

ABSTRACT

Title of Dissertation / Thesis: **THE MUSEUM OF THE CITY OF SEATTLE**

Brian Christopher Shaklee, Master of Architecture, 2004

Dissertation / Thesis Directed By: **Professor Thomas Schumacher, Chair, School of Architecture**

This thesis proposes to examine the urban restoration of a neglected and underutilized area of downtown Seattle, that being the parking garage bound by the intersections of Second Avenue, Yesler Way, and James Street, adjacent to the Pioneer Square Historic District. This urban restoration will take place in the design of a new museum dedicated to the history of Seattle. This design would also incorporate new spaces for the Seattle Underground Tour, currently conducted from the nearby Pioneer Building. In addition to providing a cultural resource for the city, this concept will provide outdoor space for use by the public and will restore a piece of the urban fabric that was destroyed in the 1960's urban movement. This site was the original location of the Seattle Hotel, a building that was demolished and converted into its present-day form, much to the chagrin of city preservationists.

THE MUSEUM OF THE CITY OF SEATTLE

By

Brian Christopher Shaklee

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Advisory Committee:
Professor Thomas Schumacher, Chair
Melissa Goodill
Associate Dean Stephen F. Sachs

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FOREWORD

Currently, the existing Seattle Museum of History and Industry is located in the community of Montlake and the University of Washington Arboretum. The building was completed in February of 1952. The building itself could be described as a work of architecture that is representative of the Modern Movement within the history of architecture. The architect of record is Paul Thiry. (Warren, King County and Its Queen City: Seattle, p. 154) Due to its location in McCurdy Park in Montlake and the University District, the Museum of History and Industry (MOHAI) has become cut off from the pedestrian downtown population of Seattle. It is my contention that a museum dedicated to the history and evolution of this city should be located within the downtown plan to offer the broadest range of accessibility to the public as possible. This contention corresponds to the pattern and attitude of planners, builders and the residents of the city over the past five years. Large-scale public and private institutions have recently been built within the downtown sector and have achieved a successful relationship with the city and its urban fabric. Three notable examples include the Seattle Art Museum (SAM) by Venturi, Scott Brown and Associates, which is located in the block contained by First Avenue, Second Avenue and Cherry Street. (See Precedent Analysis) The second example is Benaroya Hall, the new home of the Seattle Symphony, which is located in the block contained by Second Avenue, Third Avenue, Union Street and University Street. The third example is Experience Music Project (EMP), a museum devoted to the history and experience of music, located next to the Space Needle and Monorail in the Seattle Center. The

Monorail, in fact, passes directly through the structure. EMP was designed by Frank Gehry for Microsoft mogul Paul Allen, and was completed in 1997.

The site for this thesis overlooks Pioneer Square, due to the change in grade from First Avenue to Second Avenue. The site's proximity to Pioneer Square, and its relationship to the Pioneer Square Preservation District, creates an appropriate "fit" between the building's program and typology, and the greater context of the district.

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Chapter 1: Site

1.1: Site Description and History

The site for this thesis is located at the intersection of Second Avenue, Yesler Way and James Street, in the heart of downtown Seattle. The site is triangular in shape, due to the shift in the downtown grid in response to the waterfront and Elliott Bay. The parking garage that currently occupies the site is popularly known as the “Sinking Ship” garage, due to its pointed end emerging from the ground like the prow of a sinking ship.

I chose this site for several reasons. First, it is located adjacent to Pioneer Square, which is the center of the Pioneer Square Historic District. Second, the site has convenient access to major forms of public transportation, including the nearby Pioneer Square Station located at Third Avenue and Yesler on Seattle’s new Downtown Transit Tunnel, an underground bus system. Third, the site has a high degree of visibility and access due to its location between First and Second Avenues. These streets maintain a high volume of both vehicular and pedestrian traffic and run parallel to the waters’ edge. Fourth, the site has the potential, as the location of a public building, to create very important urban connections with other features and areas within the city. These areas include Pioneer Square, Occidental Park, the new Seahawks Stadium located on the site of the demolished Kingdome, Safeco Field (the new baseball stadium for the Mariners) and the Washington State Ferries. Fifth, the

character of the existing parking garage is noticeably different than its surrounding context. This has resulted in a structure that blends poorly with the character of the neighborhood.

1.2: The Great Seattle Fire of 1889

On June 6, 1889, the city of Seattle endured a terrible fire that destroyed much of the downtown area. Records estimate that approximately 66 acres of the downtown and Central Business District were razed by the Great Seattle Fire. (“Seattle Underground,” back cover) City planners, however, were determined to rebuild the city in any manner in which they could. The dawn of the twentieth century saw Seattle emerge as a city of steel and masonry rather than a city constructed of wood and nails. However, many of the foundations of the buildings that were destroyed in the fire were, in fact, constructed of masonry and remained intact.

Rather than rebuild the city on the same level as before, planners and civil engineers saw an opportunity to improve the infrastructure of the city, particularly the very poor state of the city sewer system. Seattle, being so close in elevation to Elliott Bay, was subject to the rise and fall of the tides. Bill Speidel notes in his tour pamphlet that “Visitors to town, unaware of the eccentricities of our sewer system, often were treated to a chilling experience. Newcomers became known as ‘wet backs.’”

(“Seattle Underground,” p.11)

Since it was cheaper to backfill and raise the level of the streets, rather than raise the level and foundation of the entire city, planners simply abandoned an entire level of the city and covered it up with backfill. Again Speidel notes that the citizens of

Seattle “voted the biggest bond issue in the city’s early history - \$190,000 for a new sewer system. The fire provided the opportunity to raise our streets. But the sewer system gave us the motivation.” (“Seattle Underground,” p.11)

In many locations, the civil engineers that designed the backfill system allowed an open space to remain along the perimeter of existing buildings, and used metal rods to shore the retaining walls. (Refer to Figure 1)

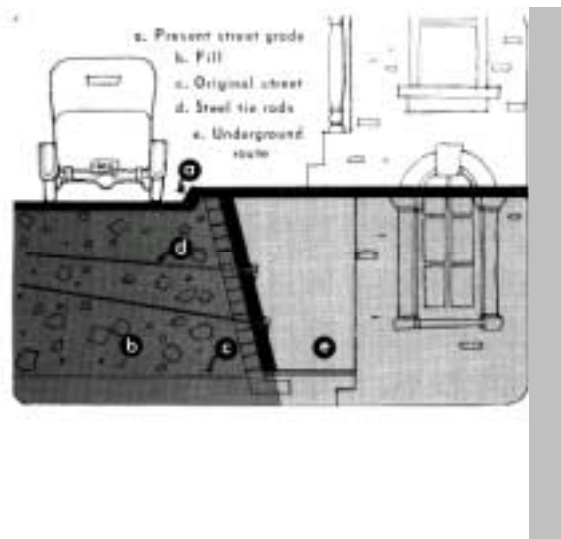


Figure 1: Diagram of backfill after the Great Seattle Fire (“Seattle Underground,” p.12)

It is the presence of this open space that has led to the organization of what is known as The Seattle Underground Tour. This tour is still given today, allowing visitors to see how the original street level of the city used to appear. (Refer to Section 2.1.1, Seattle Underground Tour)

1.3: Site Context

1.3.1: Pioneer Square

Pioneer Square was originally called “Yesler’s Corner,” after the man who owned the land at this location, and much of the city as well, Henry Yesler. (Seattle Now & Then, Chap. 14) Yesler built the extravagant Yesler-Leary Building on this site in 1883 as a symbol of his wealth and status, as well as the booming economy and growth of Seattle. The city of Seattle had been trying to buy this piece of land from Yesler for some time, but Yesler’s asking price was always too high. The problem was that the irregular grid of the city, platted in 1853, required commercial traffic to move one block west from this intersection in order to continue travel on Commercial Street, or present-day First Avenue South. The Great Seattle Fire of 1889 accomplished what the city fathers could not in destroying the Yesler-Leary Building. For the loss of his property, Yesler was awarded \$156,000, approximately \$12 per square foot.

By the time of the completion of the cast iron pergola in 1910, Pioneer Square had become a bustling urban hub. It was here that businessmen gathered on the street corners to gossip and exchange ideas. As many business transactions and deals were completed in Pioneer Square as were in the growing number of offices and businesses in the downtown. The latest fashions in clothing were displayed by the socialites and

wealthy who came to see and be seen. The Great Depression struck the Pioneer Square area, a decline, which continued in this district until preservation efforts in the 1960's and 1970's. Despite the depression and decline, most of the historic buildings in the Pioneer Square district have survived and have since been restored.

The city of Seattle, much like many other major cities in the United States, underwent an extensive urban renewal program during the 1960's and 1970's. Pioneer Square was one area where the clash between these forces of urban renewal and local preservationists and activists was apparent. In 1966, Victor Steinbreuck, an architect and historic preservationist, described the Pioneer Square district as the only area within the city “where a significant group of older buildings of one period remain to form a cohesive whole...buildings whose real value lies in their historical association, visual delight, and potential use to the community.” (Seattle Now & Then, Chap.32)

It was people like Steinbreuck and Earl Layman, Seattle's historical preservation officer, who are most responsible for saving and renovating Pioneer Square and its surrounding district that exists today.

One of the most significant casualties during the fight to save Pioneer Square was the Seattle Hotel, the last building on this thesis site before the existing parking garage was constructed. In fact, the community outrage at this destruction generated the interest and funding to develop a plan to preserve the other historic structures in Pioneer Square. The author of Seattle Now & Then, Paul Dorpat, notes that Layman was not around when the Seattle Hotel was torn down and the “sinking ship parking garage” was erected. Dorpat describes his opinion of the relationship between the parking garage and Pioneer Square in the following sentence: “This ugly scar in the

side of Pioneer Square continues to have the ironic effect of making preservation of the remaining structures a cultural necessity.” (ibid., Chap.32) In the endnotes to this book, Dorpat continues his tirade over this subject. “The number of times this ‘sinking ship’ shows up in the text and pictures is embarrassing. It’s an invitation to satire. My own obsession with this garage was divined in this collage of it coming through the Montlake Cut.” (Figure 2)



Figure 2: Parking garage coming through the Montlake Cut

Today, Pioneer Square is as busy and full of life as it was around the turn of the century. During the day, Pioneer Square is the district known for its diverse range of art galleries, antique shops, and furniture and specialty stores. Groups of people taking the Seattle Underground Tour can be seen crossing the street and visiting the subterranean tunnels. The Pioneer Square District has a large variety of restaurants, cafes and pubs that has established it as the premier area for nightlife, live music and entertainment. Mixed in with these activities and services are bookstores, coffeehouses and apartment buildings throughout the area. Pioneer Square’s

proximity to Safeco Field, the Stadium Exhibition Center and the new football stadium, make it a popular place to frequent before and after home games played by the Seattle Mariners and Seattle Seahawks.

Accessibility and transportation options to and from Pioneer Square are very convenient. Interstates 5 and 90 can be accessed only a few blocks to the east of Pioneer Square. The recently completed Downtown Transit Tunnel stops at the Pioneer Square Station, located at Yesler and Third Avenue. Travelers may ride any Metro bus from 4 a.m. until 9 p.m. within the downtown area. The Waterfront Trolley stops at Pioneer Square on its way to the Seattle Aquarium, Pike Place Market and the International District.

1.3.2: Yesler Way (Skid Road/Row)

The road that is currently named Yesler Way, and bounds one edge of the design site, has a history all of its own. Originally platted as Mill Street, this was the primary means of transportation for lumber that was brought into the city. Planks and boards were laid down on this avenue to serve as “skids” on which the logs were slid down the hill to the ships waiting at the docks. Dorpat notes that the lumbermen “...could build a skid road up that hill, on a grade sufficiently gradual for cattle teams to skid logs over and down to his mill from the forests above.” (Seattle Now & Then, Chap.12) Merchants developed saloons and brothels along this avenue to service the weary lumbermen, who did not have to travel far to spend their hard-earned money. This area developed a certain reputation, and earned a nickname that would become part of American cultural vocabulary. Again, Dorpat claims that “...this lowland’s most popular name, which would be adopted world-wide, was simply Skid Road: a

seamy place for men who were often transient, single, and on the skids, or married and on a shady retreat from respectable family life.” (ibid., Chap.12)

1.3.3: Occidental Park

The parking garage site has a long history of occupancy by hotels. The original Occidental Hotel was built on the site in 1864. It was described as "a clapboard house with 30 rooms." (Dorpat, Seattle Now & Then, Chap. 13) This hotel was purchased in part by John Collins, an early businessman and leader in the Seattle community. Collins would later maintain a controlling interest in the hotel. He later built on the site the new Occidental Hotel, a very elaborate building which he boasted would become the “leading Hotel in the Northwest.” (ibid.) This building was destroyed in the Great Fire of 1889, only to be rebuilt shortly thereafter. This hotel was later renamed the Seattle Hotel and stood until the 1960’s, when it was demolished and replaced by the parking garage which remains today. Dorpat notes that “...the Seattle Hotel was razed in 1962. Of all the Pioneer Square casualties, the hotel’s destruction was most responsible for stirring citizens to organize and save this neighborhood. The grotesque architectural reminder to maintain this preservationist struggle is...called the ‘Sinking Ship Garage.’” (Dorpat, Seattle Now & Then, Chap.12)

Occidental Place is named in honor of the first hotel that stood on the site, the Occidental Hotel. Today, Occidental Place is a space that seems caught in the middle. This urban park is located next to many of the nicer art galleries in the city, is adorned with several sculptures and many trees and is close to many of the

restaurants and bars of Pioneer Square. However, the space seems under-utilized, especially considering its relatively large size.

1.3.4: Safeco Field and Seahawks Stadium

The recent completion of Safeco Field, for the Seattle Mariners, and the new Seahawks Stadium, on the site of the old Kingdome, have re-vitalized the downtown area and given the city a new identity. Many cities, including Baltimore, Pittsburgh, Philadelphia and Cleveland, to name a few, have experienced growth and urban development through the construction of new and exciting stadiums that incorporate a sense of history and nostalgia. Many of these new stadiums use forms and materials that recognize regional architectural styles. Both of these stadiums, I believe, make a strong bid to be included in that group of successful urban projects through sports stadium design and construction.

1.3.5: Washington State Ferries and Seattle Ferry Terminal

One of the major hubs and terminals of the Seattle ferry system lies just to the west of the parking garage site. Yesler is viewed as a major arterial and traffic route that is used for access to the ferry. (Refer to Figure 3)

Existing Approach Routes to Seattle Ferry Terminal

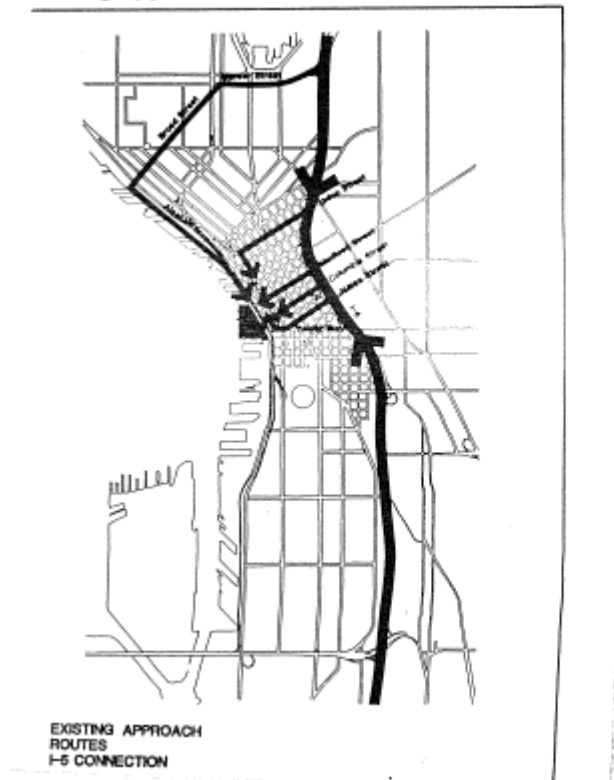


Figure 3: Approach routes to the Seattle Ferry Terminal

1.4: Zoning Requirements

Downtown Seattle is divided into eleven land use classifications. These eleven districts are defined by “The Downtown Plan: Land Use and Transportation Plan for Downtown Seattle Adopted by Resolution 29139.” This comprehensive plan was adopted and published in December 1995 under the guidance of the City of Seattle Office of Management and Planning. The general guidelines that apply to any building or planning endeavors within the Pioneer Square District are defined by Policy 33: Pioneer Square Mixed and Special Review District (PSM). The policy reads as follows:

“Pioneer Square Mixed shall apply to the Pioneer Square District area. This designation and the Pioneer Square Preservation District regulations shall recognize the historic nature of the area and allow flexibility and discretion in controls, regulations and guidelines both for present conditions and those that may develop in the future. The Pioneer Square Mixed designation and Preservation District regulations shall encourage mixed use development compatible in use and scale with existing development in Pioneer Square.” (“The Downtown Plan,” p. 60, refer to Figures 4 and 5)

Within this larger land use classification, the site at Yesler and Second Avenue falls within the PSM-100 classification boundaries. This classification sets the maximum building height for all new construction at one hundred feet.

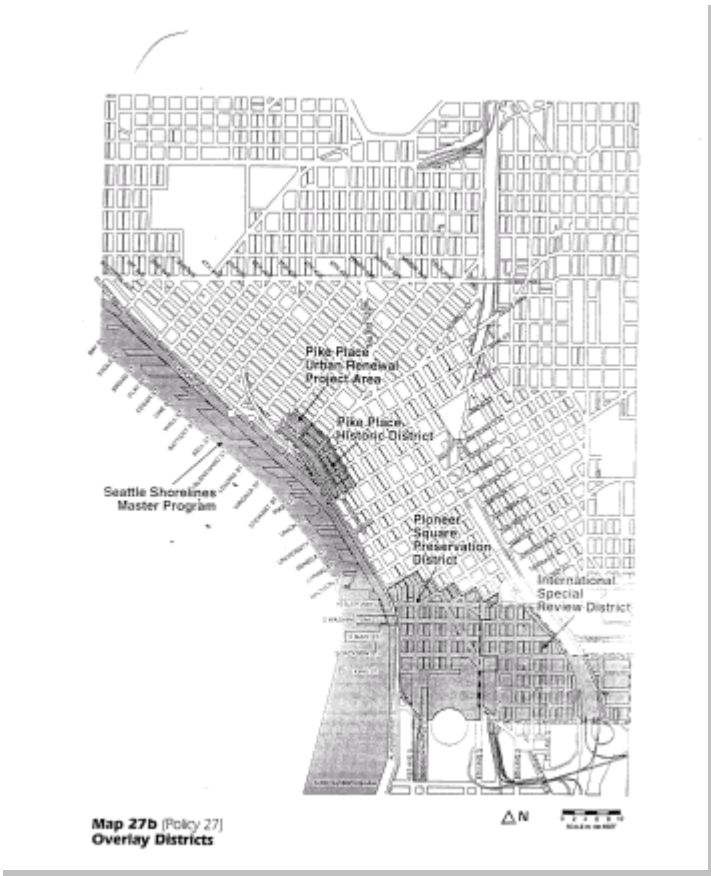


Figure 4: Overlay District Zones



Figure 5: Downtown Classifications

1.5: Site and Urban Analysis

The Background Report indicates that the street area directly around the site are “streets with an open, spacious quality where space is contained by low buildings of one or two stories and/or well defined building setbacks and open spaces.” (Refer to Figure 6, Background Report of the Downtown Land Use & Transportation Project, p.145) In fact, I would contend that the urban quality of this site is too open, and is a void that is left over. The parking garage scales very poorly against the extremely tall façade of the Smith Tower. A large-scale public building could begin to mitigate this discrepancy and provide a more appropriate urban mass.

The sites’ proximity to major tourist and entertainment centers within the downtown area is evident in Figure 7. (ibid., p.170) Pioneer Square, the Seattle Underground

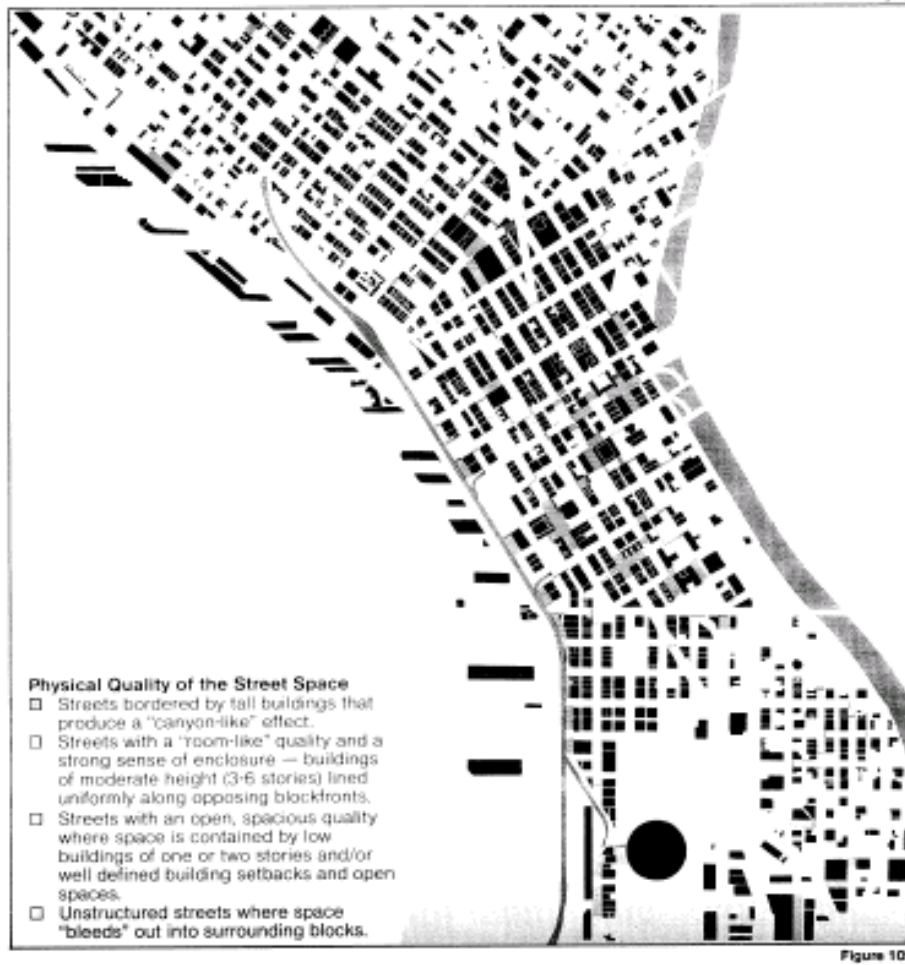


Figure 6: Physical Quality of the Street Space

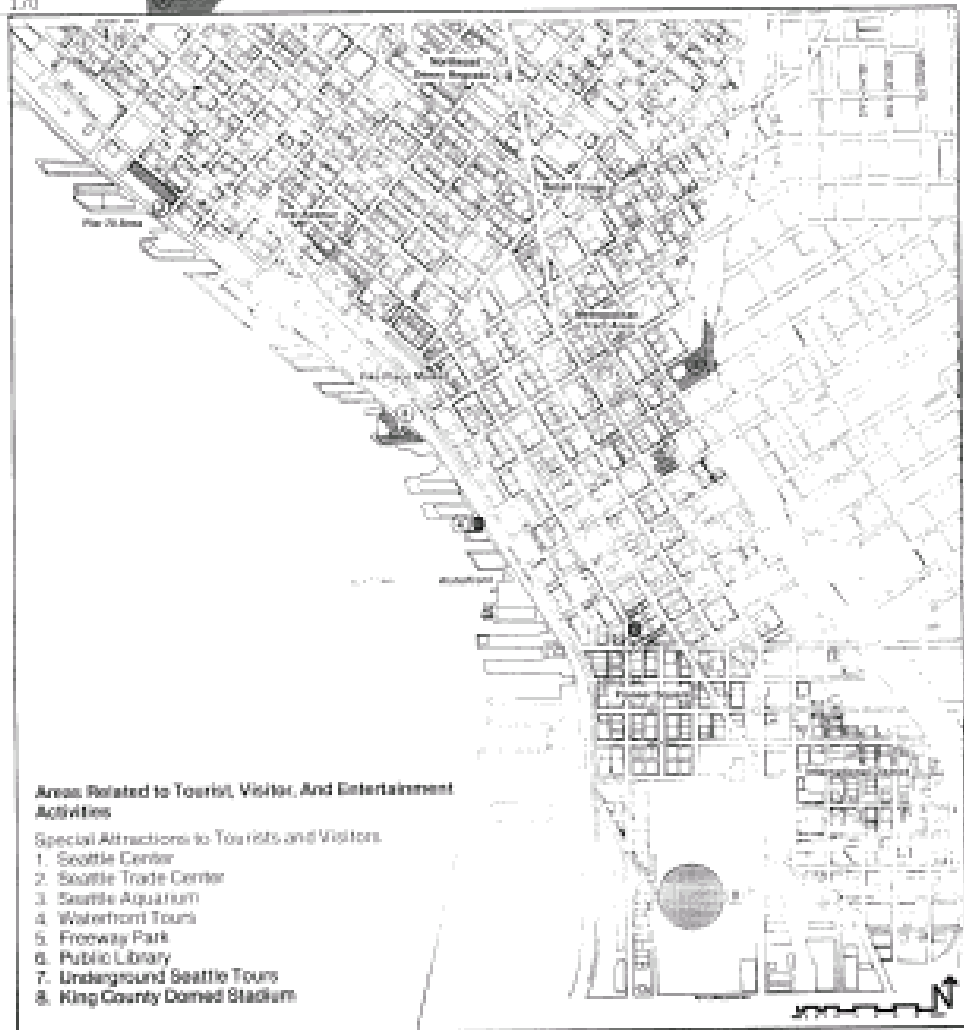


Figure 125

Figure 7: Areas Related to Tourist Activities

Tour and both the football and baseball stadiums are all within a comfortable walking distance from the Yesler site. Many streets within the downtown area present rather steep ascents for the pedestrian, particularly when one is traveling east from the waterfront. However, the vicinity immediately around the site is pedestrian friendly and offers reasonable access to many key areas within the downtown area. The shaded areas on Figure 8 show areas with steep slopes that present obstacles to pedestrian traffic. The Yesler site and environs falls outside of this designated zone.



Figure 8: Areas with Steep Slopes

1.6: Transportation and Access

Given that the city of Seattle has a relatively poor public transit system in comparison to New York City and Chicago, there are still several options available that are fairly close to the design site. As previously mentioned, the Pioneer Square Station for the Downtown Transit Tunnel is located just one block north at Third Avenue and Yesler. This is the underground bus service. The Priority Transit Network line is the regular

Metro bus service that runs a street level. This bus line has a route that services Second Avenue and extends south to Fourth Avenue, the King Street Station and Seahawk Stadium. (Refer to Figure 9, “The Downtown Plan,” p.12) The site falls within the “Ride Free Zone” which allows free passage anywhere within this area during certain times of the day. Other transportation options to the west of the site include the Seattle Ferry system and the Waterfront Streetcar, which services the waterfront area from South Main Street extending north along Elliott Avenue to just before Bay Street.



Figure 9: Transit Map

Chapter 2: Program

2.1: Design Objectives

The programmatic considerations for this thesis consist of two components. The largest and most significant component is to provide all primary, secondary and tertiary functional requirements for the Museum of the City of Seattle. The second component is to provide a headquarters and operations space for the Seattle Underground Tours. It is intended that these two institutions share the same physical container or building, yet remain functionally and programmatically separate entities. The change in grade that occurs from the western corner of the site to the northeastern corner is approximately 15 feet. This fact could conceivably permit a physical separation of the two institutions through a design solution.

2.1.1 Seattle Underground Tour

Currently, the Seattle underground Tour runs its operations from the ground floor of the Pioneer Building, which directly faces Pioneer Square at the intersection of Yesler Way and First Avenue. Programmatically, the Underground Tour contains a small vestibule, ticket window and one large receiving and gathering space that is used before the tour commences. The tour itself is conducted through the underground passages of the original city level before the Great Fire of 1889. At several points in the tour, visitors are required to ascend to the current street level and re-enter the tunnels at a different point. The tour concludes in a small museum and gallery space

devoted to artifacts and items recovered in the process of reinforcing and clearing the tunnels of debris.

The Seattle Underground Tour officially began in May of 1965, during “Know Your Seattle Day.” The person who is most responsible for the organization and impetus behind this tour was Bill Speidel, the original curator. In 1968, Speidel published a booklet titled “Seattle Underground.” The subtitle for the booklet reads as follows: “In which the truth, the whole truth, and a lot more than the truth is told about *The Forgotten City Which Lies Beneath Seattle’s Modern Streets* by Seattle historian, humorist and author of the best-selling ‘Sons of the Profits.’”

It is my intention to provide a more direct and symbolic entrance to the tour, one that celebrates this tourist ritual, as opposed to the current method of crossing First Avenue and slipping through a side door in an alley before descending to the original level of the city. In addition, the program for the new Seattle Underground Tour Headquarters provides more generous exhibition and gallery space, as well as office and support spaces for the director and necessary staff. Physically, the Underground Tour will maintain its presence and entrance on Pioneer Square and have strong visual connections to a greater part of the cityscape. Symbolically, the role and status of the Underground Tour will be strengthened by its relationship to The Museum of the City of Seattle in this author’s opinion.

2.1.2 The Museum of the City of Seattle

It is my intention to create, through the Museum of the City of Seattle, an institution that will attempt to educate and inform Seattle citizens and visitors alike of the very unique history of this place, now and for future generations. Recently, the

Washington State History Museum, designed by Charles Moore, was completed in close proximity to Union Station in Tacoma, Washington. This museum, in my opinion, has achieved a great deal of success, not only as an admirable piece of architecture, but as a place where the story of the state of Washington is accurately and creatively passed from one generation to the next. In fact, this museum serves as a great inspiration for this thesis. As such, the city of Seattle does not possess a similar institution that examines and displays this unique history.

Each of the main galleries within the museum is devoted to a formative historical period that has significantly shaped the ways in which Seattle has grown as a city, and the ways in which Seattleites view themselves. The Hall of Industry chronicles the advent of the Industrial Revolution in Seattle and the Pacific Northwest. This gallery also examines the ways in which the city grew as a result of the abundance of natural resources that were available. Such areas would include the logging industry, the seafood industry, the Klondike Gold Rush, the railroad industry and the role of the city as a major shipping and trading port. The Native American Gallery is dedicated to the many diverse cultures and tribes of Native Americans that inhabited the Pacific Northwest before the arrival of pioneers and settlers, and whose presence is still very powerful and influential today. The Historical Documents Gallery displays written and visual artifacts that, as a collection, show the evolution of the city through the words and images of the people of the time, both past and present. This archival gallery houses rare books, manuscripts and journals, as well as newspapers, etchings, drawings, photographs and other legal documents of significance. The Modern Science and Technology Gallery is the venue that reflects the past and current

innovations in areas such as engineering, robotics, audio and visual systems, computers and medicine. The Commerce Gallery chronicles the rise of organizations and businesses that have grown from humble, Seattle-based companies into nationally, and internationally successful corporations. Such corporations would include Boeing, Microsoft, Starbucks Coffee, Nordstrom's and REI. The Pacific Rim Gallery explores the relationship that Seattle has with Asian and Oriental cultures, and the city's participation within the Pacific Rim community. This relationship is evident at every level of the city's existence, from the popularity of the International District, to the presence of Gary Locke, an individual of Asian descent who is the current Governor of the State of Washington and a former King County Executive.

2.2: The Interactive Process

The common link between the diverse galleries will be the interactive process through which they are experienced. The museum as a whole will attempt to focus on the learning through an interactive process. "Interactive" in this sense implies that visitors are directly engaged in the learning process, such as having "hands-on" experiences, as well as having options as to which specific areas in a general field of study or history one would choose to learn about. The interactive process is continued and reinforced not only through the gallery experiences, but also through events that take place in the auditorium and in the Seattle History Learning Center. Through lectures, symposia, performances, workshops, seminars, interactive exhibits and media, the Museum of the City of Seattle can offer opportunities for individuals of all ages and backgrounds to participate in exploring the story of Seattle yesterday, today and tomorrow.

2.3: Conceptual Exploration: The Architectural Promenade

Part of this thesis will be an exploration, through the design process, of the relationship between the interactive educational experience and the architectural promenade through the building. My contention is that the architectural promenade can be consciously appreciated by the visitor as a result of the sequence and manner in which the visitor is guided to progress through the building. This sense of procession or promenade is heightened by the interactive nature of the exhibits and displays within the galleries.

This promenade will be manifested and articulated in several ways. The first is through the spine of circulation that exists on every floor of the museum, allowing generous access to all of the displays, exhibition halls and various other programmatic elements of the museum. The second is through the public space that is developed and carved from James Street, extending from Pioneer Square and extending up to Second Avenue via a grand staircase. The third will be accomplished by establishing urban connections outwards to the city. An articulated entry on Yesler will provide a visual connection to Occidental Place and the entry tower on Pioneer Square will both signify approach paths from the environs to the new museum.

2.4: Special Considerations

The occurrence of earthquakes and other seismic-related activity is a consideration that must be taken into account with respect to construction in the Seattle area. The “Background Report of the Downtown Land Use and Transportation Project” examines the general guidelines that apply toward this topic.

“Seattle is sited in one of the most seismically active areas in the world. Almost 80 percent of the world’s earthquakes occur along a Circum-Pacific Seismic Belt known as the Ring of Fire, which parallels the western United States. Other majority of the volcanoes occur within this area.” (p. 68)

The particular geological nature of the soil in the Seattle area, combined with the fact that a large portion of the downtown area is composed of unstable fill, mandates that special foundation and structural precautions must be taken.

“Some of Seattle’s soils are unstable under earthquake conditions. The glacial till soils slides easily when overlaying slippery sedimentary clays. In addition, much of downtown is built over unconsolidated sediments and artificial fills. The deep-seated vibrations of earthquakes can consolidate these soils, which can cause severe damage to buildings.” (p. 68, Refer to Figure 10)

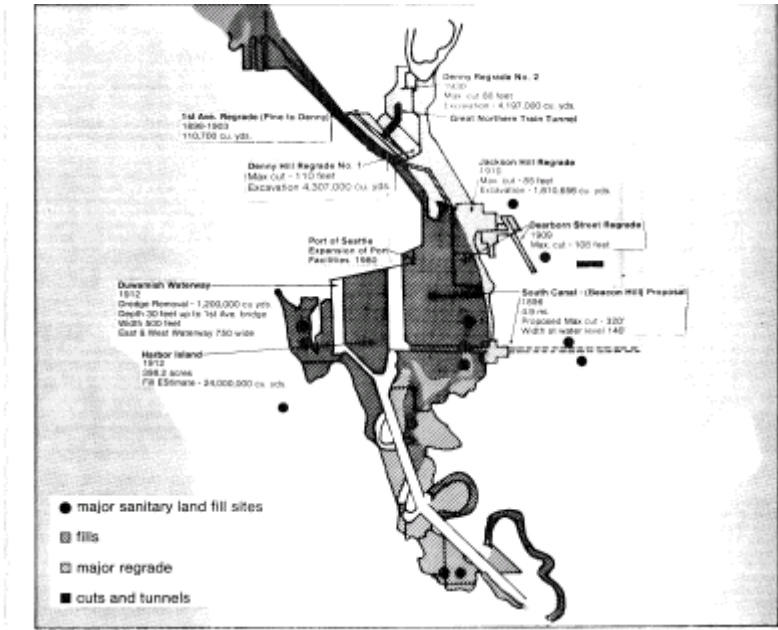


Figure 10: Map of Major Landfill Areas

The City of Seattle has adopted the special regulations and guidelines set forth by the Uniform Building Code that specify how buildings should be designed in order to

resist seismic stresses. These specifications vary in accordance to construction types and techniques, and establish seismic zones of varying intensities.

“The Uniform Building Code uses a five zone system, from Zone 0—no damage—to Zone 4—major damage sustained. This system is derived from the Modified Mercalli Intensity Scale, intensities V or greater, in conjunction with known major fault systems. This scale, developed in 1931, describes intensities of seismic activity by the degree of damage caused to buildings. The Seattle area is rated in the UBC as a Zone 3; major damage—corresponding to intensity VIII and higher on the Modified Mercalli Scale.” (p. 68)

2.5: Program Tabulation

SEATTLE UNDERGROUND HEADQUARTERS

Entry/Vestibule	150 sq.ft.
Ticketing	200 sq.ft.
Main Lobby	500 sq.ft.
Information Desk	100 sq.ft.
Receiving Room (Seattle Underground Tour collection room)	800 sq.ft.
Exhibition Hall	1500 sq.ft.
Men’s Public Restroom	500 sq.ft.
Women’s Public Restroom	500 sq.ft.
Storage Room	500 sq.ft.
Elevator Lobby	200 sq.ft.
Entry/Vestibule into Underground Tunnels	200 sq.ft.

SEATTLE UNDERGROUND SUPPORT REQUIREMENTS

Director's Office	300 sq.ft.
Secretary's Office	150 sq.ft.
Entry/Vestibule	200 sq.ft.
Ticketing	200 sq.ft.
Main Lobby	850 sq.ft.
Greeting/Information Desk	200 sq.ft.
Museum Store	2000 sq.ft.
Storage	500 sq.ft.
Café, Kitchen	2500 sq.ft.
Storage	500 sq.ft.
Auditorium (includes stage/platform)	4500 sq.ft.
Control Room/Projection Room	300 sq.ft.
General, A/V Storage	1000 sq.ft.
Children's Room	700 sq.ft.
Men's Public Restroom	500 sq.ft.
Women's Public Restroom	500 sq.ft.
Special Exhibition Gallery	3500 sq.ft.
Seattle History Learning Center	1500 sq.ft.
Hall of Industry Gallery	1500 sq.ft.
Native American Gallery	3000 sq.ft.
Six (6) Staff Offices @ 150 sq.ft. each	900 sq.ft.
Meeting Room	300 sq.ft.
Copy Room	100 sq.ft.

Employee's Lounge	250 sq.ft.
Men's Staff Restrooms	300 sq.ft.
Women's Staff Restrooms	300 sq.ft.
Storage Rooms, Two (2) @ 150 sq.ft. each	300 sq.ft.
Kitchen	250 sq.ft.
Vertical Circulation	
Passenger Elevators, Two (2) @ 75 sq.ft. each	150 sq.ft.
Freight Elevator	100 sq.ft.
Fire Stairs, Two (2) @ 175 sq.ft. each	350 sq.ft.
General Circulation, 30% of program sq.ft. total 30% of 9200 sq.ft.	2760 sq.ft.
Mechanical Room	920 sq.ft.
Loading Platform	400 sq.ft.
SEATTLE UNDERGROUND HEADQUARTERS SQUARE FOOTAGE SUBTOTAL	13,230 sq.ft.
<u>THE MUSEUM OF THE CITY OF SEATTLE</u>	
Historical Documents Gallery	3000 sq.ft.
Modern Science and Technology Gallery	2000 sq.ft.
Commerce gallery (Boeing, Microsoft, Starbucks, REI)	4000 sq.ft.
Pacific Rim Gallery	3000 sq.ft.
Gallery Storage	5000 sq.ft.
<u>M.C.S. ADMINISTRATION AND SUPPORT</u>	
Head Curator's Office	500 sq.ft.
Administrative Assistant's Office	250 sq.ft.

Ten (10) Staff Offices @ 150 sq.ft. each	1500 sq.ft.
Meeting Room	500 sq.ft.
Copy Room	150 sq.ft.
Employee's Lounge	300 sq.ft.
Storage Rooms, Three (3) @ 150 sq.ft. each	450 sq.ft.
Kitchen	300 sq.ft.
Men's Staff Restrooms	300 sq.ft.
Women's Staff Restrooms	300 sq.ft.
General Circulation, 30% of program sq.ft. total 30% of 50,500 sq.ft.	15,150 sq.ft.
Mechanical Room	5,050 sq.ft.
THE MUSEUM OF THE CITY OF SEATTLE SQUARE FOOTAGE SUBTOTAL	70,700 sq.ft.
General Parking 250 spaces @ 275 sq.ft. each	68,750 sq.ft.
TOTAL BUILDING SQUARE FOOTAGE	152,680 sq.ft.

Chapter 3: Precedent Analysis

3.1: Precedent Number 1: Seattle Art Museum

The Seattle Art Museum is an interesting precedent to consider in analyzing with respect to this thesis project, as both are located in downtown Seattle and both occupy corner sites within their context.

Like many large buildings in downtown Seattle, the Seattle Art Museum uses grand, open stairs as an elegant means to negotiate changes in level, in both interior and exterior realms. (Refer to Figure 11) The interior stairs serve as an architectural promenade, signifying the importance of what lies ahead within the exhibit halls. The exterior stairs along Cherry Street act as public space, a place to read a newspaper or take lunch. An even more popular example of this can be seen in the outdoor stairs and fountain, near the Pike Place Market to the north.

Venturi, Scott Brown and Associates articulated the façade along Cherry Street and the exterior stairs as a series of “shop fronts” that march up the hill toward Second Avenue. Instead of peeping in to examine goods, however, people on the street can view the extension of the stairs inside the building, along with some impressive and strategically placed sculptural figures.

Rather than mark the main entrance to the museum, located at First Avenue and Cherry, with a pronounced change in form or material, the architect chose a more subtle approach. The “shop front” articulation wraps around to both the First and

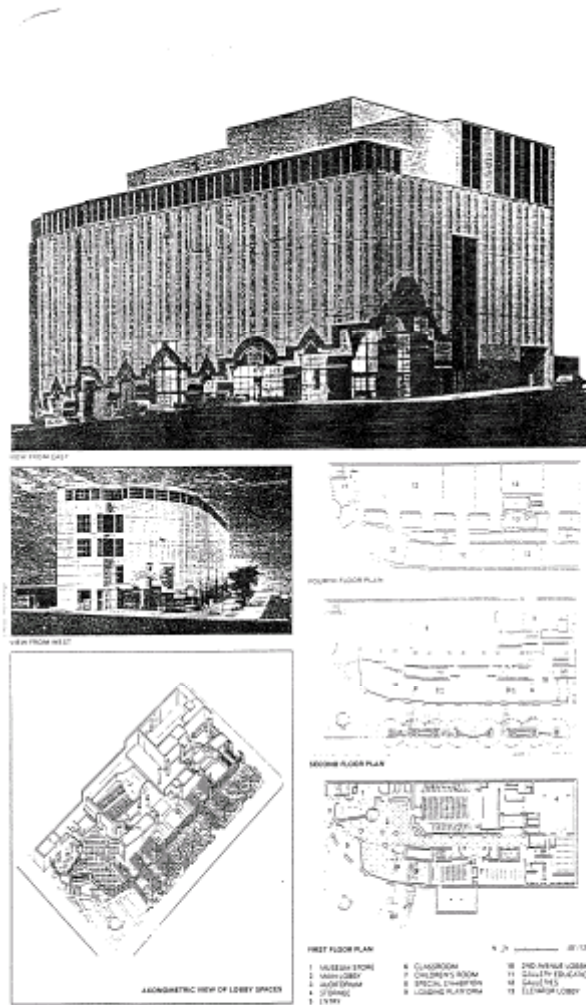


Figure 11: Seattle Art Museum

Second Avenue entrances, becoming more distinct and larger in scale than the section in the middle that runs the length of the stairs. The subtle curvature of the skin of the building, a Post Modernist nod toward the fluting of classical columns, leads visitors from the small public space at the main entry in to the lobby and up the grand stairs. The placement and presence of the enormous (and active) “Hammering Man” sculpture at the main entrance provides another indicator of the significance of the location.

The Seattle Art Museum, I believe, is a valid and useful example as a precedent for this thesis. It is a successful example of how a large, public building can address an urban corner location and manage a change in grade by developing an exterior stair that is designed on a public scale.

3.2: Precedent Number 2: Washington State History Museum

This building, located in Tacoma, Washington, was Charles Moore's last project. Ten days after the groundbreaking ceremony in 1993, Moore died. ("Architectural Record, October 1996, p.73)

I chose this project as a precedent for this thesis for several reasons, one being that the Washington State History Museum creates a strong urban connection through the creation of an outdoor public space. Moore's design features a sunken, outdoor amphitheater for use as a gathering space for lectures and as an assembly space. This amphitheater connects the concourse floor level with the main street entry level.

(Refer to Figure 12)

Additionally, the exterior of the museum is articulated in massive masonry and metal arches, a vocabulary that ties the new building to the adjacent Union Station depot, one of the more architecturally valuable assets within the city of Tacoma. Moore's use of material and forms displays a strong but sensitive regional approach to the design of the museum in the urban setting. (Refer to Figure 13)

Lastly, the museum relies heavily on interactive displays through nearly all of the exhibits. Children are encouraged to touch and engage in the exhibits and are even quizzed in a fun, relaxed learning environment.

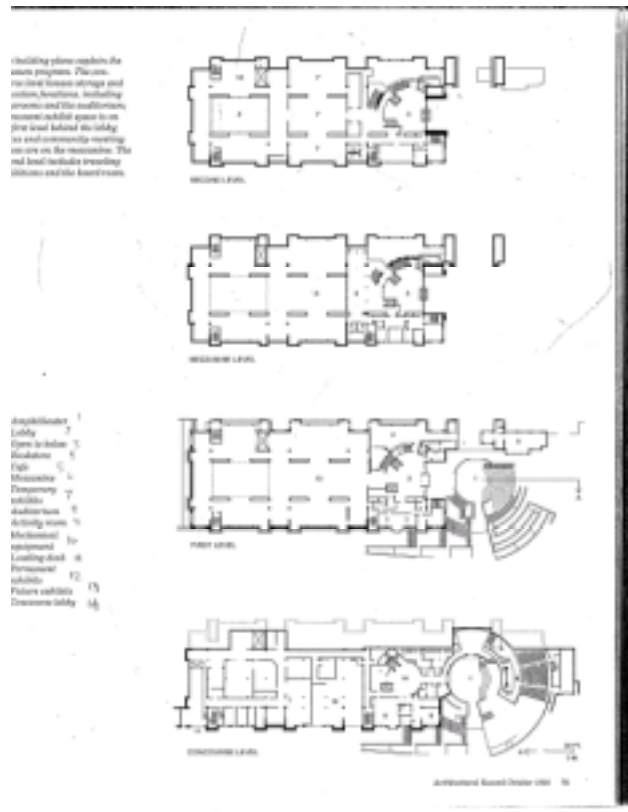


Figure 12: Washington State History Museum , floor plans

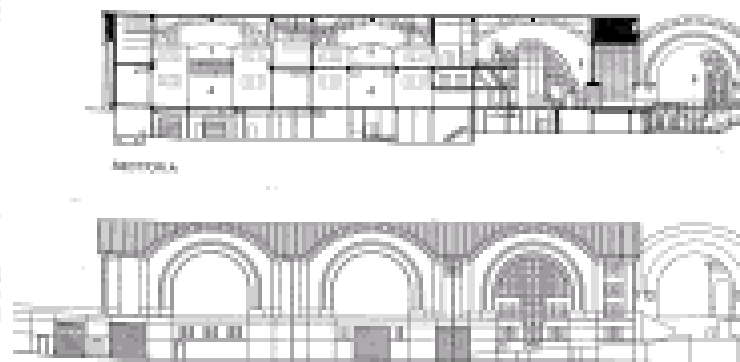
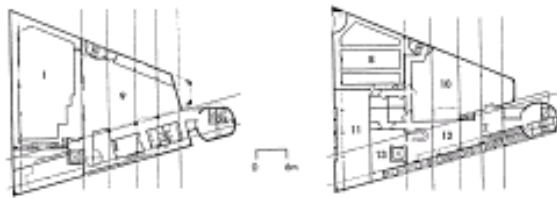


Figure 13: Washington State History Museum , elevations

3.3: Precedent Number 3: Pointe-a-Calliere Archaeological Museum

This project is very interesting as a precedent analysis in relation to this thesis, as many of the design elements are very similar. The Canadian architect Dan S. Hanganu designed this museum, located in Montreal. (“The Canadian Architect, October 1992, p.20) In his design on a triangular site, the architect chose a stylized clock tower as a formal element to turn the corner of the site and provide a visual focal point. The entry tower also serves a reminder of a building that used to exist on this site, the Royal Insurance Company Building, which was demolished in 1947. (ibid., p.23, refer to Figure 14)

Additionally, the lower level of the museum allows access through an underground aqueduct to a “Crypt” level. This level is beneath the nearby Place Royale, an open, public space, and offers visitors a glimpse of an old stockade from an 18th century fort. (ibid., p.22, refer to Figure 15)



LEVEL TWO

LEVEL THREE



STREET LEVEL



ARCHAEOLOGICAL LEVEL

ÉPILON AND CRYPT, POINTE-A-CALLIÈRE

Located in Montreal's Old Port area, the site marks the point of land facing the St. Lawrence River where Maisonneuve and Jeanne Mance landed and settled 350 years ago. The "Épilon" is one of three components to the museum. It contains the main entrance and a large multi-media hall whose galleries sit over the exposed foundations of buildings below. These layers include the 1952 Royal Insurance Company building, two earlier houses and a cemetery dating from 1643. On the upper levels is exhibition space and a restaurant overlooking the port and exhibition space.

From the basement visitors proceed through a 15th century underground passage and into the museum's second component, the "Crypt" below Place Royale, where they see the city's original fort stockade posts and the 18th century foundations. On the far side of Place Royale—still underground—the visitor enters the third component, the restored Customs House (see page 26).

The Épilon has the same triangular footprint, proportions and volumes as the Royal Insurance building which was demolished in 1947 to make a parking lot. Thus the new building recreates the former view along Place d'Youville along the north, and repairs the continuity of the street fabric on De la Connaissance. Place Royale is preserved as an open public space, knitting the complex into the urban fabric.

Client: Ville de Montréal / La Société d'histoire de la Pointe-a-Callière / Direction de Montréal

Architect: Dan S. Hargrave / Reverend Roy, Architects. Design team: Dan Hargrave (principal), Thomas Schweitzer, Luc Plante, Gilles Faudhomme. Project team: Michel Roy (principal), Claude Tremblay, Alain Desjardis, Alain Gagnon, Jacques Bédard, François Poirier, Guy Pigeon

Structural: Nicolas Chartrand / KAC
Mechanical & Electrical: Liberson, Roy, Caron et Associés, Inc.

Museography: GSM Design (multi-media); Le groupe d.e.s. inc. (archaeology); GID Design (temporary exhibits)

Photos: J. Rodvick Chan, Thomas Schweitzer, François Poirier

Figure 14: Pointe-a-Calliere, floor plans

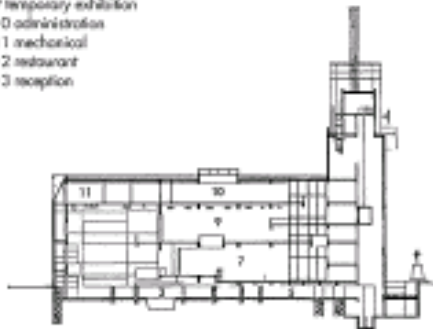


Royal Insurance Company Building, demolished in 1947.

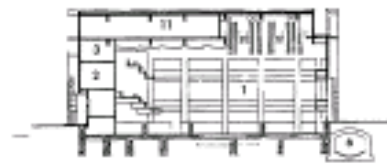


Main entrance facing Place Royale.

- 1 multi-media room
 - 2 boutique
 - 3 cemetery
 - 4 exhibit
 - 5 archaeological remains
 - 6 old conduit for St-Pierre river
 - 7 foyer
 - 8 void
 - 9 temporary exhibition
 - 10 administration
 - 11 mechanical
 - 12 restaurant
 - 13 reception
- A Ejeon
 - B Crypt
 - C Customs House



LONGITUDINAL SECTION



CROSS-SECTION THROUGH MULTI-MEDIA ROOM



RUE DE LA COMMUNE (SOUTH) ELEVATION



CROSS-SECTION THROUGH CRYPT

October 1992 

Figure 15: Pointe-a-Calliere, sections, elevations, photos

Chapter 4: Design Approach

4.1: Discussion of Conceptual Design Strategies

The Excavation Space

One of the primary design objectives of this thesis was to attempt to create a successful urban space that relates to both the new building and the urban surroundings. By “excavating” the bulk of James Street that extends between First and Second Avenues, a physical connection can be established between this new public space and Pioneer Square. The new space can even be viewed as an extension of Pioneer Square itself. The boundaries and defining edges of the space, those being the existing Pioneer Building and the new museum structure, open outwards as a pair of embracing arms to welcome visitors. The grand stairs that lead up to Second Avenue provide a focal point for viewers along First Avenue and Pioneer Square. Canopy structures line both sides of this space to provide shelter, as well as mimicking the forms and vocabulary of the cast iron pergola that exists in Pioneer Square. Finally, the opening up of the lower level of the Pioneer Building can provide some additional retail opportunities for this area to draw people into the new space.

The Urban Corner

Another very important design consideration in this thesis was to develop a dominant entry point and landmark, one that worked functionally within the floor plan, and also

provided an image or face for the new museum. The selection of a cylindrical tower element was based on two factors. The circular space in plan provides a logical solution to circulation through the building, acting as a hub or node within the plan. Also, the arc of the circle provides a resolution of the urban corner, uniting the two facades of the building that would otherwise meet at a very sharp angle. Furthermore, the tower offers views of Elliott Bay and the Olympic Mountains to the west, for museum visitors on the upper level. (Refer to Figure 16)

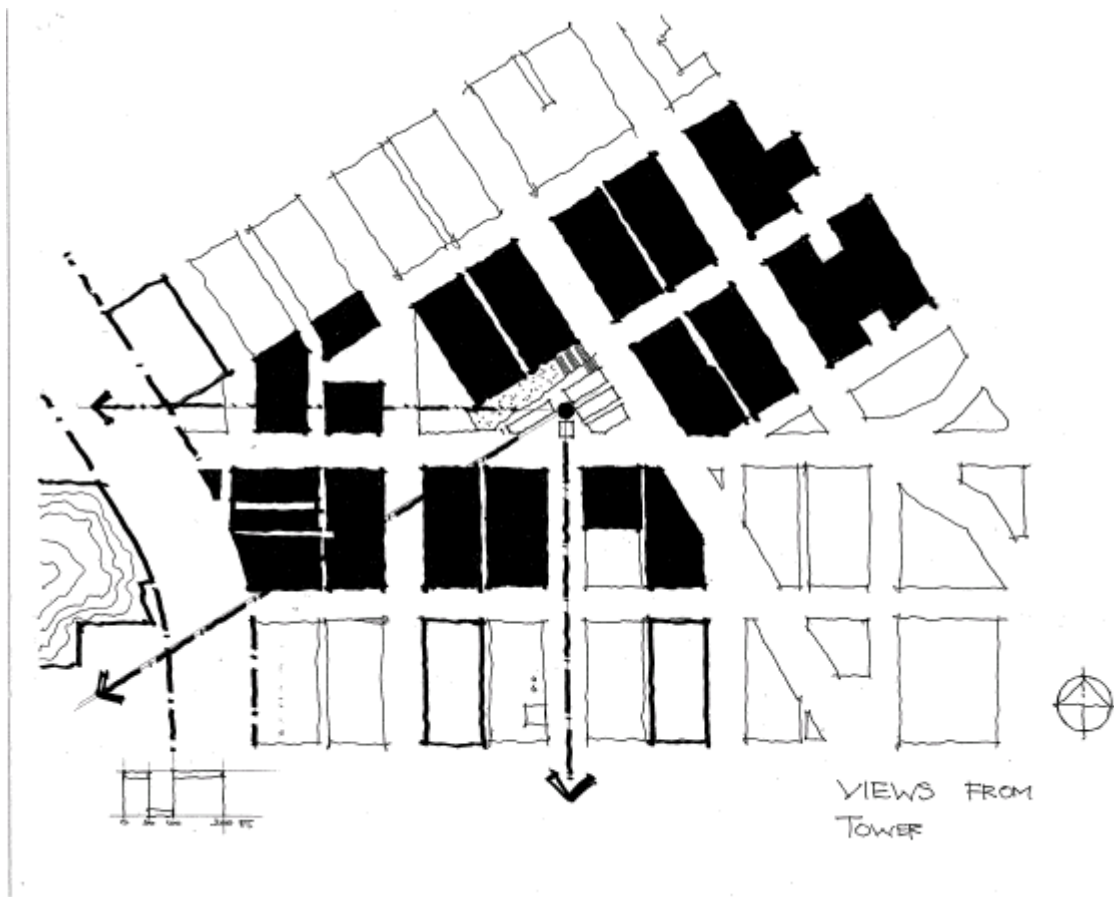


Figure 16: Diagram of views from tower

Urban Context

My choice of using brick as the primary exterior finish and cladding of the building is an attempt to relate the new museum to the its urban context. Pioneer Square is perhaps the most well preserved district of Seattle that has remained more or less intact from the re-building days of the city following the Great Seattle Fire. Brick and terra cotta are the most widely used materials in this area, so the choice for using this material again was clear. Many buildings have arches articulated over entry doors and windows. The arched opening at the Yesler entry is another attempt to tie the expression and vocabulary of the new museum into the existing character and urban quality of the Pioneer Square Historic District.

4.2: Parti Analysis

Parti Number 1

This design concept focuses on two ideas for exploration: first, that the primary or unique feature would be a cylindrical mass that rises from the approximate center of the new building, and second, that the massing of the building would be broken into two separate, discreet volumes. (Refer to Figure 17) The “break” in the middle of



Figure 17: Plan diagrams of Parti One

the two masses was intended as a means of establishing a stronger urban connection with Occidental Place. (Refer to Figure 18)

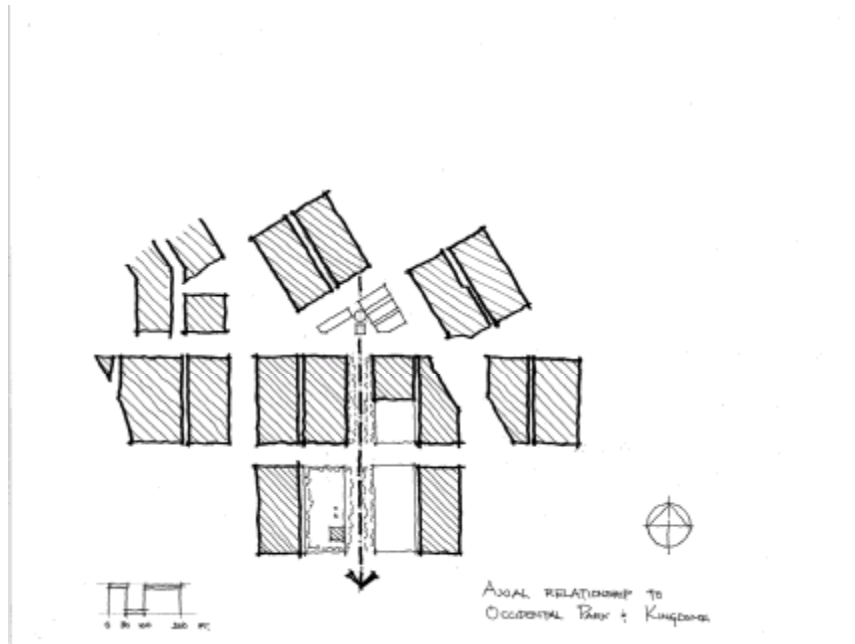


Figure 18: Plan diagram of relationship to Occidental Place

Parti Number 2

This second concept again uses the strong geometric form of the cylinder to announce an entrance. The entry in this scheme, however, was placed at the intersection of Second Avenue and Yesler Way. The resolution of the triangular tip of the site at Pioneer Square was articulated with a broad sweeping arc in the footprint of the building. (Refer to Figure 19)

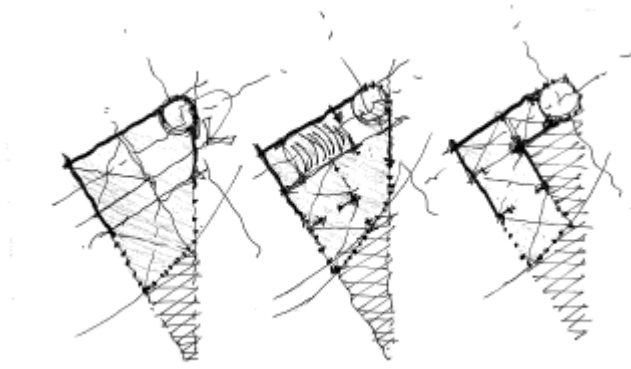
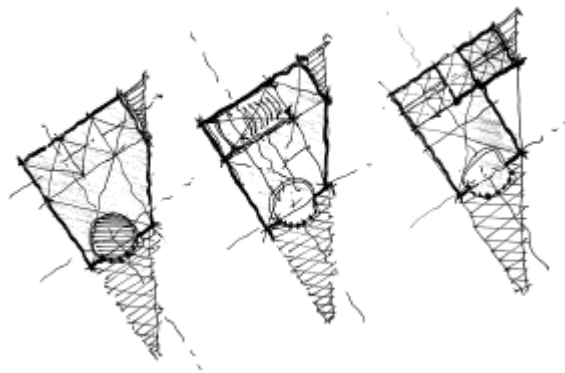


Figure 19: Plan diagram of Parti Two

Parti Number 3

The third and final design concept is closest to the final design that I chose to develop for this thesis. In this concept, the tower element is again featured, yet addresses the open space of Pioneer Square. In the final plan, the entry tower extends further out, engaging the square and providing a larger footprint. (Refer to Figure 20)

Figure 20: Plan diagram of Parti Three



The following sketches (Figure 21) are massing diagrams associated with all three of the partis that were outlined above:

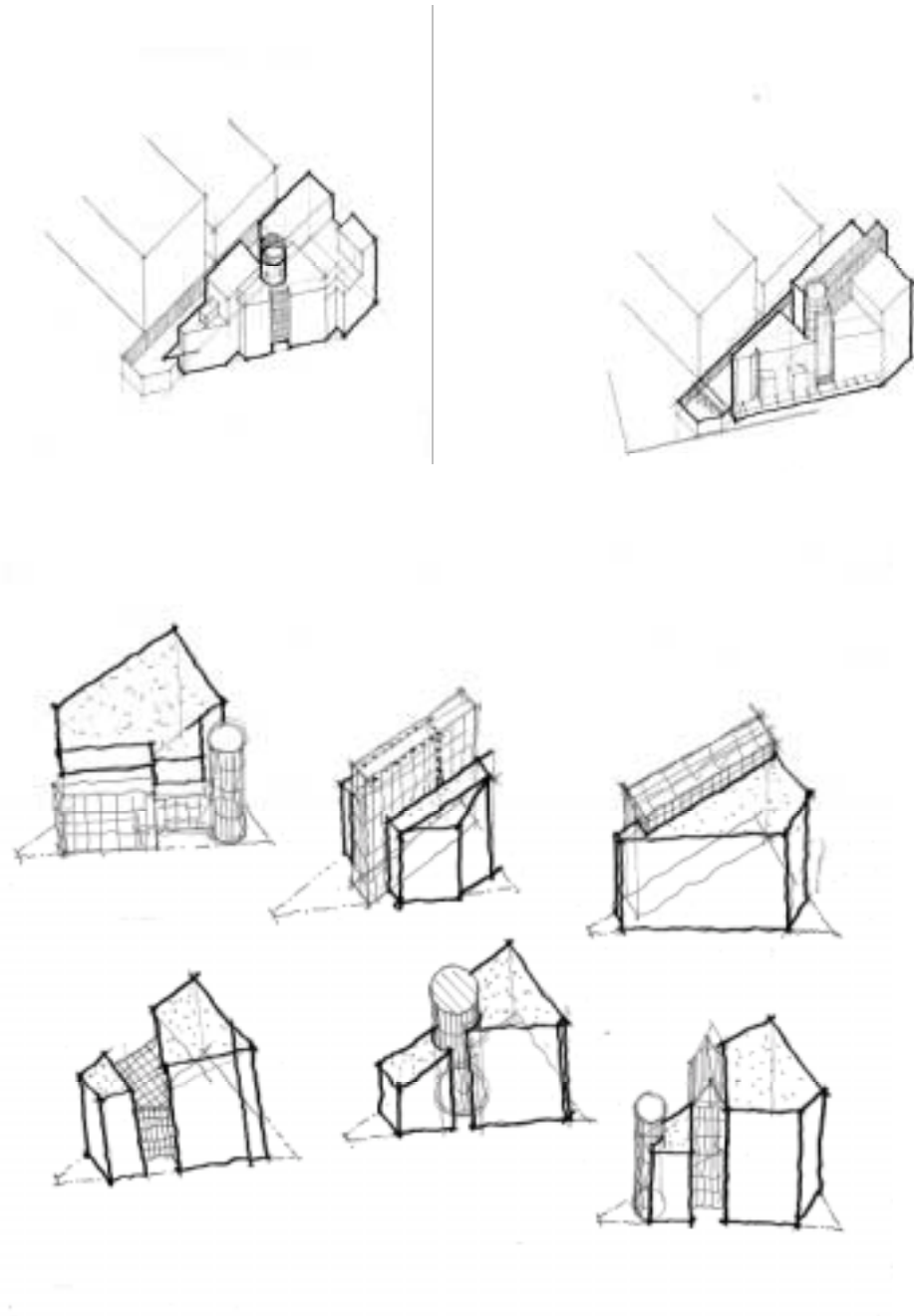


Figure 21: Massing diagrams

Chapter 5: Conclusions

5.1: Final Plans and Drawings

The following pages illustrate the final design drawings of The Museum of the City of Seattle, including plans, sections, elevations and perspective sketches.



Figure 22: Site Plan



Figure 23: Figure Ground

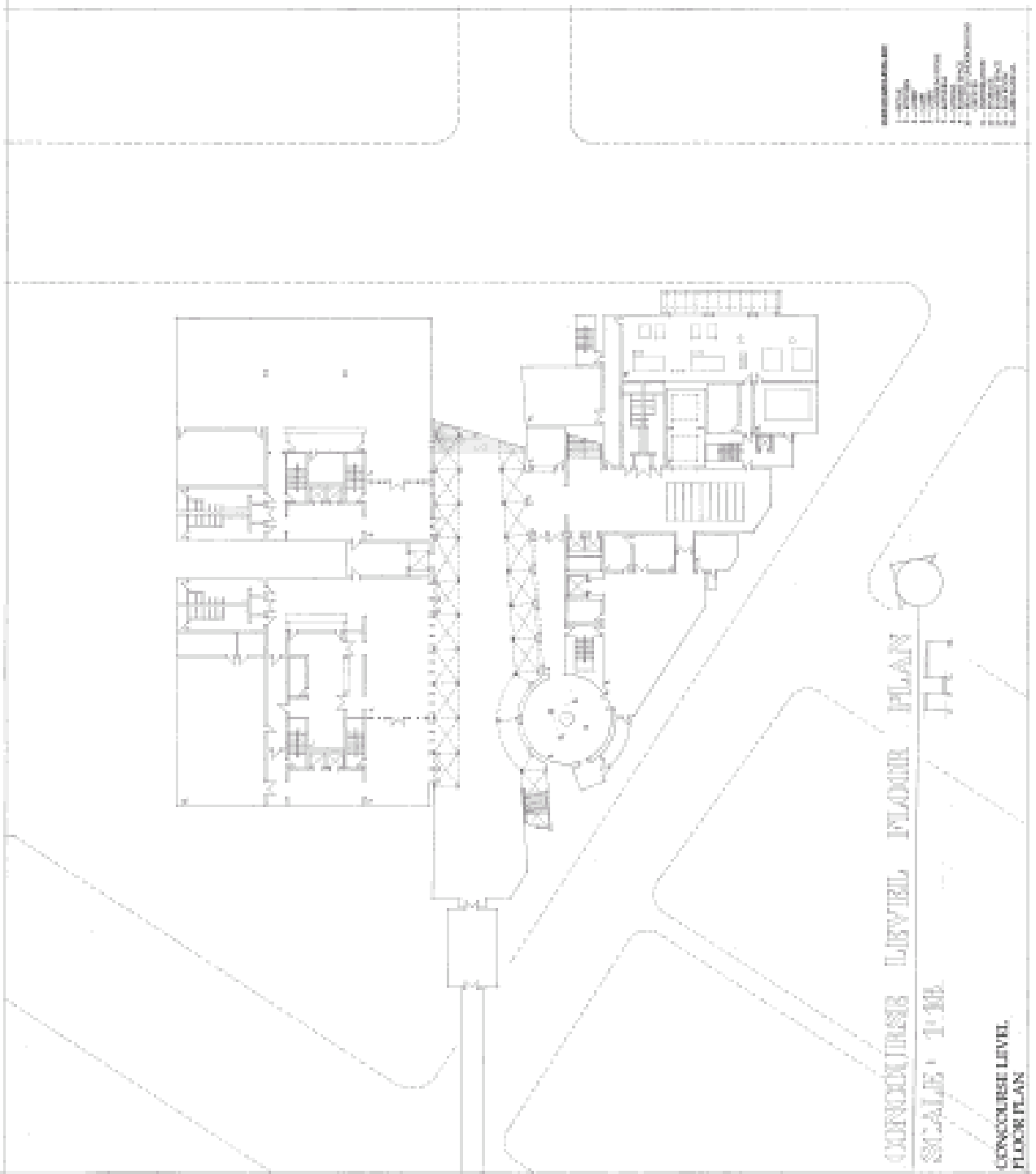


Figure 24: Concourse Floor Plan

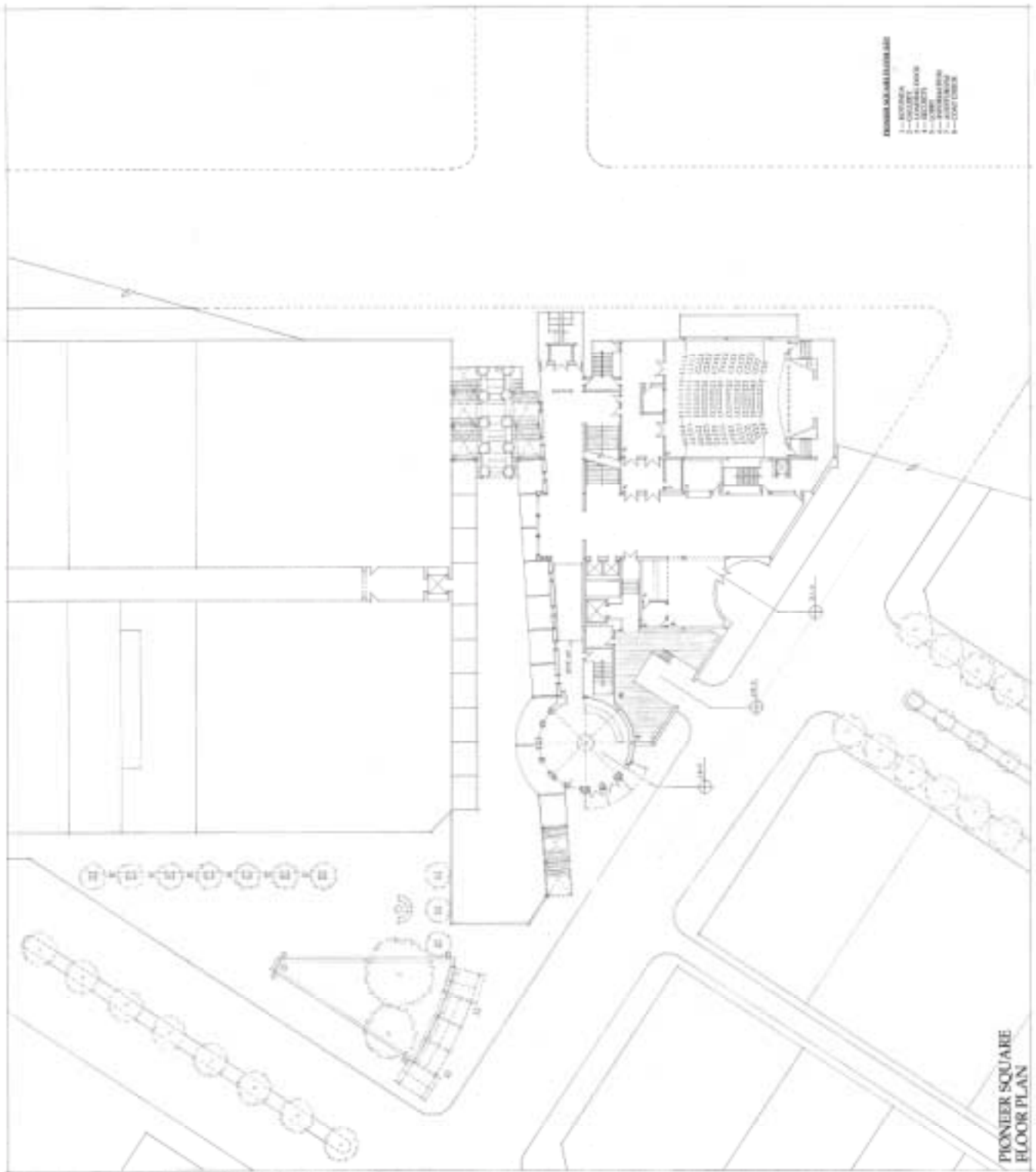


Figure 25: Pioneer Square Floor Plan

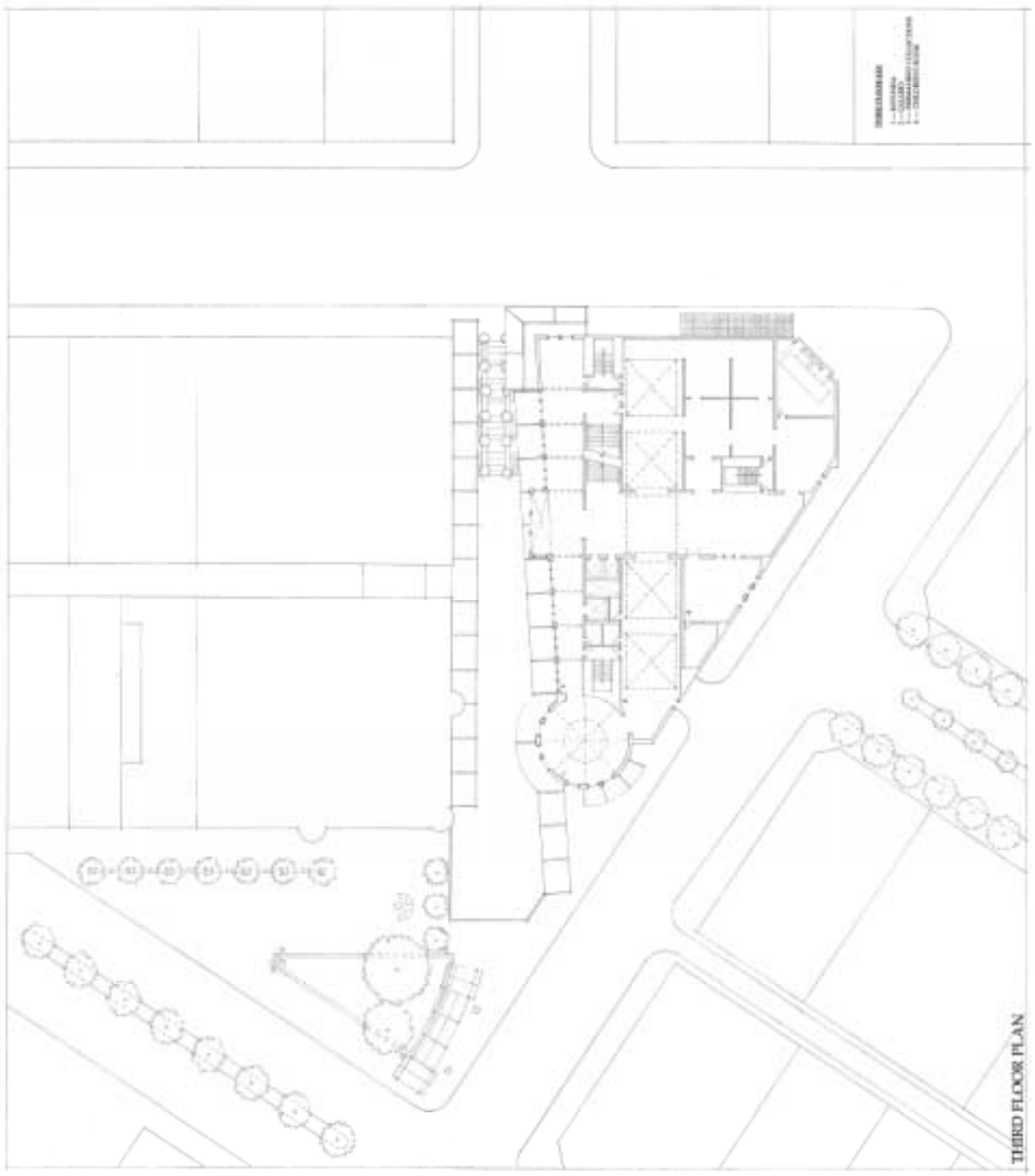


Figure 26: Third Floor Plan

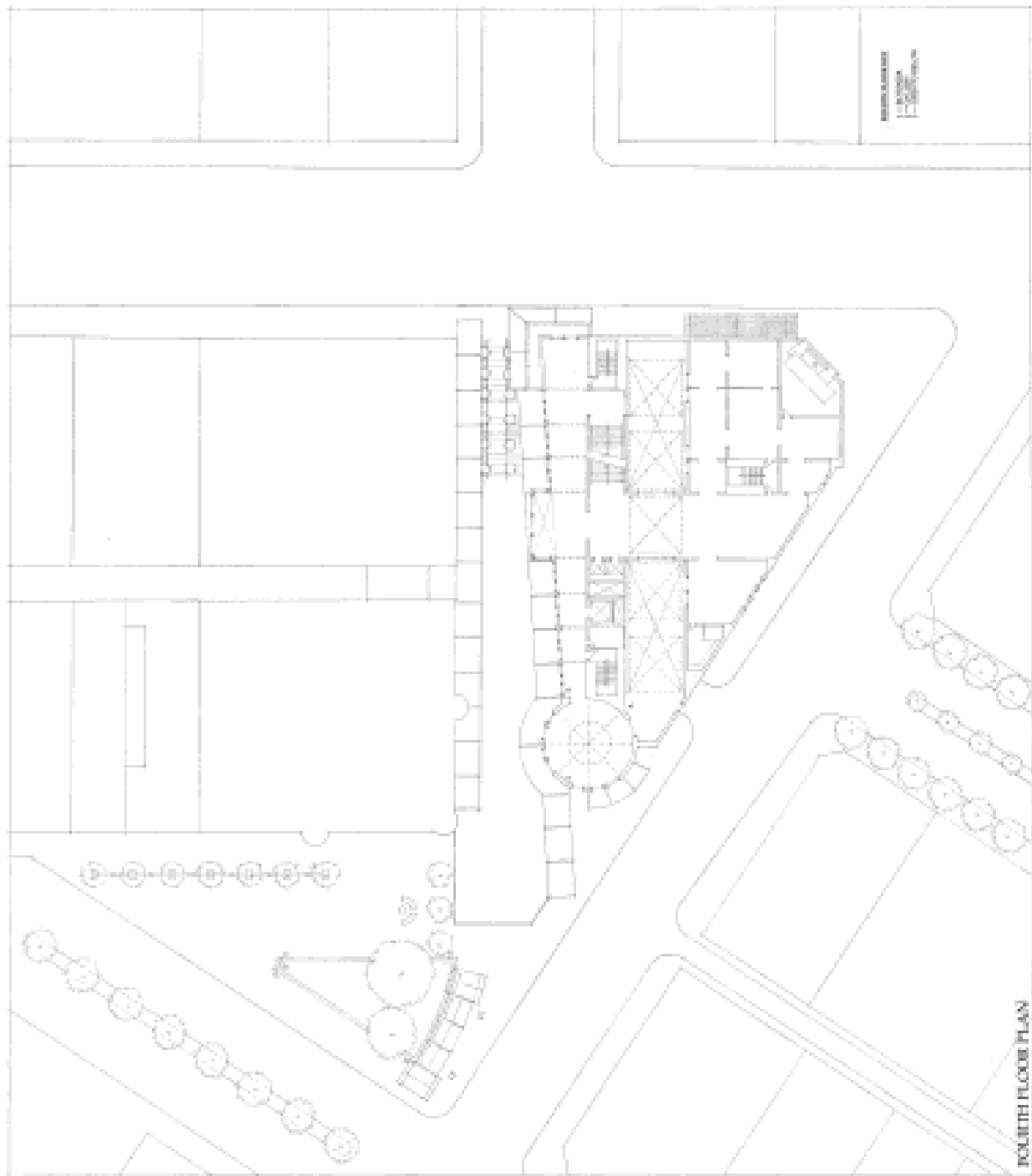


Figure 27: Fourth Floor Plan

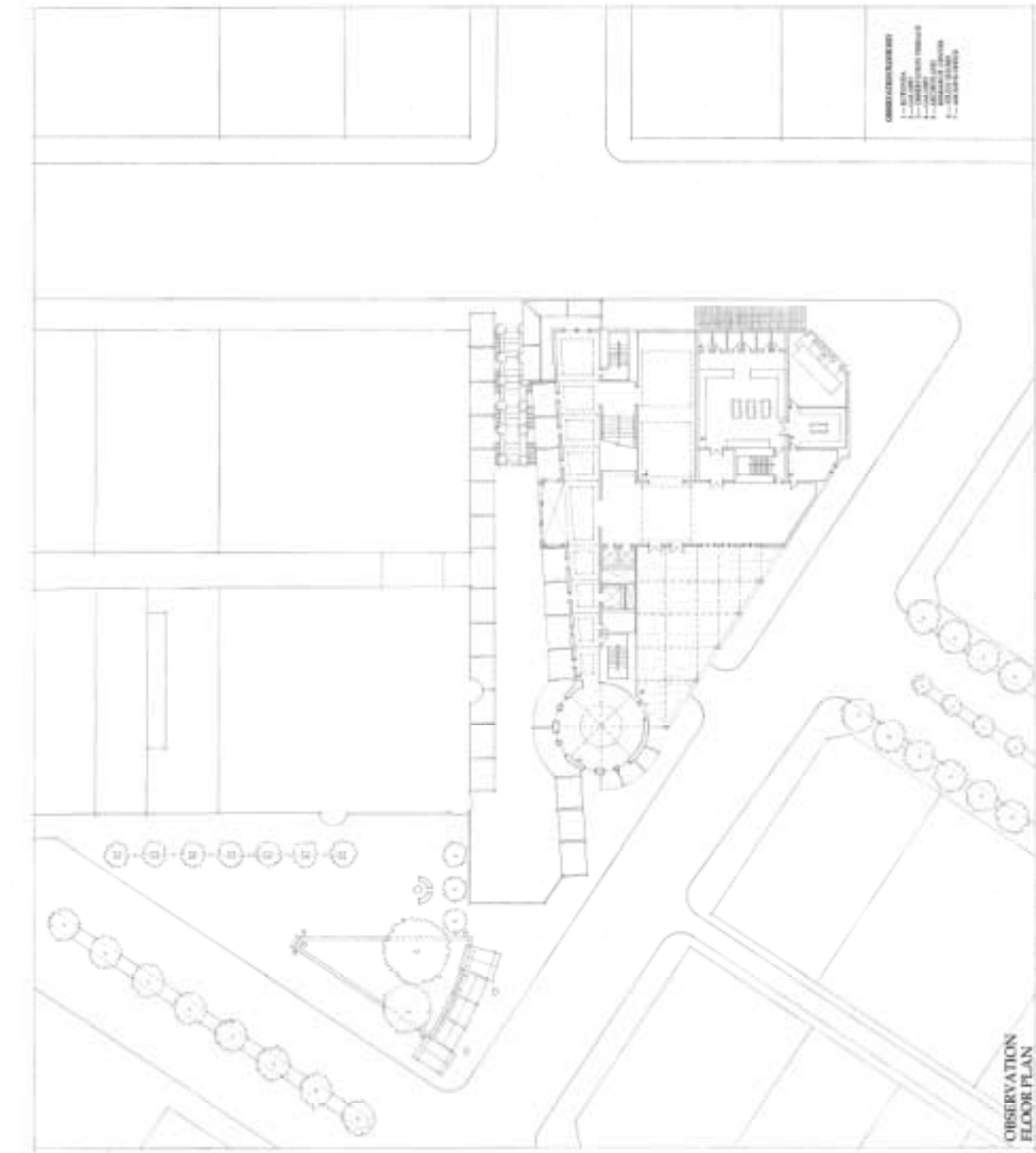


Figure 28: Observatory Floor Plan

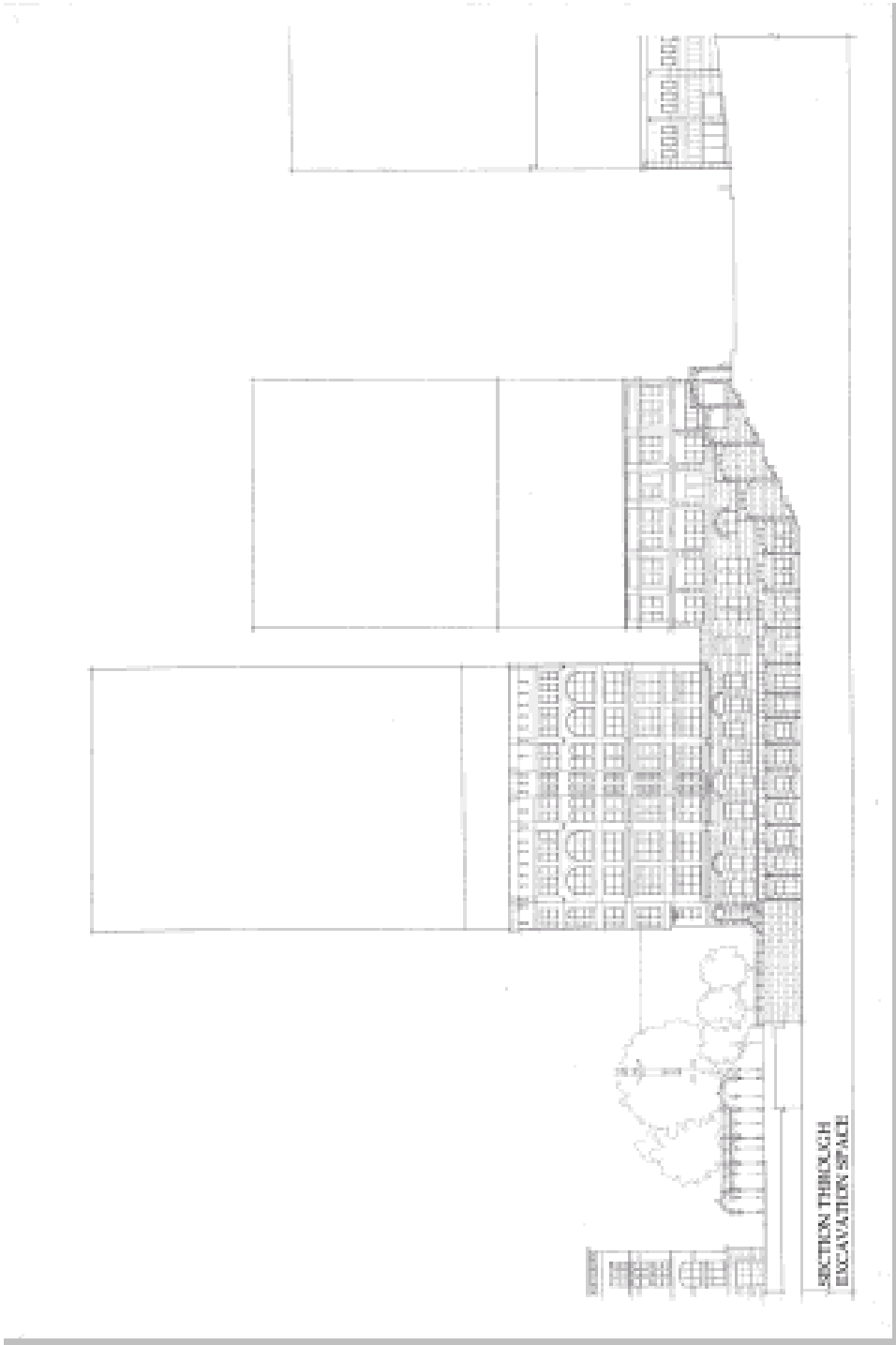
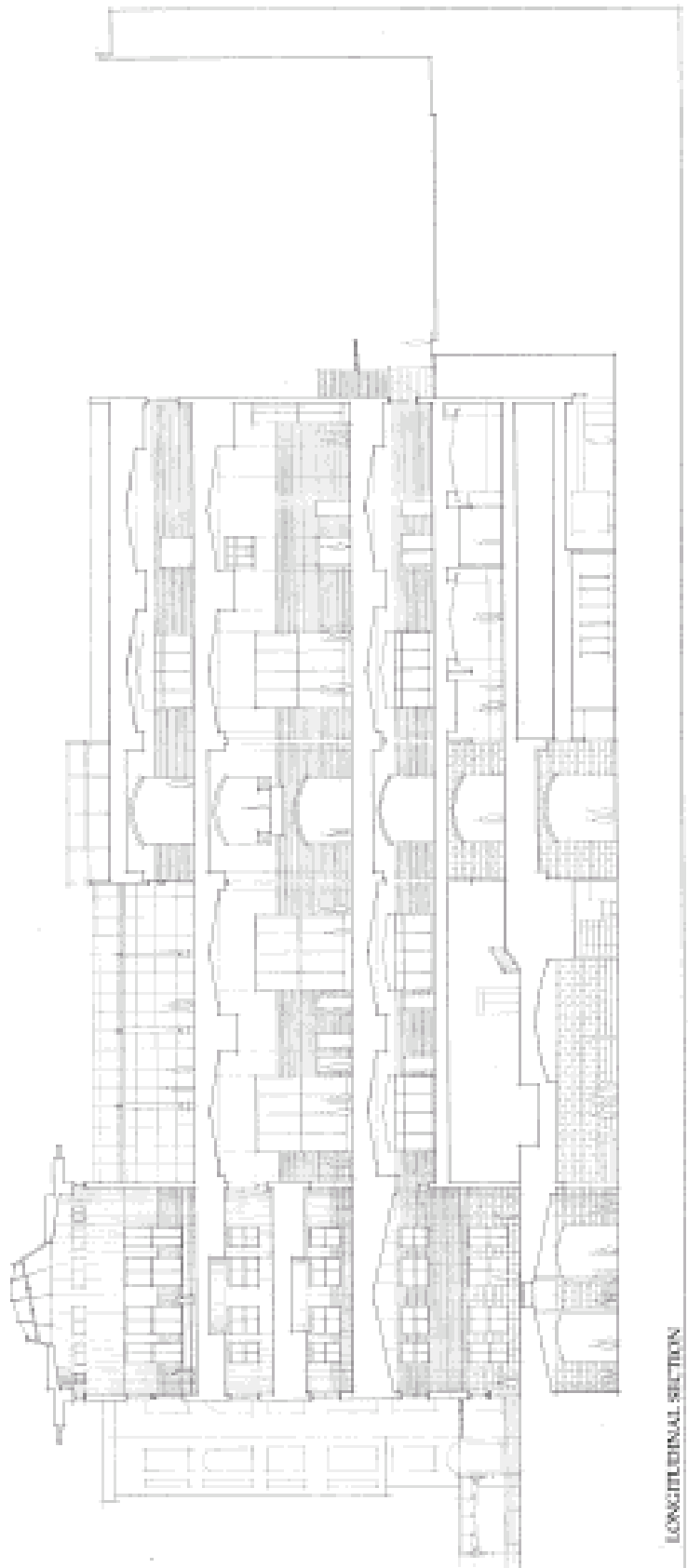


Figure 29: Section through Excavation Space



LONGITUDINAL SECTION

Figure 30: Longitudinal Section

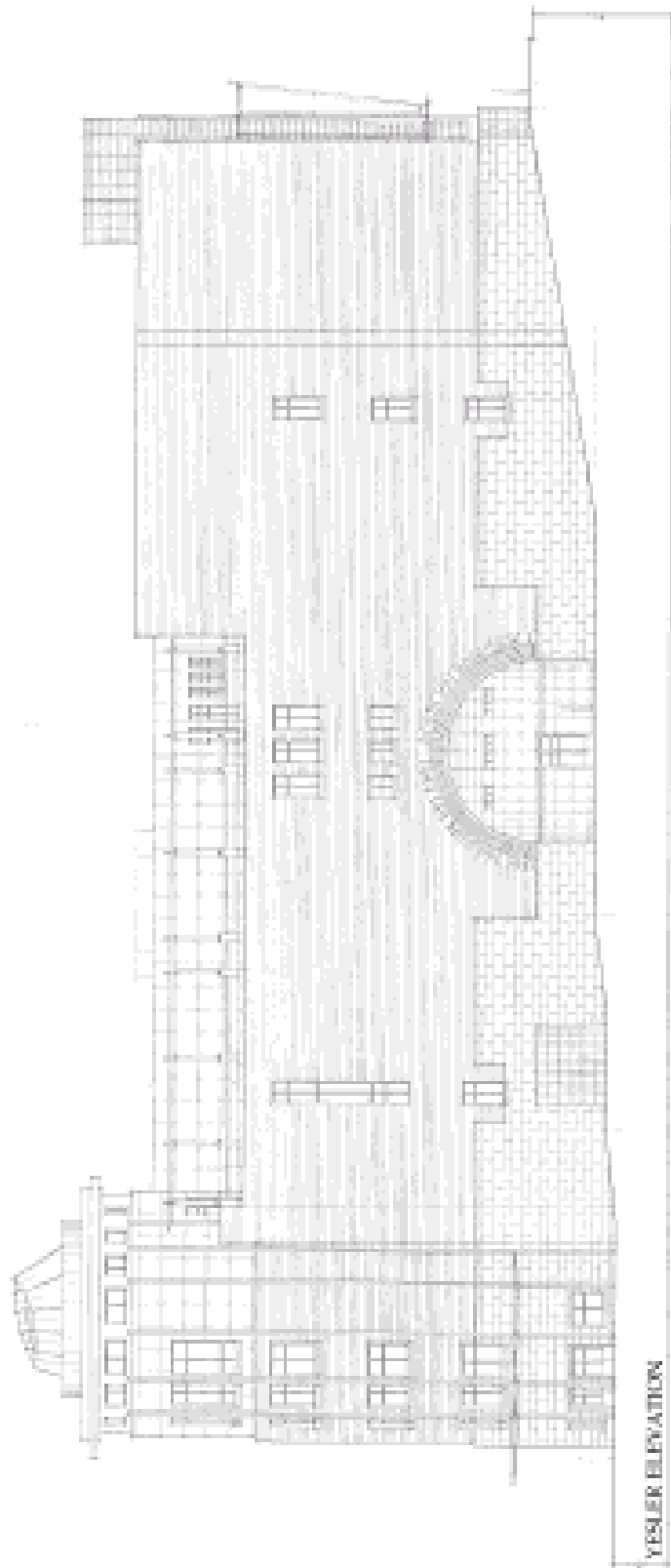


Figure 31: Yesler Elevation

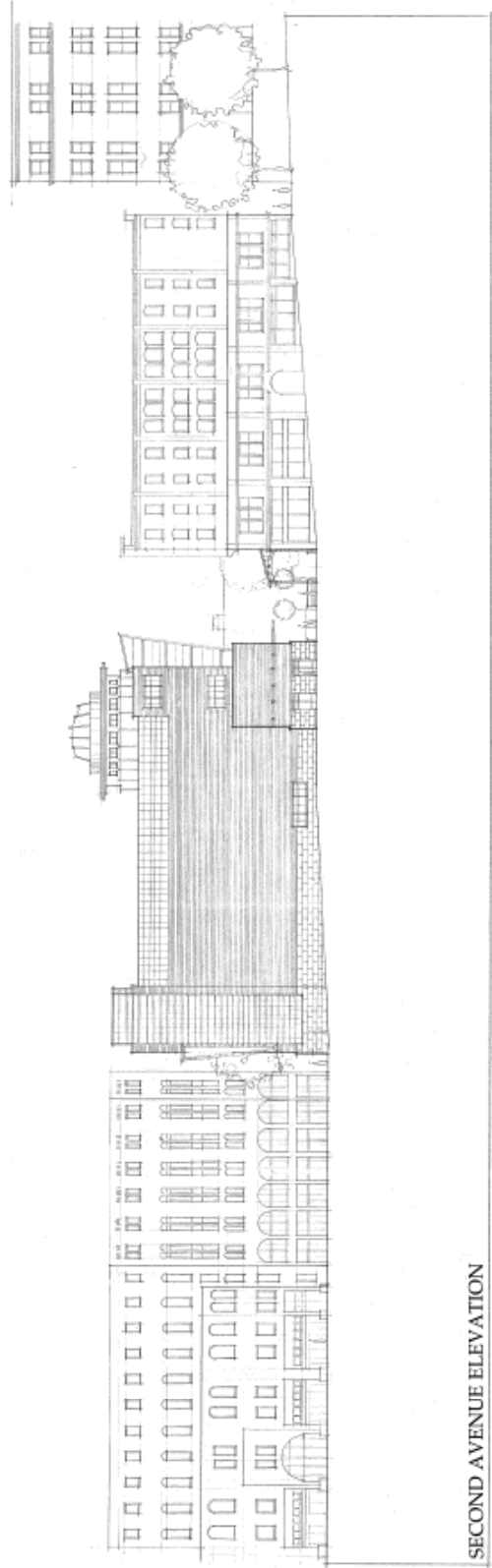


Figure 32: Second Avenue Elevation



Figure 33: Perspective Sketch of Yesler Entrance



Figure 34: Perspective sketch of tower

5.2: Summary

The final thesis design is a thoughtful response to the many urban, site-related, programmatic and historical aspects of the design challenge. The final concept unites two separate and disparate entities, the new history museum and the Seattle Underground Tours, and provides a meaningful relationship between them. A new public space is formed from the opportunity to access the Underground Tour with the creation of the “Excavation Space.” The Yesler entrance provides a terminus and focal point for Occidental Avenue while providing a connection between two existing urban spaces, Occidental Park and Pioneer Square. The new observation tower and entry at Pioneer Square provides another urban focal point, as well as an intellectual restoration of the memory of the Occidental and Seattle Hotels that used to exist on the site.

In closing, recent developments indicate that the current Museum of History and Industry (MOHAI) is planning to relocate to downtown Seattle from Montlake and is currently in the design and planning phase. The new history center will be located at 800 Pike Street. The following is a preliminary rendering of the entrance to the new



Figure 35: Rendering of proposed new MOHAI

museum. (Refer to Figure 35) More information on the planning efforts and progress can be obtained by visiting www.seattlehistory.org.

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9. "Architectural Record" October 1996