key topics of this thesis history and memory, are elusive and intangible,. Yet they are crucial to our understanding of our lives and the world around us. In dealing with these topics, the thesis provided one interpretation of history and memory and responded to their roles in architectural design.

Endnotes

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³Hartman, Chester. The Transformation of San Francisco. (New Jersey: Rowman and Allanheld Publishers) 1984, p.37.

⁴ Board of State Harbor Commissioners Biennial Report, 1938-1940, p.28.

⁵ Ibid, p.31.

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⁷ McGloin, John Bernard, San Francisco: The Story of a City. (Presidio Press: San Rafael, California), 1978, p. 160.

⁸ Board of State Harbor Commissioners Biennial Report, 1910-1912 p. 8.

⁹ Zane, Wendy " On the Waterfront of San Francisco" (Report prepared for the San Francisco Landmarks Preservation Advisory Board) 1991, p.2.

¹⁰ McGloin, p.191

¹¹ Zane, p.9

¹² Board of State Harbor Commissioners Biennial Report, 1910-1912, p.5.

¹³ Board of State Harbor Commissioners Biennial Report, 1910-1912, p.63

¹⁴ " Big improvements are made along the city's waterfront" San Francisco Examiner-Real Estate and Finance. , 1 August 1915.

¹⁵Ibid.

¹⁶ The Port of San Francisco: Waterfront Land Use Plan, Draft for Public Review and Comment (San Francisco: Waterfront Plan Advisory Board, 1996) p. 15

¹⁷ Caltrans District 4. I-280 Transfer Concept Program, Historic Properties Survey Report. City and County of San Francisco, 1983. p. 3

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Courtesy San Francisco Maritime NHP, J Porter Shaw Library.
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aknowledgements

thank you

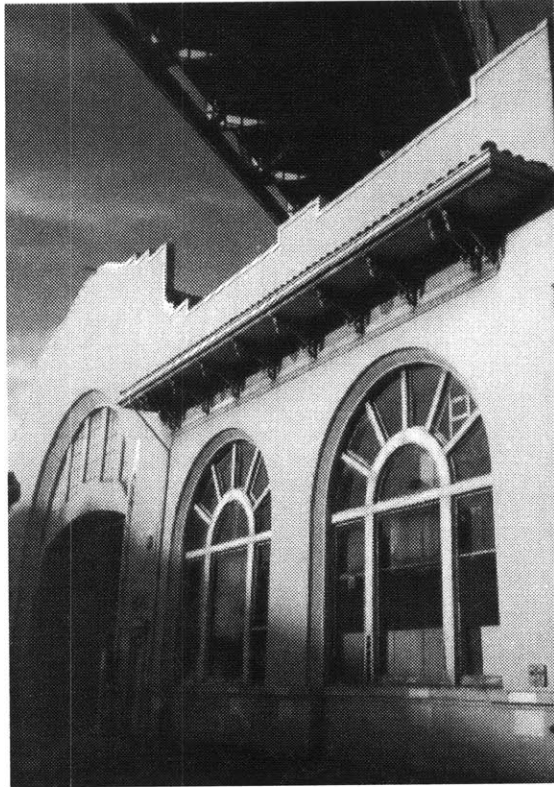
to my family and friends athome in California who have supported me through these crazy years of my architectural education.

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...to a place I never knew about until i went in
search of it.