

ABSTRACT

Title of Thesis: Water Culture House – DUMBO, Brooklyn

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This thesis begins with an investigation of a waterfront site in Brooklyn and proposes a program that draws upon Brooklyn's rich immigrant history and memory, in the form of a Water Culture House. The proposed Water Culture House would contain programmatic elements of a bathhouse and hotel. In addition, this proposal would incorporate the "ruins" of an old tobacco warehouse that currently occupies part of the site. The inclusion of this ruin would capture "memory" in the physical sense, while the program of the bathhouse would invoke "memory" more abstractly as it recalls the cultures that have shaped Brooklyn over the centuries.

This site is located in an area of Brooklyn called DUMBO – Down Under the Manhattan Bridge Overpass, which literally lies in the space between the Brooklyn anchorages of the Manhattan and Brooklyn bridges. DUMBO's character is very much defined by these two looming structures; one an elegant gothic relic, the other a cantankerous iron icon befitting old New York. The neighborhood still retains qualities of its industrial past with cobble stone streets and small trendy shops that have emerged in a quiet but growing

residential community. Other larger “lifestyle” businesses have begun to locate their showrooms and distribution centers in this area. This site offers fantastic views of lower Manhattan and Chinatown via the East River and is situated on State-managed parkland at the water’s edge.

WATER CULTURE HOUSE – DUMBO, BROOKLYN

By

Vicki Skovle

Thesis submitted to the Faculty of the Graduate School of the
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To a sister of mythic proportions – Ann – the world should know your wit, beauty, intellect and compassion.

Also on my mind – Adam. Nikki. Caitlin. Luis. Mirissa. Megan. Kate. Halley. Ricki. Calvin. Nadav. Sarah. Denise. Lisa. Lars... and couldn't have done it w/o... Arthur. Colleen. Jer Little. Joice,.SB...

And many thanks to MA and Brooke (“tha bomb”) Wortham.

“This station dull, boring, dull...” - Manu Chao

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Introduction

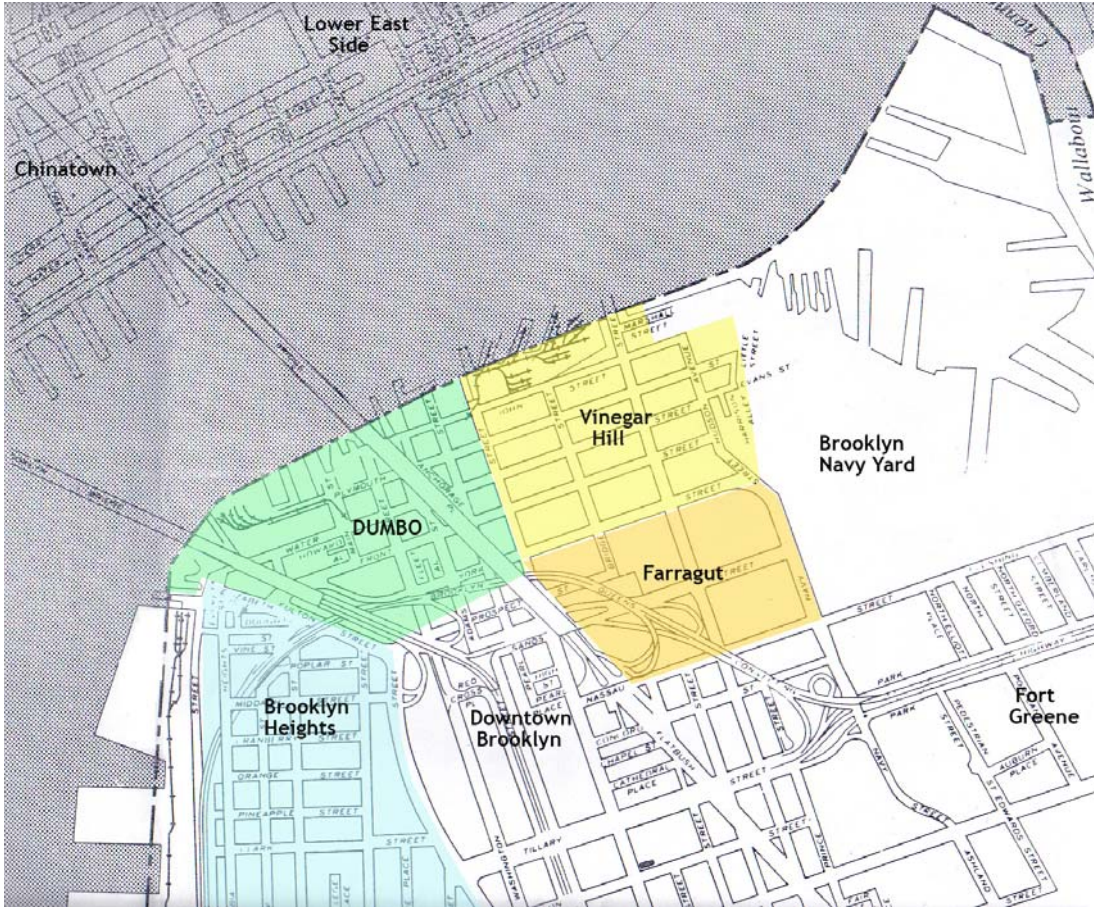
New York's location at the junction of the Hudson and East Rivers enabled the city's early settlement and development, and has informed its streets and industries. Waterfront symbols like Ellis Island have reflect the arrival of generations of new Americans, and have survived as cultural artifacts through the writings of Joseph Mitchell and Frank McCourt. Throughout the city's history, New York's waterfront has been emblematic of the conditions of society, and has expressed the economic and social pursuits of the time.

This thesis will explore DUMBO, an area of New York's waterfront, with a story that is representative of many American waterfronts. In DUMBO's case, the waterfront was exploited primarily to satisfy economic ends during settlement and industrialization. As a result, the course of city development was absolute, leaving few traces of the natural landscape. Subsequent economic and social advances rendered the fabric of this neighborhood obsolete. As societal activities moved away from the waterfront, the site was abandoned in its industrial state. Currently DUMBO is a catalogue of American history representing the failures and achievements of our society. The legacy includes among other things, two implausible bridges, industrial era warehouses and a poor and dangerous public housing development. More recently, DUMBO has been rediscovered, giving rise first to an artist community that converted the derelict loft spaces to art studios, and of late to the encroachment of luxury housing. These recent developments suggest that DUMBO's unique location and character are too valuable to be left underdeveloped during present times.

Within this story is a greater question, one which addresses the resettling of cities and the influence of the creative class in reshaping this landscape. It addresses the notion of culture and its role as a viable commercial generator. Is the waterfront a public amenity and can its value be captured without being negligently exploited as a century of industrial use has done? Can Brooklyn's waterfront development forgo purely economic pursuits and invest in culture as a method of revitalization? Will new uses of the waterfront involve turning this valuable resource over to line the pockets of private developers for luxury housing, or will the waterfront be developed in order to benefit the public, reconnecting New Yorkers with the rivers so central to the city's origins.

The character and possibilities of DUMBO are implicit within its salient urban forms. While the bridges act as both connectors and as edges, they generate constant movement along a horizontal path, providing sanctuary to the water from human activity. How can these two bridges generate urban form as the water once did? There has been little reconciliation with the changes brought to DUMBO by the bridges, as they rendered the neighborhood unnecessary for travel or commerce; it has been literally passed over in disregard of the wonderful fabric below.

THE SITE



[Fig. 1] Plan of Brooklyn and the relative location of DUMBO amidst the surrounding neighborhoods.

Design Strategies

The Water Culture House proposed in this thesis presents an answer to the question facing DUMBO at this pivotal juncture in the neighborhood's rebirth. The project capitalizes on the site's inspiring and charged location, bringing a unique amenity to Brooklyn's waterfront and reconnecting the waterfront with the city's riverine environment. The water culture house draws on and reflects existing trends, including the adaptive reuse of New York's waterfront for health and fitness activities; the increasing interest in alternative medical treatments; and the continuing importance of international and domestic tourism within New York's economy.

Within New York City and elsewhere, placing cultural buildings in rundown neighborhoods has proven an effective way of attracting investment and enabling the re-colonization of under-used buildings.¹ Facilitating the growth of DUMBO as a cultural district will further integrate the experiences of its residents, while increasing the number of temporary users who make this site a destination. The water culture house would create a recreational and health facility on a site that offers a place for conversation, reflection and delight. Is a strategy that recognizes the character of DUMBO and the potential for development to occur in a way that attracts new visitors while enabling public access to the waterfront' green spaces.

Currently DUMBO is in a state of rejuvenation. There are numerous old warehouse buildings that are being renovated for new uses, mostly housing, and there are even more buildings that have yet to be rehabilitated. Because of the size, condition and density of the existing fabric, these buildings, once renovated, will provide ample housing to the neighborhood. If housing stock is in ample supply, however, other important questions face the community as its new identity is being formed. In twenty years, will this unique neighborhood have lost its distinctive edge, with a Starbucks and GAP on every corner, or is there an alternative direction that will revitalize DUMBO with new cultural institutions and retain its distinctive flavor.

Neighborhoods in cities across the country have cultivated and made distinct their own character and notions of place. The urban creative class in particular values a movement away from a mass produced culture. In many unique corridors found throughout America, prohibitions have been placed on development to allay symbols of

¹ Kenneth Powell, *City Transformed: Urban Architecture at the Beginning of the 21st Century* (te Neus 2000), p. 24.

the mass produced from diluting the unique character of the place. Examples of this trend can be found in actively developed zones like Myrtle Avenue, Brooklyn and in small towns like Oak Bluffs, Martha's Vineyard where purveyors of consumer culture (like GAP and McDonalds) have been restricted.

Providing cultural alternatives as a means of expanding the quality of life can act as a vehicle for attracting a younger creative class back to urban centers both as residents and as visitors. In New York City, cultural brokers, like the Museum of Modern Art ("MoMA"), have capitalized on the growing social and cultural activity outside of Manhattan by setting up satellite museums like MoMA Queens and P.S. 1. Neighborhoods like Astoria and Jackson Heights in Queens, and Fort Greene and Williamsburg in Brooklyn have seen notable social and economic changes over the past decade. While manufacturing and other industrial jobs have moved away, a younger, more non-traditionally employed group of people have made creative use of the old industrial fabric. Neighborhoods have been resettled in part because Manhattan's neighborhoods of similar character like SoHO, the East Village and Tribeca have become truly unaffordable. The paradigmatic example of this trend may be Williamsburg which "has become perhaps the most emblematic of Brooklyn's resurgence over the last few decades, as young people seeking an alternative to Manhattan have flocked to its once desolate streets, remaking Williamsburg into a hub of nightlife, art galleries and restaurants just one subway stop away from Manhattan." (NYT May 3, 2005) The success of Williamsburg may be due in part to the overspill of Manhattan wealth and the ability of Brooklyn's dense fabric to support a variety of uses among which cultural venues can flourish.

Like Williamsburg, DUMBO now offers a neighborhood filled with artists' studios and galleries as well as some of Brooklyn's most distinctive restaurants and bars. The neighborhood is also home to an increasing number of new media firms and furniture designers, as well as residents who may not be artists themselves but enjoy living in this outpost of the creative class.

Abbreviated Site History



[Fig. 2] Aerial Photograph showing (from left to right) the neighborhoods of Brooklyn Heights, Downtown Brooklyn and DUMBO and The Brooklyn Navy Yard. (McGraw Hill)

The neighborhood known as DUMBO was one of the first settlements in “Old Breukelen” and is a site that has represented the development of Brooklyn over the course of three hundred years. The site has been shaped by a variety of uses including transportation, manufacturing, residential and commercial, and in its current state provides a rich source of historical and cultural value that rivals any economic speculation.

DUMBO and the adjoining neighborhoods of Vinegar Hill and Fulton Ferry were once leading industrial centers. Between the mid 1600s and the late 1800s, the Fulton Ferry neighborhood was the most important ferry link between Brooklyn and Manhattan. The opening of the Brooklyn Bridge in 1883 immediately changed the role of the neighborhood as a transportation and commercial center, since traffic was diverted from the area to the streets surrounding Brooklyn City Hall, a notable distance from the ferry landing.

Through the 1880s and into the 20th century DUMBO grew as an industrial and manufacturing center and housed twenty iron, brass and lead foundries, 4 sugar and vinegar works, and numerous chemical plants and multi-purpose warehouses. Driven by the development of steam power engines and rail, the site's location at the water's edge became an ideal resource for moving manufactured cargo between the rail lines and the East River. Many traces of these activities remain as the tracks from old rail lines are revealed between eroded stretches of asphalt and cobble stones.²

The 1950s marked another key period of change in the neighborhood with the razing of 20 acres of the surrounding area including much of the working class residential area of Irishtown (Vinegar Hill). Further to this modification, new markers of the postindustrial era were erected in their place, most notably the Brooklyn-Queens Expressway (BQE) and the Farragut Houses, a mid-rise housing project. These two additions greatly influenced the character and condition of the neighborhood, as the area became fully disengaged with downtown Brooklyn.

² Kenneth T. Jackson, *The Neighborhoods of Brooklyn* (Yale University Press 1998) p. 97.



[Fig. 3] Aerial Map showing the buldings of DUMBO framed by the Manhattan and Brooklyn bridges and the surrounding roadways of the BQE.

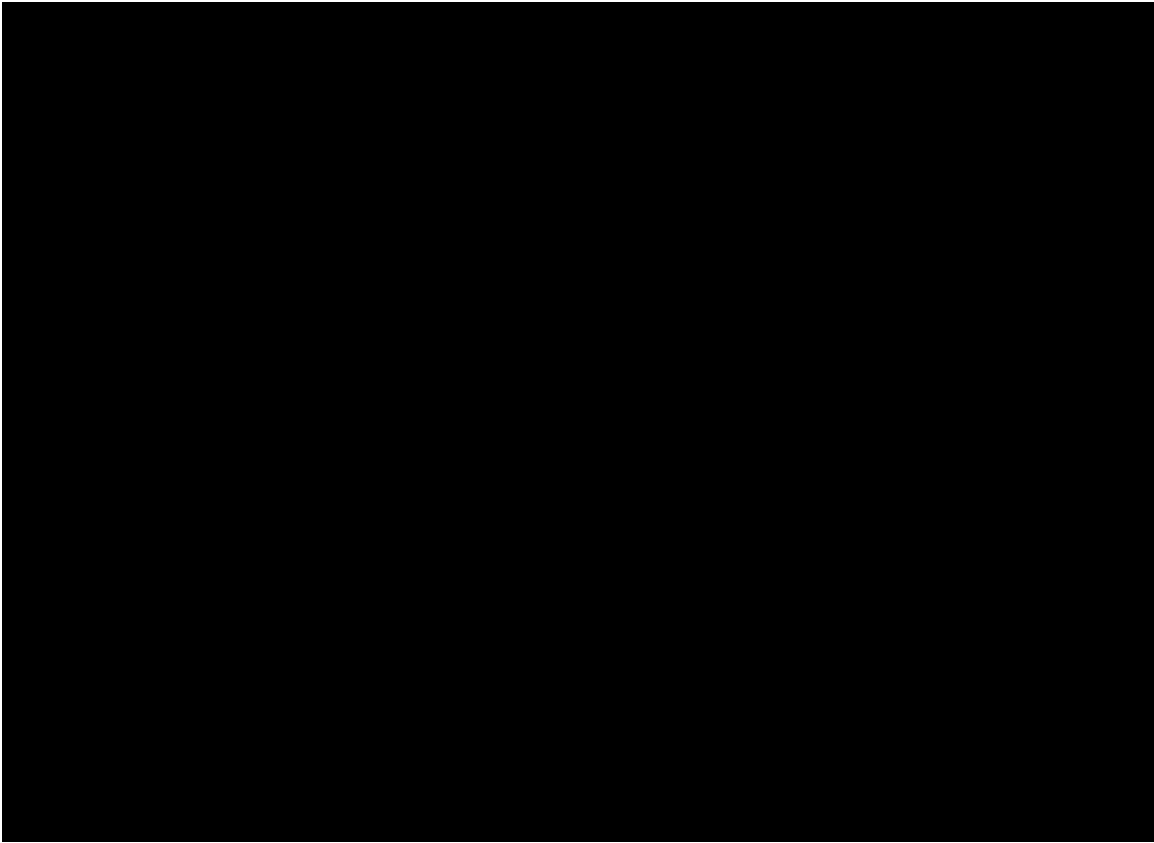


[Fig. 4] Photograph of The Empire Stores as it operated at the turn of the century along the DUMBO waterfront. (Photograph from *The Encyclopedia of New York City*)

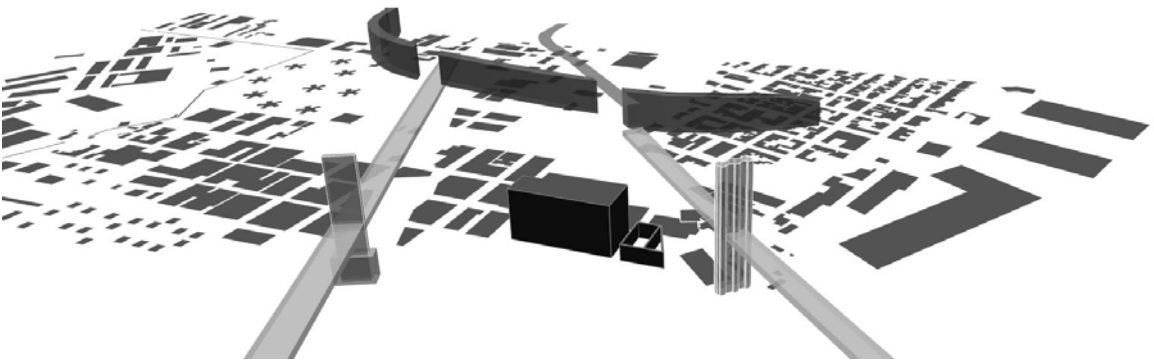
Site Description

DUMBO has very distinct built features, as its name may suggest. The Manhattan Bridge overpass and the overhead roadways that link the two bridges to the BQE mark the most accessible entrance to the area from Brooklyn's downtown. From this main entrance the neighborhood gradually slopes forty feet toward the water, leaving much of its built fabric hidden from downtown Brooklyn and other neighborhoods in close proximity to the site. These two physical conditions are a great influence to the character of the neighborhood and may describe why DUMBO has remained relatively undisturbed amid a renewed interest in city living and despite a growing creative class that has

resettled and reshaped many neighborhoods of similar fabric, like Williamsburg, Brooklyn to the north.



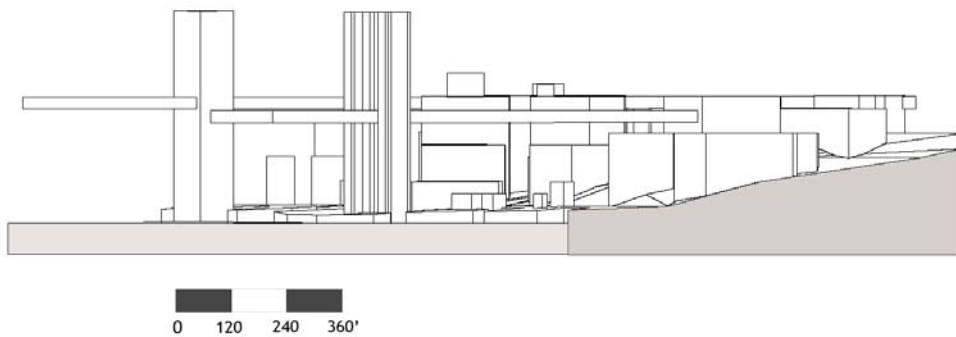
[Fig. 5] Contour map of the area studied.



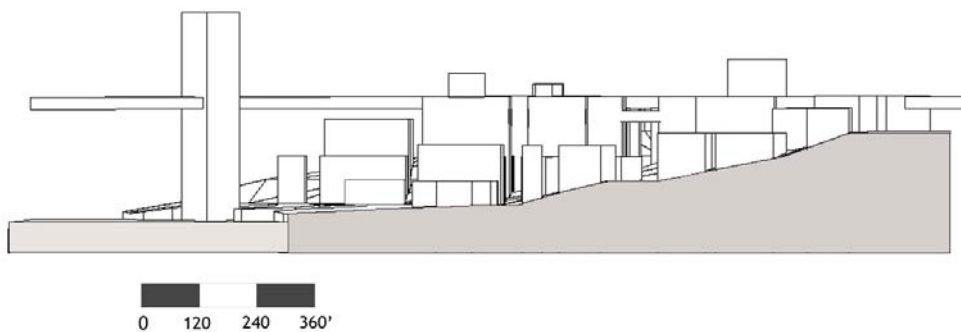
[Fig. 6] Perspective view of DUMBO from the East River showing the impact of the bridges' roadways and the BQE on the site. The BQE cuts off DUMBO from the rest of Brooklyn.



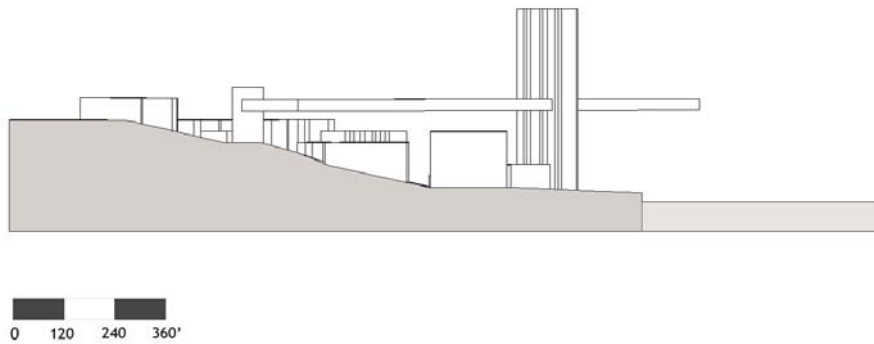
[Fig. 7] Diagrammatic view of the bridges as they intersect with the fabric of DUMBO, Brooklyn.



[Fig. 8] Diagrammatic section through DUMBO showing the Brooklyn and Manhattan Bridges and the slope of the neighborhood towards the water.



[Fig. 9] Diagrammatic section through the site at the water's edge looking toward the East at the Manhattan Bridge.



[Fig. 10] Diagrammatic sectional view through the site looking west along the East River at the Brooklyn Bridge.

Additional physical boundaries serve to further isolate DUMBO from the rest of Brooklyn. Just to the east of the Manhattan Bridge, on DUMBO's far eastern edge are a ConEdison power station and the Brooklyn Navy Yard. These zones are literally securely enclosed, impenetrable areas that dominate vast areas of the waterfront along the East River and are fully disengaged with the surrounding fabric. To the west, crossing under the Brooklyn Bridge and into the Fulton Ferry neighborhood, one is again confronted with a natural topographical edge and a distinct incline to the southwest. The neighborhood is naturally bounded at the north by the East River. Directly across the river is the neighborhood of Chinatown in lower Manhattan. Between the natural and man-made boundaries, the neighborhood is self-contained and insulated from developments taking place throughout the rest of Brooklyn.

Although relatively easy to reach DUMBO is a bit off the beaten path and is somewhat out of the scope of the major development that is slated for downtown Brooklyn. There is limited subway access to the area via the York Street F train. This station is situated in the neighborhood at York and Adams Streets and the train runs along

6th Avenue in Manhattan and through the Borough Hall subway interchange in downtown Brooklyn and continues on to Coney Island. Another subway station within a reasonable walking distance is the High Street/Brooklyn Bridge stop on the A train, although it lies just outside and above the neighborhood. Various public buses also serve the neighborhood, though it remains less accessible than more centrally located communities.



[Fig. 11] Pedestrian and car access to DUMBO is mediated by archways in the BQE overpass. View through the BQE overpass along Jay Street. The York Street Subway entrance can be seen on the right.



[Figs. 12-13] View of various access points to the neighborhood, which exist along the BQE, Manhattan Bridge and Brooklyn Bridge overpasses. The overpass system creates a strong edge which forms the southern boundary of the neighborhood and severs DUMBO from the rest of Brooklyn. (From Adams St)



[Fig. 14] View of the Manhattan Bridge as seen from the DUMBO waterfront.



[Fig. 15] The Brooklyn Bridge as seen from Water Street with the financial district behind.



[Fig. 16] The bridges create unusual ways to experience and view the neighborhood, either through framed views or dramatic plays with light and shadow.

DUMBO is defined by two of the city's most notable structures, the Manhattan and Brooklyn suspension bridges that stretch horizontally overhead. Their great stone bases frame the streets of the neighborhood and cast whimsical shadows amid an array of industrial era buildings. Additionally, a constant rumble of noise emanates from the Manhattan Bridge as three subway lines run across the bridge every few minutes between Brooklyn and Manhattan. Generally, the site remains placid as the East River, which was once characterized as a busy industrial and commercial artery, flows quietly with relatively little traffic.

Unlike its more rapidly developing neighbors, DUMBO can not claim a university, library, movie theatre, shopping district or major public transit interchange. So what is the attraction to this place? For one it provides an in the city escape from the otherwise relentless hustle of New York City. When visiting one is immediately captivated by the view: of the river; of Manhattan; of the bridges; of a neighborhood that seems to represent another time. Additionally, the development that has taken place symbolizes a growing interest in arts and culture as numerous old warehouses have been converted into art galleries, eclectic furniture showrooms and other cultural gathering spaces. As was observed as early as the 1920's by the New York Regional Plan "[New York's] most striking architectural feature is its mass of high buildings as seen from the

surrounding areas of open water, which gave it the benefit of open space from which buildings can be seen. It is on the frontage of these water areas that its greatest opportunity lies for creating beauty of building.”³

The “Other” River

The East River is the “other” river in New York. Unlike the Hudson River on the west side of Manhattan, the East River has served as New York’s service road. Lacking the title of gateway, it has undergone years of intense abuse at the hands of industry and the huge urban population it supports. The East River is a fourteen mile long tidal strait that separates Long Island from the mainland and includes nearly sixty miles of shoreline. The river has been vigorously developed ultimately changing its hydrology, creating faster currents, greater tidal rises and longer sedimentary ranges. The shores of the East River are still dominated by old industrial structures, many of which are dilapidated and unsecured. The resulting environment is foreboding and desolate, but offers unparalleled views and opportunities for new kinds of activities.⁴

While there is tremendous pressure to develop Brooklyn’s waterfront along the East River to meet growing housing and commercial needs, there is also a pressing need to ensure public waterfront and recreational access. This access has remained inadequate due to residual zoning applications that address past industrial and transportation uses. Improved waterfront access and the creation of public infrastructure along the waterfront in the form of parks and other cultural facilities would re-engage the community with a river that has shaped the fabric of the borough but has been kept out of the public’s reach

³ M. Christine Boyer, *The City of Collective Memory* (MIT Press 1994), pp. 464-65.

⁴ See *VAI: East River Competition Site*, available at http://www.VanAlen.org/competitions/east_river/site.htm.

for too long. Well designed public spaces and amenities improve the quality of life in dense urban areas, and also tend to increase surrounding property values and spawn additional private business opportunities.

One need not look far for proof that public parks and other amenities can stimulate development while increasing property values in adjoining communities. Both Central Park in Manhattan and Prospect Park in Brooklyn are prime examples, as housing located on these parks' borders is among the most desirable in the city. Another example is the largest park in the Borough of Queens, Flushing Meadows Corona Park. Once a vast dump for the ashes and other detritus of local industry, the site of Flushing Meadows Corona Park was dubbed a "valley of ashes" by F. Scott Fitzgerald in The Great Gatsby. This eye-sore was transformed in one of the most ambitious projects of the time when Robert Moses redeveloped the dumping grounds into the fairgrounds for the 1939 World's Fair. The park later served as the site of the 1964 World's Fair, when the famous "Unisphere" was constructed. Today, Flushing Meadows Corona Park contains the National Tennis Center where the U.S. Open is played annually, as well as Shea Stadium, home of the New York Mets. It holds the New York Hall of Science, the Queens Museum of Art, and the Queens Theater in the Park, as well as the Queens Wildlife Center and Queens Botanical Garden. What was once the derelict dumping ground for the residue of industrialism has now been transformed into an emerald treasure, enjoyed by millions of Queens residents annually, and housing numerous cultural institutions that improve the quality of life for city residents.

More analogous to the challenges facing those who would redevelop the East River waterfront, however, is the experience of the Hudson River Park on the West Side

of Manhattan. The decline of the post-industrial waterfront in Manhattan was highlighted after an elevated section of the West Side Highway collapsed in 1973. Responding to the need to replace the elevated highway, and seeing only derelict piers on the Hudson River, state officials proposed “Westway,” a project that would involve submerging the West Side Highway along the river’s edge, a task that would be completed by dumping vast amounts of land-fill into the Hudson, and creating new commercial spaces – as well as parkland – on the river’s “new” edge. After environmentalists and community activists scuttled Westway, a new vision emerged which would create an at-grade West Side Highway and a continuous greenway along the water’s edge, from Battery Park to 59th Street. The proposed greenway also included a wide range of recreational facilities, including a path for jogging, biking and roller-blading, berths for recreational canoeing and kayaking, and the like. The Hudson River Park Conservancy was created to shepherd the project to completion, replaced in 1998 by the Hudson River Park Trust.

The proposed Hudson River Park, a 550-acre public amenity of green spaces, river access, and recreation, may have seemed a fantasy when it was initially proposed in the aftermath of Westway’s demise. A survey of the crumbling piers and abandoned structures along the Hudson’s banks in the mid 1980s would lead only the most optimistic to conclude that an inspiring public amenity could be achieved. And yet that is what has happened in the last 20 years. Though the park is not yet complete and construction continues, the park’s spine – a five-mile bike and jogging path – has been completed. Eventually, this green path will stretch all the way from New York City through the Hudson River Valley Greenway Trail, to Troy, New York – north of Albany. In the meantime, the public enjoys biking and jogging; kayaking and rowing; community

gardening; fishing; skating; and various other activities. In fact, New York’s first flying trapeze school opened in the Hudson River Park in 2002, allowing students to learn the art of trapeze while taking in breath-taking views of the Manhattan skyline and the Statute of Liberty. “Trapeze School New York” provides a powerful rebuttal for those who would question the practicality of revitalizing New York’s waterfront with creative, innovative, and publicly available recreational, fitness, and health facilities.



[Fig. 17] A “soft” edge that exists at the DUMBO waterfront along the East River. Only three soft edges currently exist along the shores of the East River. The movement to reclaim these natural edges is ongoing.

Of course, the amenities of the Hudson River will end up taking decades to complete, and have been achieved only with the investment of money and political capital over the course of many years. Indeed, the desire to revitalize the city’s waterfront stretches back

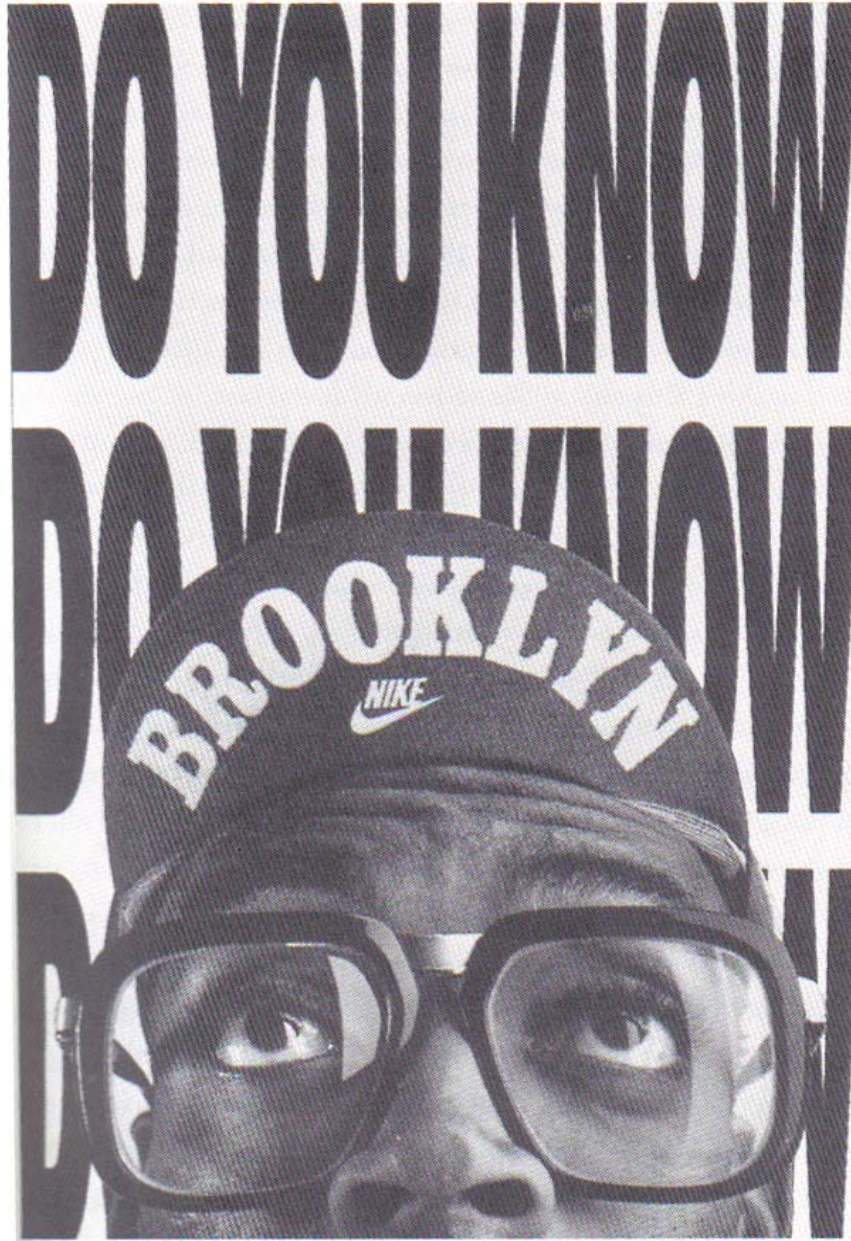
even before the debate over Westway. For example, in 1967, the Mayor's Taskforce on the Design of the City of New York reiterated that "New York needs – and could have – closer connections with nature...The city's largest sweep of nature by far is its harbors and rivers."⁵ The city has been slow to move on these recommendations. New York is still developing its waterfront strategies, particularly in the surrounding boroughs. Only recently (May 2, 2005) have rezoning plans been passed for the Williamsburg district in Brooklyn, that establish development guidelines for mixed use, manufacturing and residential and recreational facilities.⁶ Planning initiatives that would implement a new riverfront park stretching from DUMBO to Cobble Hill are still being reviewed and active development on this project isn't expected until 2008.⁷

⁵ Boyer, *The City of Collective Memory*, p. 465.

⁶ Diane Cardwell, *City Backs Makeover for Decaying Brooklyn Waterfront*, THE NEW YORK TIMES 05-03-2005 p. A1.

⁷ *Id.*

The Identity of Brooklyn



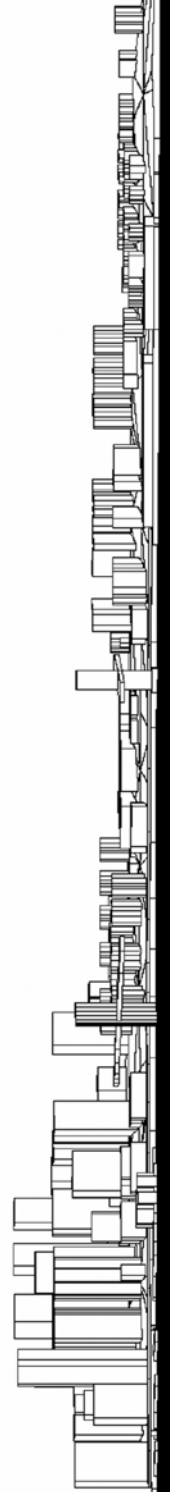
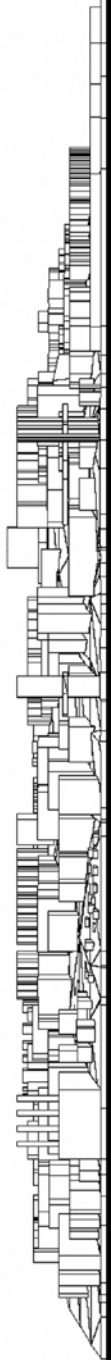
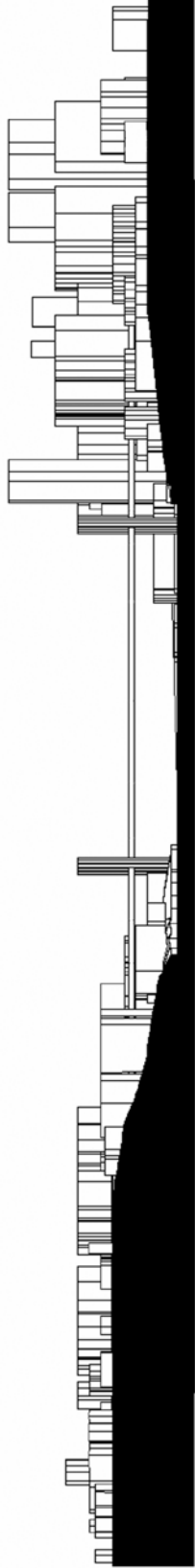
"Do You Know Brooklyn?" Poster for Nike.

[Fig. 18] Image showing Spike Lee in an advertisement for Nike. (From *The City of Collective Memory*.)

Brooklyn is the most populous borough in New York City with nearly two and a half million residents in 1990. Were Brooklyn an independent city, it would be the fourth largest city in the United States, according to 1990 census data.

Originally settled in 1624 by the Dutch, Brooklyn did not become part of New York City until January 1898, as a way to resolve its financial indiscretions. Even before economic circumstances drove the 1898 consolidation, Brooklyn's relationship with the economic powerhouse across the river could be strained. In 1748 Brooklynites burned down the ferry house and tavern at the Fulton Ferry landing to protest Manhattan's ownership of their shorelines.⁸ The terms of shoreline ownership still favor Manhattan, as its boundaries consume all of the East River up to the bulkhead lines of Brooklyn.

⁸ *See 1700*, available at http://www.VanAlen.org/workshops/east_river/general/images/ftime1700.gif.



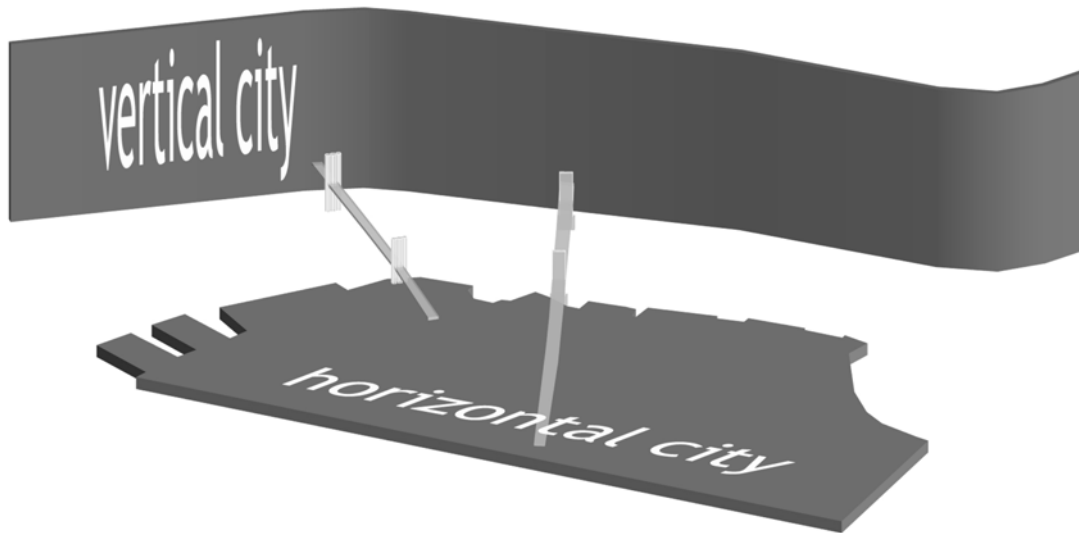
[Fig. 19] Site Section looking west along the East River toward the Brooklyn Bridge. The towers of Manhattan can be seen on the right, while the lower warehouse fabric and residential buildings distinguish Brooklyn on the left side. [Fig. 20] Section through the East River looking at Brooklyn, the ConEdison Power station is on the left and the Brooklyn Bridge is on the right. [Fig. 21] Section through East River looking at Manhattan, the dense financial district is on the left, while Chinatown and the Lower East Side are to the right. (Note that additional taller buildings would appear in the background of this section).



[Fig. 22] Figure/Ground diagram across the East River identifies the fine grain quality of Brooklyn's traditional fabric versus the modern fabric of Manhattan. The residential neighborhood of Brooklyn Heights can be seen on the left side of Brooklyn, while the star-shaped Farragut Houses and the wall of the Navy Yard can be identified on the right side of the diagram. DUMBO's fabric can be identified by the large and boxy figures between the bridges.

A figure/ground drawing of Brooklyn describes the traditional urban fabric that exists in conceptual opposition to Manhattan's modern planning principles. While Brooklyn is composed primarily of low-rise, dense fabric, lower Manhattan's tall forms are emblematic of the "tower in the park" strategies put forth by the modern movement. These differences can be described in other terms that highlight the tension of the forms

that sit across the river from each other; like horizontal/vertical, mountain/plateau and spectacle/everyday.



[Fig. 23] Conceptual diagram showing the dynamic relationship between the two boroughs, Brooklyn and Manhattan. The site is compelling because of the vastly different patterns that occur across the river.

Brooklyn's population is varied and diverse and even during current times Brooklyn remains the center for Orthodox Jews, Russians, Caribbeans and has the largest African-American community in the United States.

“While the borough is still beleaguered in many ways – more than twenty per cent of its two and a half million residents live below the poverty line – Brooklyn has also begun to serve as an overspill for Manhattan wealth, with development proposed for many formerly neglected stretches of territory, from the old Brooklyn Navy Yard, which now houses movie studios, to the industrial waterfront between Williamsburg and Greenpoint, where the city would like to see luxury apartment towers rise, to the piers below the Brooklyn-Queens Expressway just south of the Brooklyn Bridge, where new

parkland has been proposed.” (http://www.newyorker.com/printables/fact/050425fa_fact - 4/22/2005).

Why a Water Culture House?

“It is in the city that one learns to be a citizen. There people acquire valuable knowledge, see many models to teach them the avoidance of evil. As they look around, they notice how handsome is honor, how lovely is fame, how divine a thing is glory.”

Alberti

There is a long tradition of bathhouses in New York City. Some of the earliest bathhouses emerged as concerns about the cleanliness of the poor and the spread of disease once required public intervention. Other baths served a more privileged clientele. The first bathhouse was opened by Nicholas Denise and began operation in 1792 primarily for the elite who enjoyed bathing. In later times, the movement gained momentum as bathhouses provided bathing, swimming and laundry facilities for a wide cross section of the city’s population. In the 1870s the Department of Public Works began a tradition of floating baths, which were large wooden structures installed on the Hudson and East Rivers that housed pools open to bathers between June and October. There were fifteen of these baths by 1888 that were used by 4 million people each year. During the 1890s, The People’s Baths opened on the Lower East Side as the first successful public indoor baths. The City began building public bathhouses in 1895 after a state law was passed that required municipalities with populations exceeding 50,000 provide free bathhouses. The city built a total of twenty-seven bathhouses including sixteen in Manhattan and seven in Brooklyn. However, use of public bathhouses declined during these years while commercial venues thrived. At the turn of the century there were

sixty-two commercial establishments that included medicated baths, Russian steam baths, Turkish baths and pools. The most well known were the Turkish baths on 10th Street.

Many of New York's surviving bathhouses were closed during 1970s and 1980s due to the perceived role of the bathhouses in connection with the gay liberation movement (of the 70s) and the growing AIDS epidemic. Only recently have some of these landmark bathhouses reopened. In the mid 1990s, the Asser Levy Bath on East 23rd reopened and current plans are underway to renovate the Croton Park bathhouse in the Bronx.⁹

That a significant chapter in the history of public baths in New York occurred in floating baths moored in the Hudson and East Rivers is no surprise, given the importance of the waterways in the City's history. The life of the waterfront has shaped the culture of New York throughout its evolution. The vibrant waterfront has produced the City's commercial warehouses that served as transfer points for moving goods along the river, its ferry terminals that transported workers between Manhattan and outlying boroughs and its public market places that procured the catches from the rivers themselves. Expressions of these traditions are evident in the structures that housed these activities, like the Fulton Ferry terminal and the Fulton Fish Market.

The images of New York's waterfront as the location for the development of the City's culture have evolved over time. The life of the waterfront, as was once chronicled by Joseph Mitchell (in his stories for *The New Yorker* and later in "On the Waterfront"), told tall tales of rat infested wharfs, plagues aboard docked ships and strange culinary traditions involving cod cheeks. More recently, the new uses of the waterfront have taken on a more sanitized flavor. Today recreational waterfront activities include Chelsea

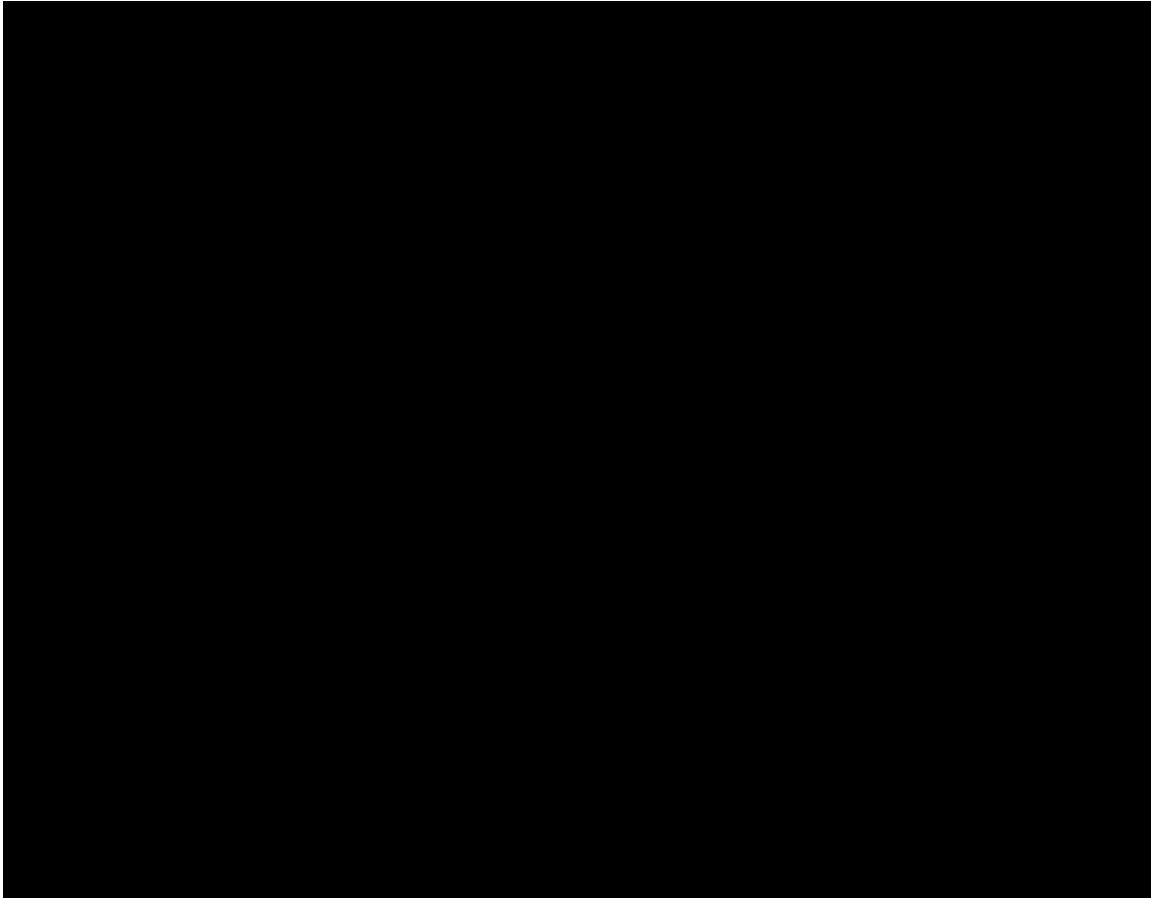
⁹ Kenneth T. Jackson, ed., *The Encyclopedia of New York City* (Yale University Press 1995) p. 87-88.

Piers, South Street Seaport and the minor league baseball stadiums of the Brooklyn Cyclones on Coney Island and the Staten Island Yankees in Fort George.

While new recreational activities grace some segments of New York's waterfront, other stretches still feature vestiges of the industrial era, in various stages of repair.

Envisioning new activities for the waterfront to replace those defunct industrial complexes is an immediate need in New York. The water vulture house responds to this need by bringing a multi-use therapeutic facility to the waterfront which will serve local residents as well as providing tourist destinations. The resurgence of a spa culture is evident as the growing numbers of private spas and retreats in New York City and throughout the United States has proven. SoHo and DUMBO can both provide examples of this phenomenon as Bliss Spa, a London based company, has opened day spas in these neighborhoods. The possibility of using spa culture as a means of expanding cultural activity has been demonstrated by cities like Reykjavik that have created entire tourist economies based on outdoor thermal pools (hot pots) and other types of night entertainment and adventure travel all defined by the natural landscape.

The Building Site



[Fig. 24] A street map showing the built fabric of DUMBO composed mostly of old industrial warehouse spaces. The usable park areas are located at the edge of the river. All other unidentified open spaces are unusable as they either provide connections to the overhead roadways or they contain surface parking lots.

The thesis site runs along Water Street between the Brooklyn Bridge (at New Dock Street) and Main Street and is bounded on the north by the East River. Prominently featured on this site is an abandoned structure, the Tobacco Warehouse. Only the external brick envelop of The Tobacco Warehouse remains, but it offers 7,200 square feet of space enclosed by a one storey wall punctuated by regular arched windows. It was originally constructed in 1870 and lies in the shadow of the Brooklyn Bridge functioning at one time as a tobacco inspection warehouse. During periods of activity it served as a storage facility and transfer point between the river and the rail lines. Currently it can be

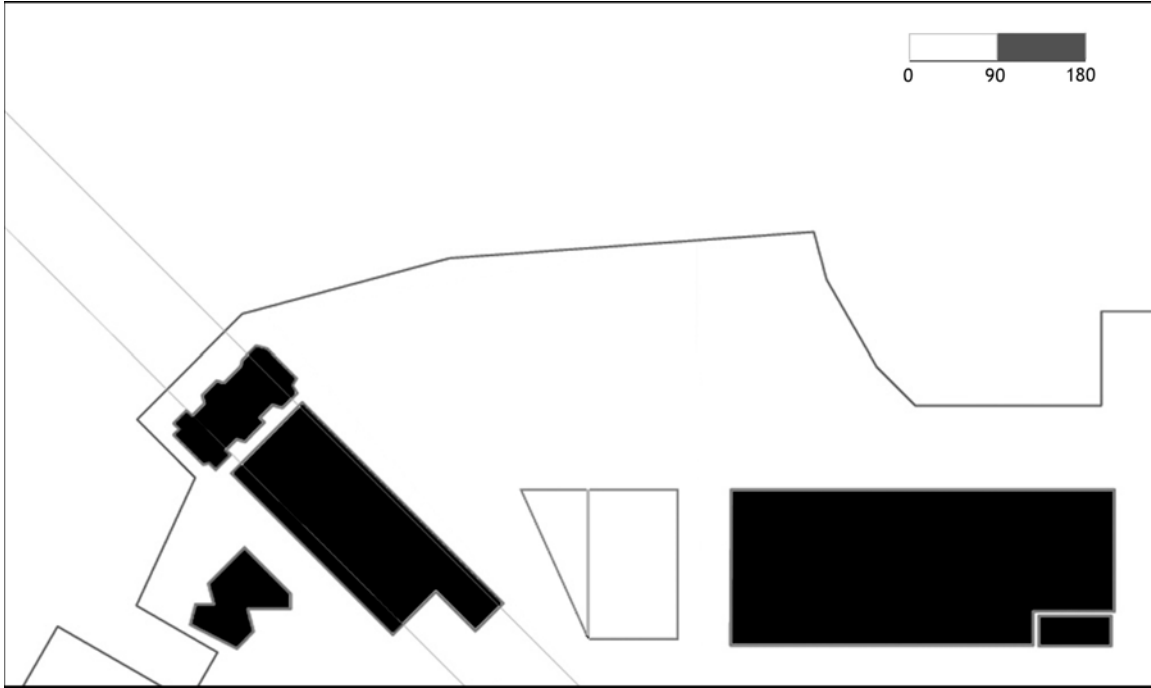
rented for private events and is tented on these occasions. The Empire Stores, directly to the east, dates back to 1869 and also sits on Water Street adjacent to the Tobacco Warehouse. It is a 19th century warehouse that at one time held sugar, animal hides, coffee and other raw materials to be loaded from Brooklyn trains onto barges docked at Fulton Ferry piers. The brick exterior of the Empire Stores remains intact, its solidity standing in contrast to the open and airy space created by the Tobacco Warehouse.



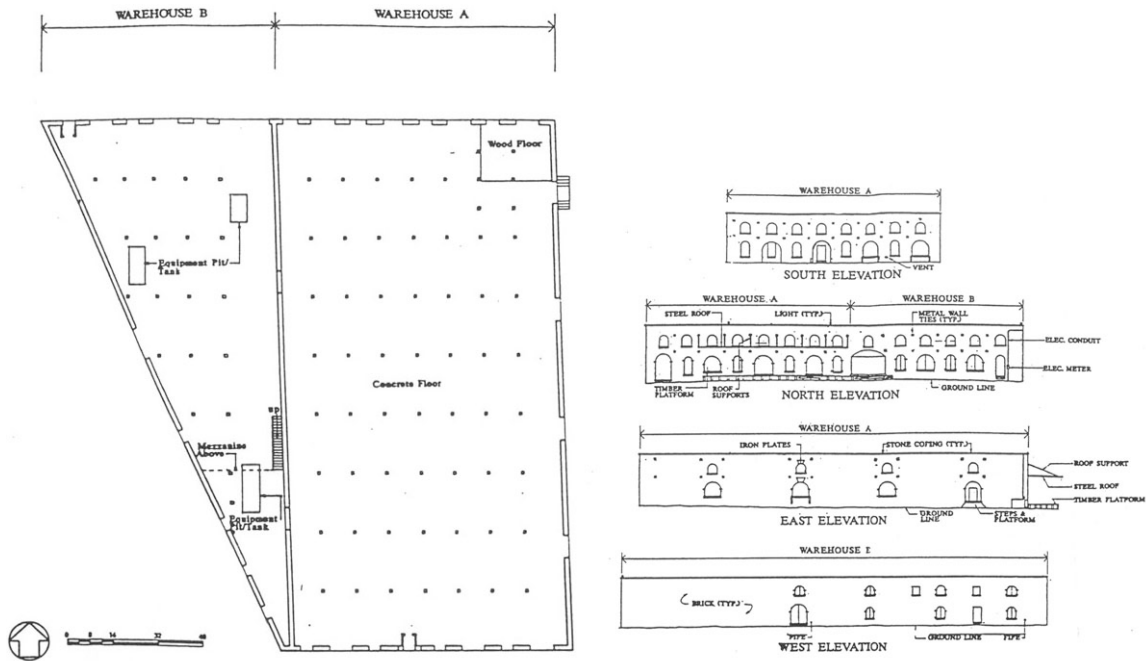
[Fig. 25] The map above defines the area of investigation for this thesis. This includes the existing Tobacco Warehouse and The Empire Fulton Ferry State Park.

The Empire Fulton Ferry State Park includes the Tobacco Warehouse and Empire Stores as part of the park area. Currently the park is in great condition and is probably

underutilized. The park offers fantastic views of Lower Manhattan and has been used as a backdrop in numerous films and television programs including *Scent of a Woman*, the *Sopranos* and *Sex and the City*.



[Fig. 26] Site for proposed Water Culture House which includes the footprint of the Tobacco Warehouse.



[Fig. 27] The plan and elevations of the abandoned Tobacco Warehouse that sits directly on the site as provided by the Brooklyn Bridge Park Conservancy.



[Fig. 28] View of the Tobacco Warehouse from the site sitting in the shadow of the Brooklyn Bridge.



[Figs. 29-30] Views of the Tobacco Warehouse as seen from the site. The building rests at the foot of the Brooklyn Bridge, yet frames views of the Manhattan Bridge and Lower Manhattan as through openings in its interior.

City Planning Initiatives

Numerous city plans put forth by the Department of City Planning have the potential to affect DUMBO's continued development. These include:

The Downtown Brooklyn Plan : Currently adopted as a strategy for the Brooklyn's future growth to provide for additional office space and business expansion, this plan was enacted to protect NYC jobs impacted by the growth of New Jersey. The Plan identifies the following as obstacles to achieving growth:

- Zoning and the lack of adequate development sites
- Downtown core is isolated from surrounding strong residential communities
- Downtown has not tapped into vast cultural and educational resources

The DBP also identifies the expansion of cultural resources such as the growth of the BAM Cultural District centered around the Brooklyn Academy of Music, which will include the construction of a Brooklyn Public Library of Visual and Performing Arts (designed by TEN Arquitectos). The DUMBO neighborhood is not an immediate part of this plan but it should be considered as the plan may increase daily traffic to the surrounding area and may bring more "recreational" visitors to the neighborhood. Also, to the extent Brooklyn expands the number of visitors to cultural and art institutions in adjoining neighborhoods, this should naturally have the effect of increasing visitors to the galleries and studios in DUMBO.

The East River Waterfront Study: This plan has been enacted to propose improvements to reconnect the varied neighborhoods of the lower east side of Manhattan to a two mile stretch of the East River. This study involves an area directly across (the river) from

DUMBO and may be a useful comparison as the conditions of waterfront use and accessibility are of a major concern.

The Greenpoint-Williamsburg Land Use and Waterfront Plan: This plan addresses zoning changes to allow for new uses of the waterfront including housing and recreational areas along with light industry and commercial uses. This plan affects the neighborhoods along the East River just North of the site, past the Navy Yard.

The New York City Comprehensive Waterfront Plan: Reclaiming the City's Edge – Adopted in 1993, this plan is aimed at creating public waterfront access.

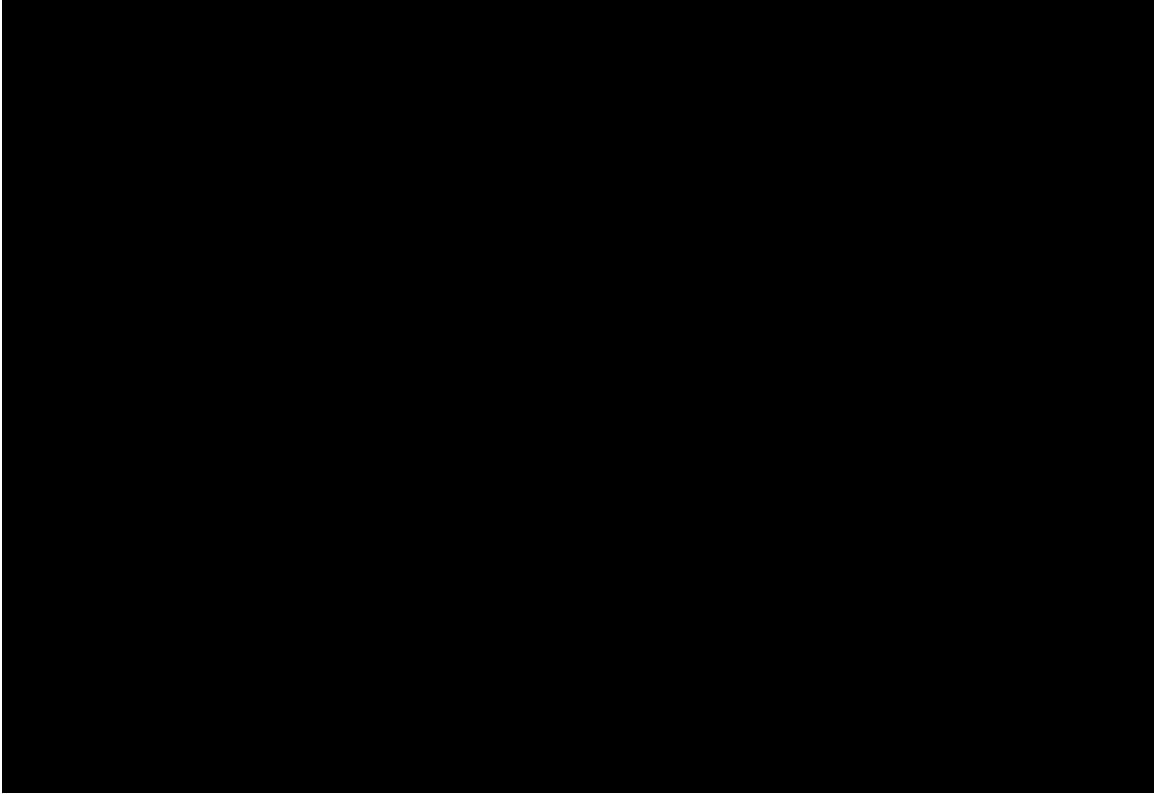
The Brooklyn Bridge Park Plan: Currently a proposal addressing the redevelopment of the piers south of the Brooklyn Bridge (visible from the Brooklyn Promenade), up to the Empire Fulton Ferry State Park. The plan has not yet been approved but appears to include extensive park and playing fields along the East River waterfront to replace the current warehouse and industrial development.



[Fig. 31] Rendering of the proposed Brooklyn Bridge Park Plan, as piers would serve as parks. (NYT – 12/04)

Zoning

The area of investigation is zoned for MX-2, light industrial and manufacturing, according to the Department of City Planning. However, the Van Alen Institute reports that the site and its surrounding area are used solely for recreational purposes. This would be a more accurate description for zoning as the site currently contains Empire-Fulton Ferry State Park and is directly adjacent to Brooklyn Bridge Park. Currently there are no industrial or manufacturing users on or directly adjacent to the site. The nearest such user is the Con Edison power generating station on the eastern edge of the site. According to the Metropolitan Waterfront Alliance (an association of the Municipal Arts Society), advantageous use of the East River would incorporate zoning for mixed uses, and would



[Fig. 32] The zoning information for DUMBO as provided by the Department of City Planning. The designation of M is used to describe manufacturing uses. Most of the East River shoreline is zoned for manufacturing and industrial conditions, yet it is rarely used for these purposes as many of these industries are defunct. The shoreline has long been inappropriately used for waste transfer stations and power plants.

not prohibit manufacturing/industrial uses along the river. ¹⁰This would ensure a future for waterfront generated jobs and commercial/industrial access as well as fulfilling the need for public and residential access. Obviously, the primary concern is ensuring the health of the East River and initiatives are underway that would reclaim the few soft edges of the river and alleviate ecological conditions created by the bulkheads that line most of the river's edge. Strategies include the replanting of native sea grasses and other techniques for de-mapping the hard concrete edge created by the bulkhead.

¹⁰ From interview with Loren Talbot, Municipal Arts Society, Metropolitan Waterfront Alliance, May 2, 2005.

PRECEDENTS

Precedents

The purpose of studying the following urban precedent is to explore the negotiation of public/private space as it relates to an urban amenity like a park or waterfront area.

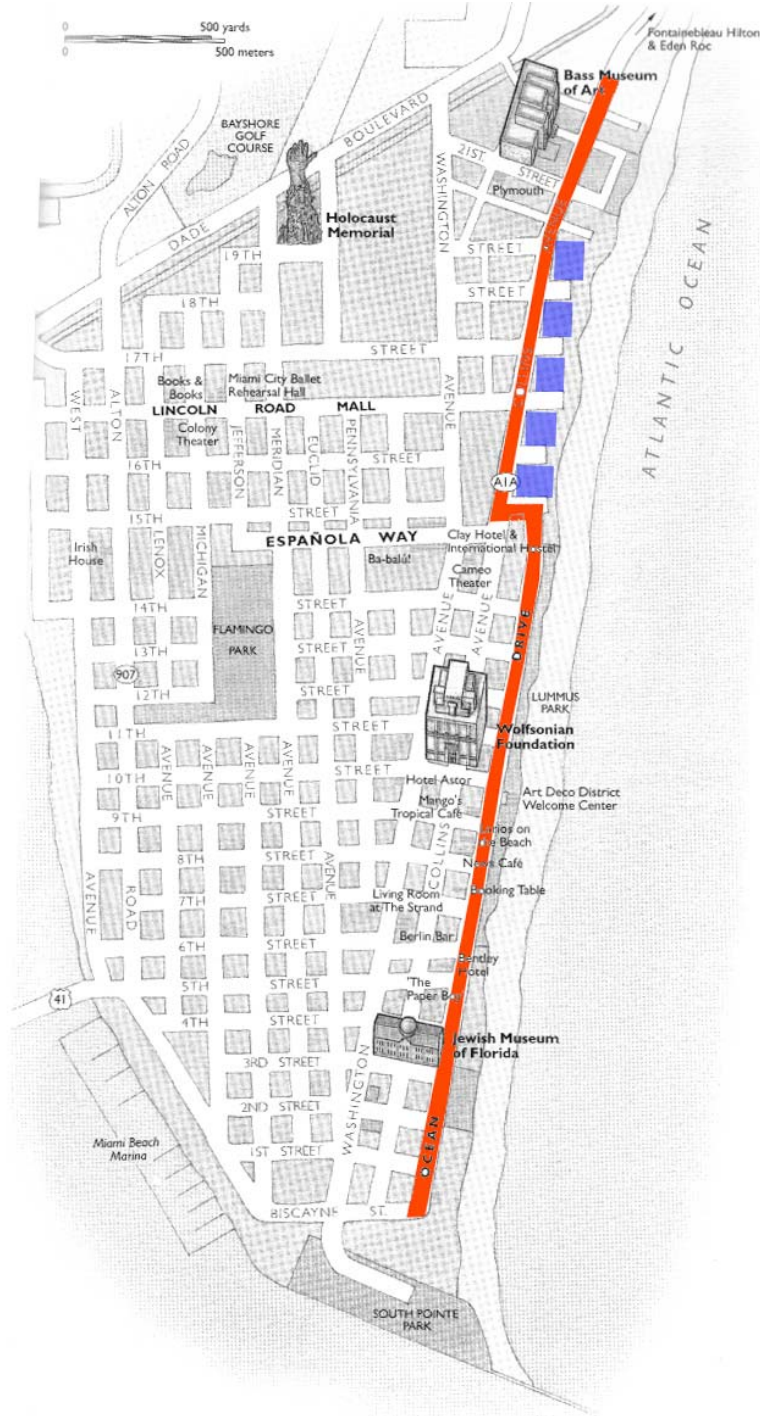
Urban Precedent

Miami Beach – Collins Avenue and Ocean Drive

Miami's beach and waterfront provide a unique place to study an urban amenity and its use as it benefits both public and private needs. This is increasingly relevant to the study of the Brooklyn waterfront which is currently undergoing a major transformation as its own use patterns shift from industrial to recreational.

The major commercial core of Miami Beach has negotiated the use of public and private space in a manner that has increased the value of the beach for both commercial development and for public use without compromising the accessibility and value of the amenity itself. This was accomplished through the designation of a given area of the beachfront as public park and the use of an edge, namely Ocean Drive (a major commercial corridor), as the delineator of public and private space. As Ocean Drive terminates north of the park area at 14th street, a number of major hotels occupy the beachfront and mitigate beachfront access along the street. Still, this area of the beach remains commercially successful and the businesses along Ocean Drive and the public park and include notable places like the Delano Hotel. What is remarkable about these private establishments is that they too are part of the public domain in the sense that their first levels remain accessible to the public as lounges, lobbies, bars and recreational areas that connect the street activity to the beach. While there remains a level of regulation to

this activity in the form of a formal entry point, it is more or less free flowing as users do not have to be hotel patrons nor are they required to purchase anything to occupy the space. In addition the beachfront remains public ranging from between 100' and 125' from the shoreline to the hotel.



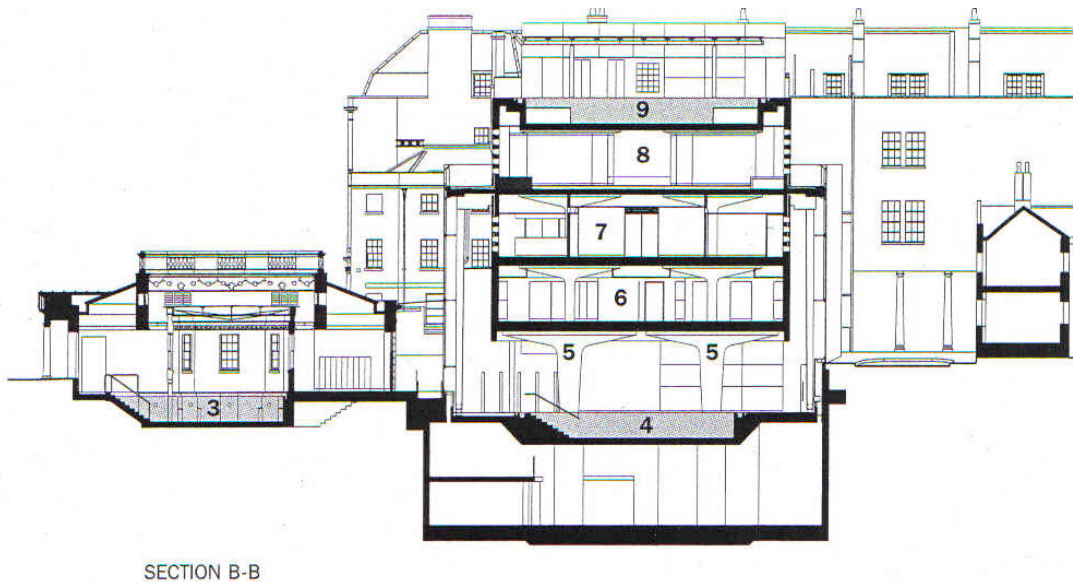
[Fig. 33] View of Ocean Drive as it meets Collins Ave., the main commercial corridor in Miami Beach. The Hotels along Collins Ave. mediate entry to the public beach. While Ocean Drive creates an unmitigated public edge along South Beach, at Collins Ave. hotels like the Delano run along the beach perimeter.

Building Type Precedents

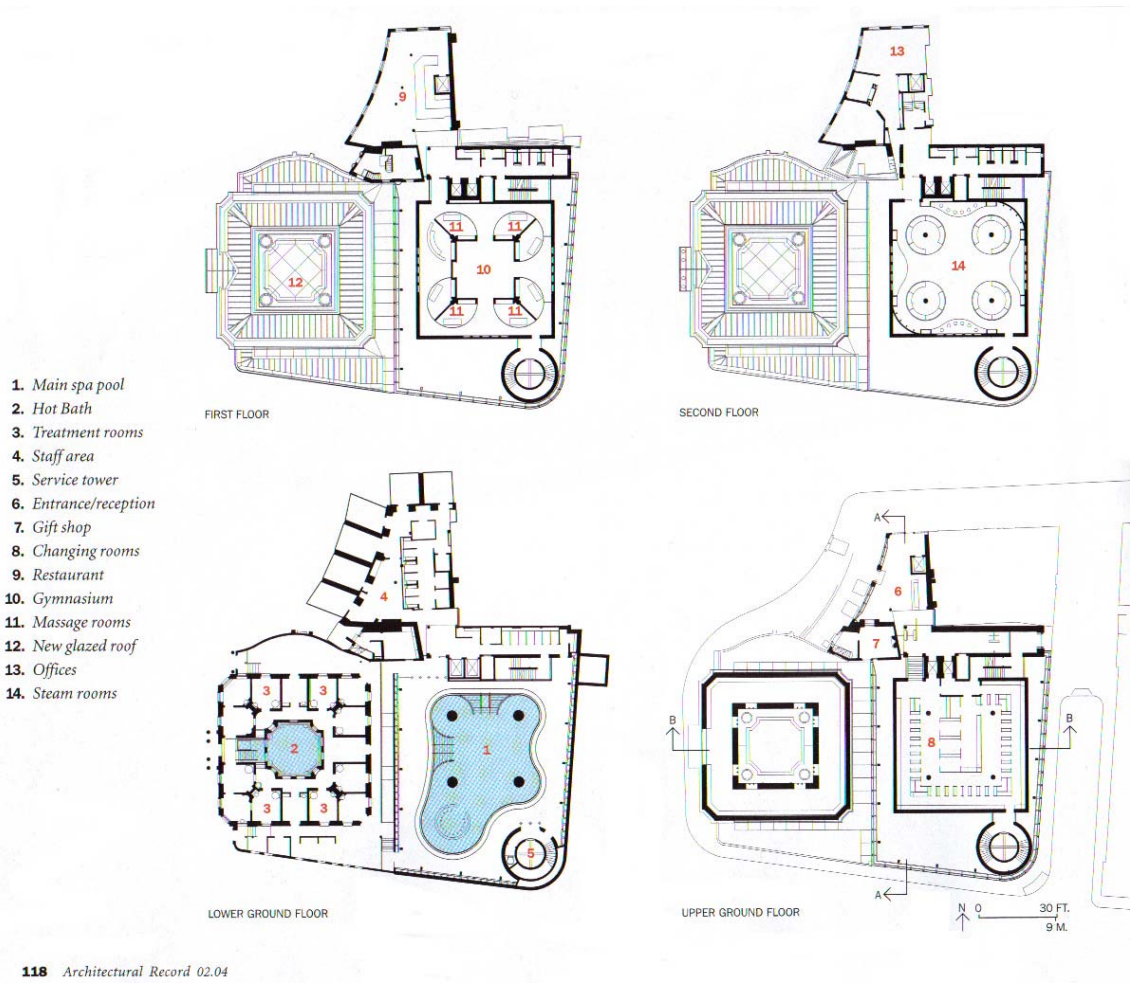
For the purpose of investigating the program of a Water Culture House the functional programs for both a hotel and bath house were studied.

Bath Spa, Bath, England

The recently constructed Bath Spa in Bath, England by Grimshaw provides a possible strategy for the bathhouse component of the Water Culture House. This project involved the restoration of an adjacent spa building as well as a new facility. The building is composed of 39,000ft² and uses the local material of limestone in conjunction with a glass façade to reincorporate the new building into the local fabric. The section below highlights the general organizational strategy of the building.



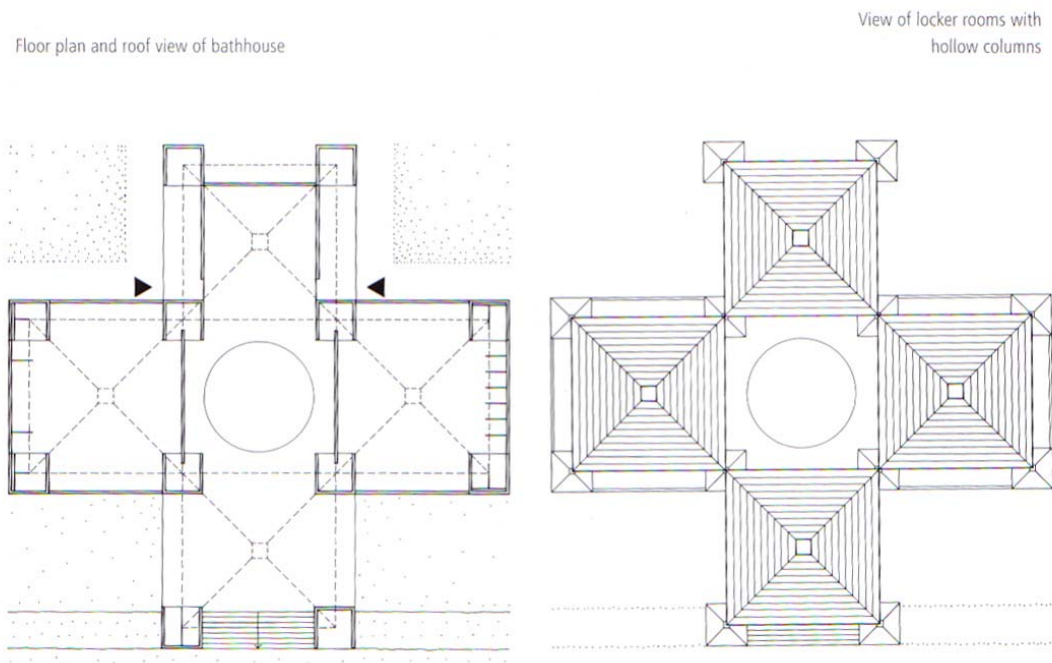
[Fig. 34] Section of the Bath Spa showing the locations of major water features within the building. A rooftop pool (9) as well as a main pool (4) are the primary water features in the building.



[Fig. 35] Plans of the Bath Spa showing the placement of major water features and the general organization of the building.

Trenton Bathhouse at the Jewish Community Center

Kahn's Trenton Bathhouse built 1955-1957 is a simple structure composed of an outdoor pool and showers and locker rooms. The composition uses a classical Roman vocabulary of aedicules as a means of organizing the building. The bathhouse is essentially a symmetrical shape that uses four square volumes spanned by pyramidal roofs, organized in a grid-like orthogonal system around a major central space. Although the building has a small program, its use of geometry and procession as a way of organizing a public space make it a symbolic and clear space.



[Fig. 36] Plan view of Kahn's Trenton Bathhouse. The circular space in the center is the pool and the four pavilions surrounding are the locker rooms.

Indian Step Wells/Step Ponds

“For their pensive stillness and silent collection, still waters have traditionally represented the contemplative and pervasive indwelling spirit of nature.” – Charles Moore¹¹

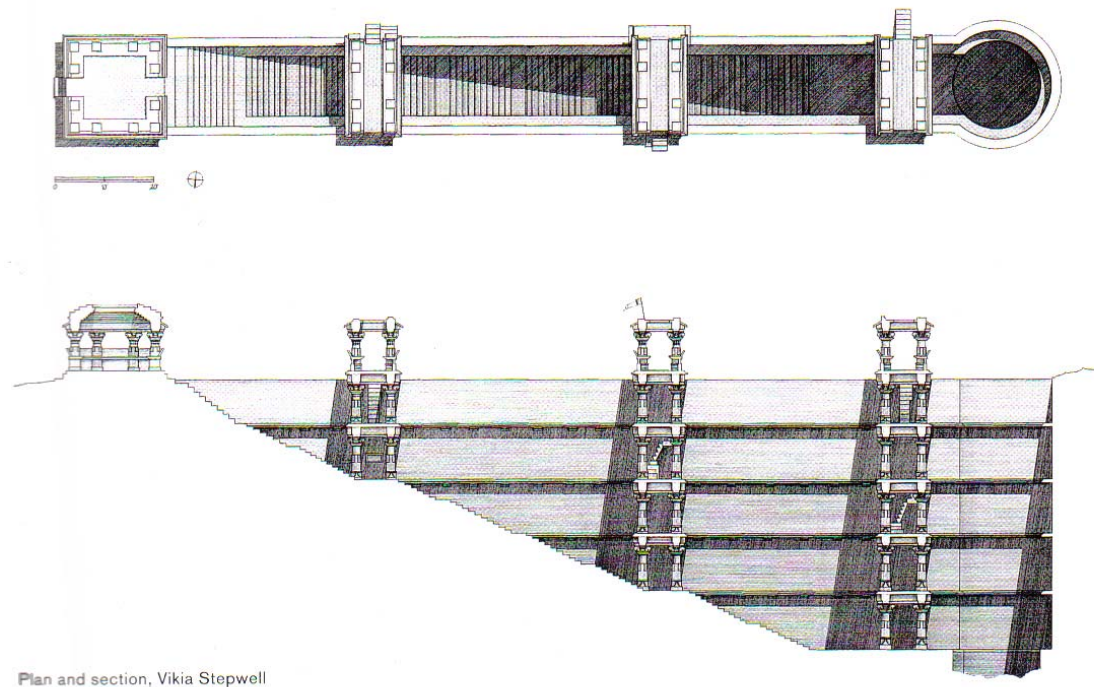
A stepwell is a linear building with stairs leading down to a cylindrical well. Carved and pierced stone walls screens called jalees shade the uppermost landings. In section the stepwell is a triangular wedge, with one horizontal line at ground level, one cutting vertically into the ground, and the third, following the diagonal of the stairs. The stepwell is uncovered and open to the sky. The stepped pond is also used in Hindu traditions as a place for bathing and rituals.

Like other religions and cultures, Hindus attribute significance to bathing as fording a river on a pilgrimage. There is an element of symbolism that equates crossing the exercise with “cross[ing] the shores at a tirtha, a threshold between earth and heaven.”¹²

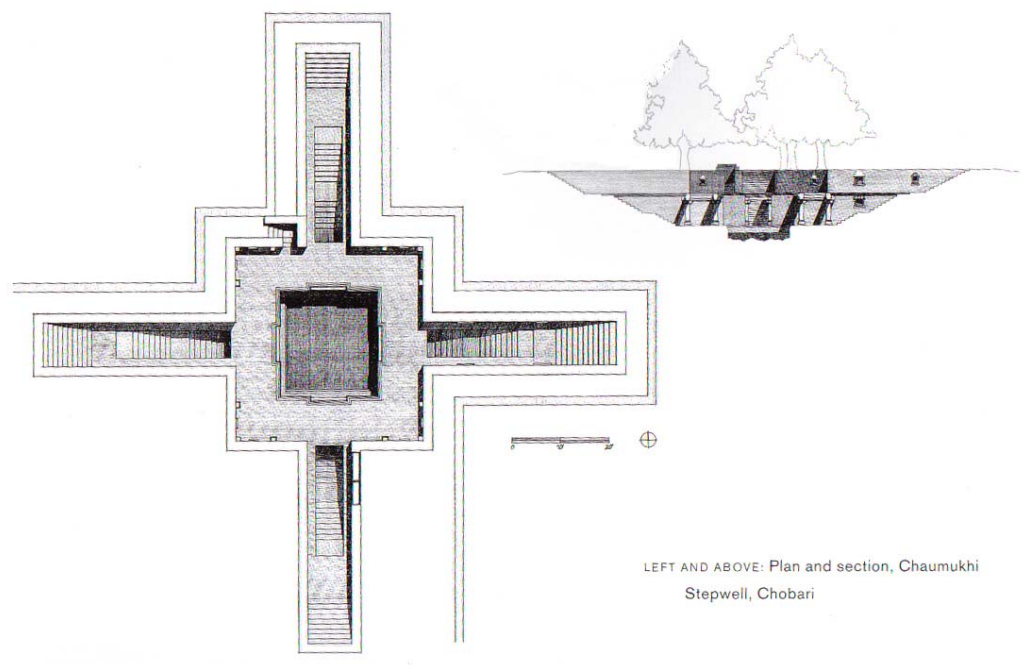
The Vikia stepwell is structured by a simple linear plan that descends directly upon a circular pool. There is a strong use of geometry as stone stairs carve a path into the earth. The Chaumukhi Stepwell is also defined by its strong geometry and axial composition. It has a central figural space, the pool, that terminates the processional route of the stairs.

¹¹ Morna Livingston, *Steps to Water: the Ancient Stepwells of India* (Princeton University Press 2002) p. 5.

¹² *Id.* p. 50.



Plan and section, Vikia Stepwell



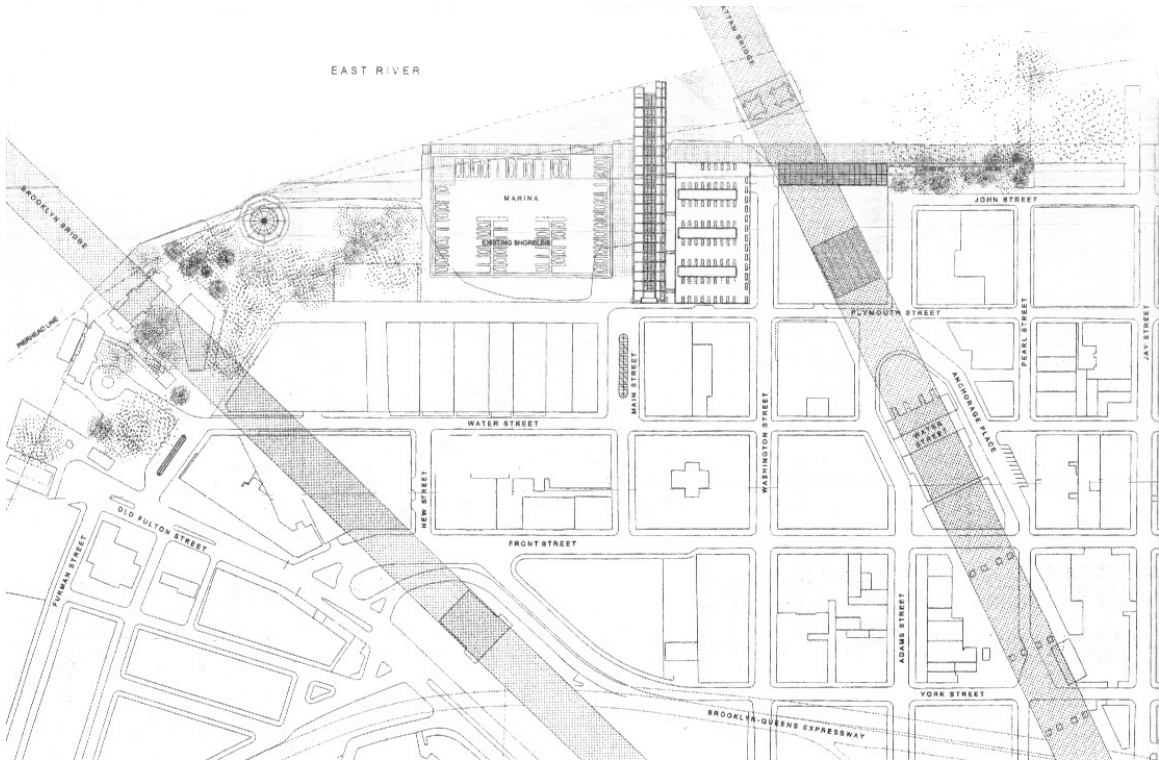
LEFT AND ABOVE: Plan and section, Chaumukhi Stepwell, Chobari

[Figs. 37-38] Plan and section views of the Chaumukhi and Vikia stepwells

The River Hotel – Jean Nouvel

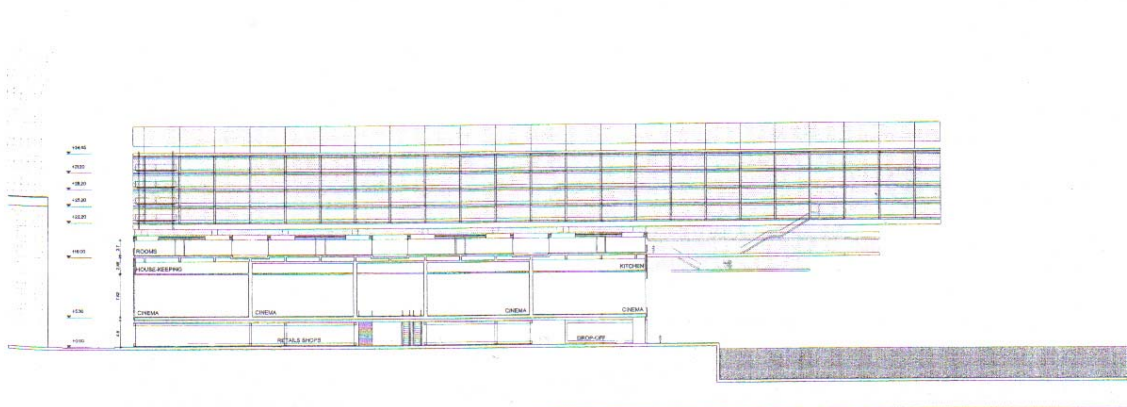
The River Hotel is a fortuitous precedent to use for this thesis investigation as it was proposed in 1999 for the site currently being studied. A major developer in DUMBO, David Walentas, hired the architect Jean Nouvel to design a 145 room hotel for a parking lot site adjacent to the Manhattan Bridge, in what is now Brooklyn Bridge Park. The development proposal included a hotel, shopping area and marina. In the time since the proposal was made, the parking lot area has been reclaimed by the City and is being used as a public park. An interesting feature added by the Parks Department is the restoration of a soft edge in this urban park; a rocky beach along a cove on the site. A well maintained playground was also added to the park. The fate of the proposed hotel is still unclear, but certainly lends insight to the strategy laid out in this document.

One of the concerns with the Walentas proposal was that it might block public access to the waterfront, and that the proposed program seemed heavily geared toward commercial growth and density along the waterfront. It completely ignored the character issues of the neighborhood and was described metaphorically by the architect as a “mirror on Manhattan.” Is this the most effective approach for redeveloping DUMBO and its waterfront? Unique to DUMBO and many of the abandoned industrial sites in the city, is the re-encroachment of nature and the uniqueness of the landscapes created by the absence of human activity. Can a strategy that considers the nature of the river itself benefit both the desire to develop the site and the appetite for open public space in a very dense and expensive urban area.

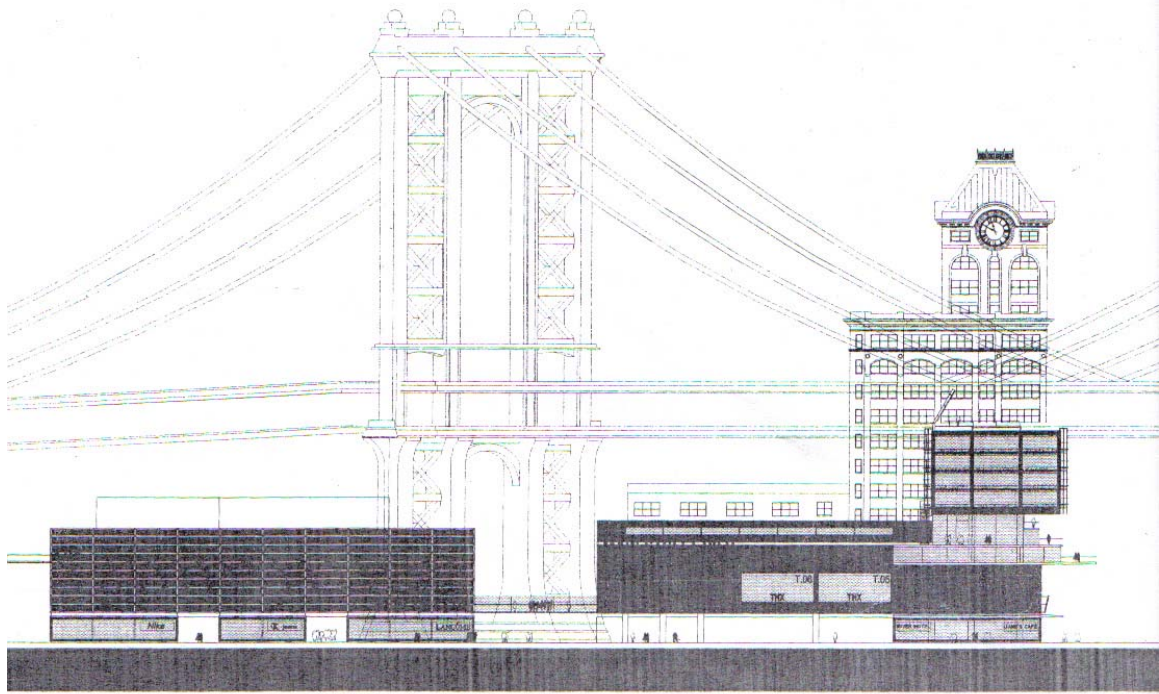


[Fig. 39] Plan of Nouvel's hotel proposal for DUMBO to the left of the Manhattan Bridge.

below: Section through hotel (scale: 1/1,000). Below: Section through Main Street Pier.



[Fig. 40] Sectional view of proposed hotel.



[Fig. 41] View of west elevation of Nouvel's hotel proposal.

FUNCTIONAL PROGRAM ANALYSIS

Functional Program Analysis

This thesis is driven by a desire to keep waterfront available to the public and to create new creative spaces at the waterfront that engage public interaction with the landscape and promote cultural exchange and chances for conversation.

The programmatic elements and required square footage for the bathhouse and hotel vary greatly depending on the intended use and target population. A comparison of the Trenton Bathhouse and the Bath Spa demonstrate that there can be profound programmatic differences in this building type. Kahn's bathhouse offers only a pool and changing facilities, while the Bath Spa is a full service facility with several pools, treatment rooms, steam and massage amenities. The Bath Spa exists truly as an extension of its site, as it facilitates the use of natural hot springs in the area. The Trenton Bathhouse serves as a more culturally significant role as it provides a place for gathering and relaxation for the Jewish Community Center in Trenton. Both are public facilities and both are architecturally significant. The programmatic requirements for a bathhouse in this thesis will fall somewhere in between the two precedents studied.

The programmatic requirements offered in the precedent studies for the hotel component also vary greatly. A hotel can contain any number of rooms and offer additional space for a number of other functions. The programmatic requirements for this hotel will be based on 40 – 60 rooms.

PROGRAM FOR THE WATER CULTURE HOUSE

Site

Total Area Footprint	105,300ft ²
Tobacco Warehouse Footprint	16,200ft ²

Building Components

The Hotel

Guest Rooms 40-60 (max six stories)

Guest Rooms (average 450 ft ² per)	27,000ft ²
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Entrance Lobby

Flow Area	1500ft ²
Seating	200ft ²
Stairs/Elevator	700ft ²

Administration/Office

Reception/Reservations	150ft ²
Concierge	50ft ²
Work Area	200ft ²
Office Conference Space	200ft ²
Storage	60ft ²

Restaurant/Lounge (100 seats)

Seating	1800ft ²
Bar	800ft ²
Bar Storage	75ft ²
Toilet/Coats/Telephone	600ft ²
Kitchen Space	600ft ²
Food Storage	300ft ²
Dish Washing Facility	60ft ²

Receiving and Storage

Loading Dock	150ft ²
Trash Holding Area	100ft ²
Compactor	100ft ²
Outdoor Equipment Storage	200ft ²

Conference Center

Conference Room	1800ft ²
Breakout space	200ft ²
Toilet/Coats/Telephones	500ft ²

Laundry and Housekeeping	
Linen Room (storage and soiled)	500ft ²
Supplies Closet	80ft ²
Housekeeping	80ft ²
Engineering and Mechanical Area	
Mechanical Plant	1000ft ²
Shop	200ft ²
Meter Room	50ft ²
Parts Storage	100ft ²
Parking	
Staff/Visitor	2000ft ²
<hr/>	
Total Net	41,355ft ²
Grossing Factor	1.4
<hr/>	
Total Gross	57,897ft²

Spa/Bathhouse

Outdoor Facilities

Main Pool	5400ft ²
Hot Pools (5)	375ft ²
Bar/Café	200ft ²
Steam Room	200ft ²
Pool Deck Area	

Indoor Facilities

Lounge	100ft ²
Sauna	200ft ²
Steam Room	200ft ²
Cold Pool	120ft ²
Treatment Pools	375ft ²
Massage Rooms	500ft ²
Bathrooms (gender segregated)	400ft ²
Showers (gs)	500ft ²
Changing and Locker Facilities (gs)	800ft ²

Support

Employee Area	700ft ²
Checkin/Information	200ft ²
Swimsuit Rental	100ft ²

Laundry and Housekeeping

Soiled linen room	500ft ²
Supplies/storage	500ft ²
Linen Storage	200ft ²
Outdoor Supplies Storage	300ft ²

Mechanical Facilities 2000ft²

Total Net 13,870ft²

Grossing Factor 1.4

Total Gross 19,418ft²

**Total Gross for All
Programmatic Functions 77,315ft²**

THE BUILDING

The Building

The planning of the proposed Water Culture House will be informed by the various precedents described earlier, both in terms of the siting and program of the structure itself, as well as the ways in which the building mediates the public and private spaces on this site at the river's edge. The Water Culture House will incorporate the existing walls of the Tobacco Warehouse in order to achieve continuity with the industrial history of the site, annexing the spaces enclosed by the Tobacco Warehouse's walls to create both interior and exterior spaces that will constitute the Water Culture House complex. Whether the Tobacco Warehouse will remain an enclosed exterior landscape entirely open to the sky, or whether some or all of the Tobacco Warehouse will be enclosed and incorporated into the interior of the Water Culture House will be determined as the planning of the structure progresses. Whatever final form the building takes, however, certain important ideas drawn from the precedents will be included.

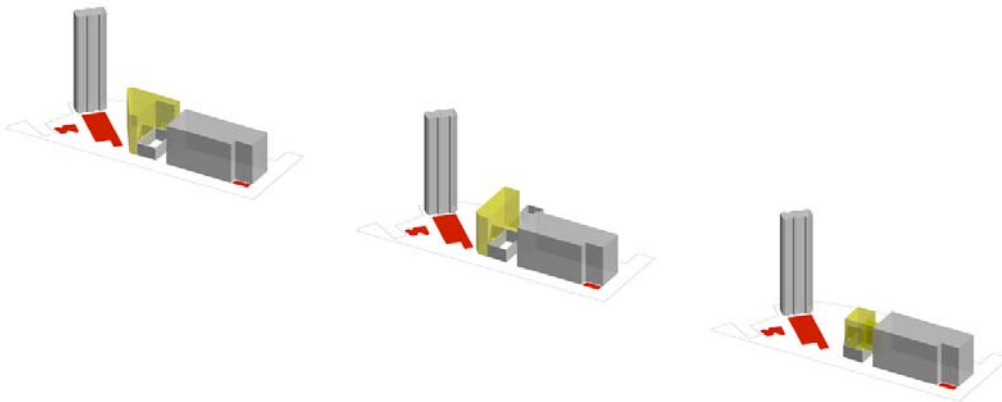
Like the hotels lining Collins Avenue in Miami Beach, the Water Culture House will lie between the water's edge and the public thoroughfare, in this case Water Street. Rather than eliminating public access to the shoreline by creating an enclosed private facility, the Water Culture House will attempt to connect the public with the waterfront, as do Miami Beach hotels like the Delano. The Water Culture House will accomplish this by including a variety of public and semi-public spaces stretching down from Water Street to the East River. These spaces will include bar and restaurant spaces that are partially outside, as well as landscaped gardens: all spaces the public can enjoy for minimal or no cost. In addition, the primary public pool, as well as changing rooms,

various "hot pots," saunas and steamrooms will be open to members of the public who purchase daily or season passes, as well as being open to guests staying at the Water Culture House. Thus, while certain services within the hotel facility will primarily serve hotel guests – some mineral baths, therapeutic spas, and of course the hotel rooms themselves – much of the program of the Water Culture House will consist of interior, exterior, and transitional spaces that are open to any member of the public. Because these public spaces will stretch from Water Street, through the enclosed spaces of the Tobacco Warehouse, and across the landscaped parkland stretching down to the River, the public will have uninterrupted access to the riverfront, as well as the landscape between the river and the structures of the Water Culture House complex.

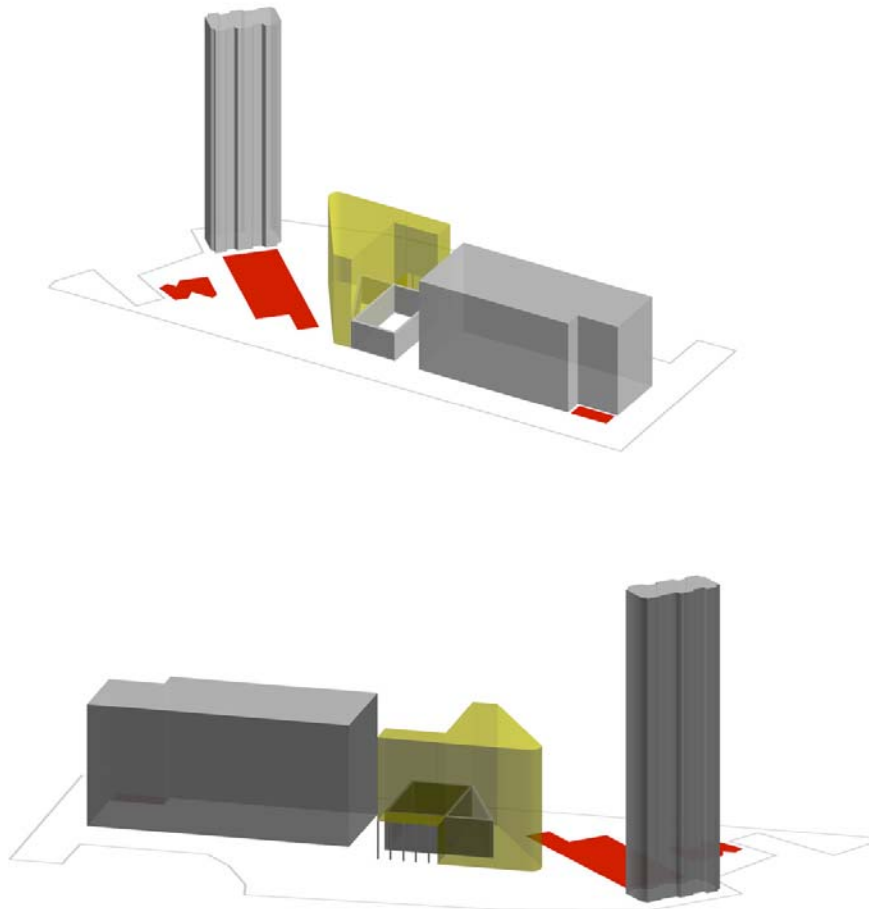
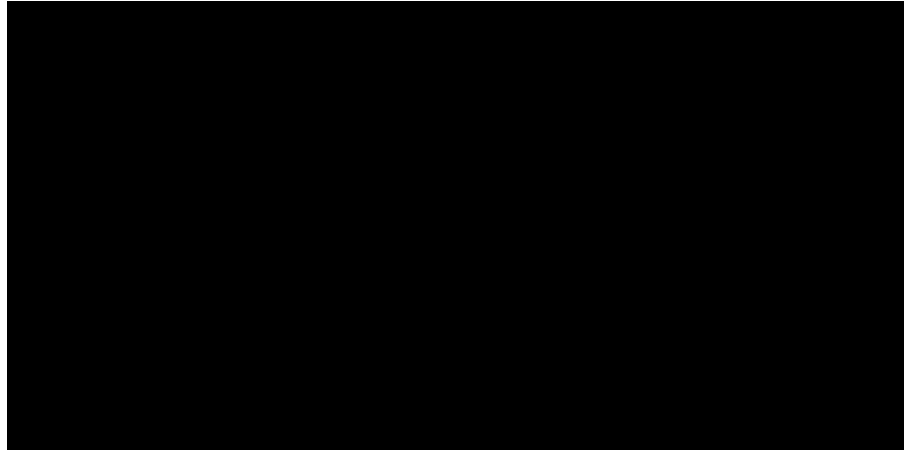
In this way, the design of the Water Culture House will avoid some of the pitfalls that plagued the failed hotel proposal by Jean Nouvel. Unlike the Nouvel proposal, which was criticized for blocking public access to the waterfront with its enclosed spaces and private marina, the Water Culture House's central focus will be preserving, and fostering, public access to the river. In addition, while the Nouvel proposal's attempt to "mirror Manhattan" provoked complaints that the Nouvel highrise was out of character with and dwarfed DUMBO's low- and mid-rise architecture, the Water Culture House will echo the existing structures on the landscape by capping construction at six stories.

The Water Culture House will also be shaped by lessons culled from the design of the Bath House in Bath, England and the Trenton Baths. For example, the ways in which these facilities have located large public pools in relation to private massage rooms and therapeutic spa spaces will inform the layout and design of the Water Culture House,

though the tension between interior and exterior spaces within the Water Culture House will distinguish this design from those two precedents. Indeed, the centrality of bathing spaces located in the exterior spaces of the Water Culture House will be a crucial factor in defining the unique character of the facility. These important external pools will draw on the forms and layouts that are reflected in the various sacred pools that are so important within India's Hindu traditions, as well as the pools that have been carved out of the natural landscape along the Capetown coast in South Africa. While the focus of the Water Culture House is secular and not religious, and devoted to steam and cleansing for health purposes rather than for ritualistic religious purification, the power of the spaces and shapes utilized in Indian ritual pools will inform the layout of the exterior pools of the Water Culture House. Notably, while it bears repeating that the Water Culture House's mission is secular in nature, it is undeniable that the soaring and dynamic forms of the bridges which enclose the site imbue the location with a transcendent ambience that approaches the spiritual. It is appropriate, then, that the forms of the cleansing baths that lie between the Water Culture House and the river's edge will be informed and inspired by the shapes of sacred bathing pools.

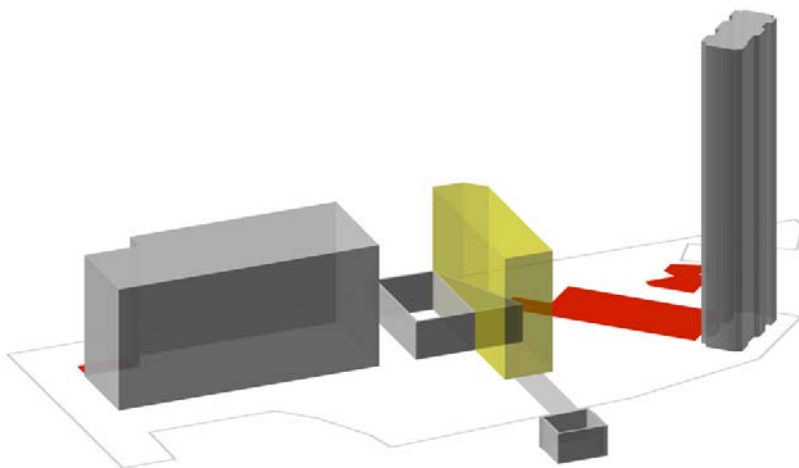
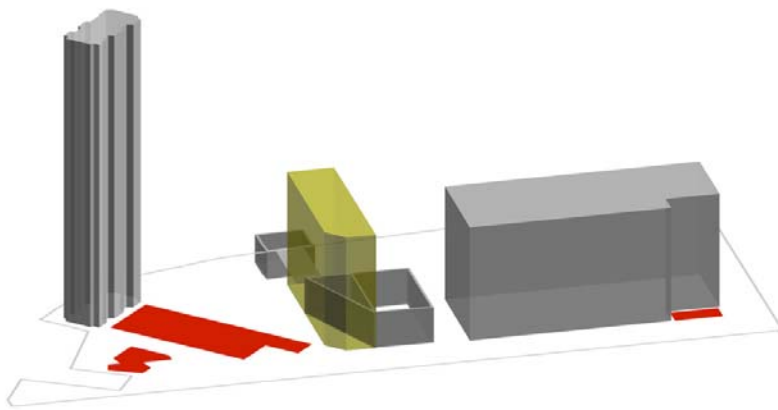
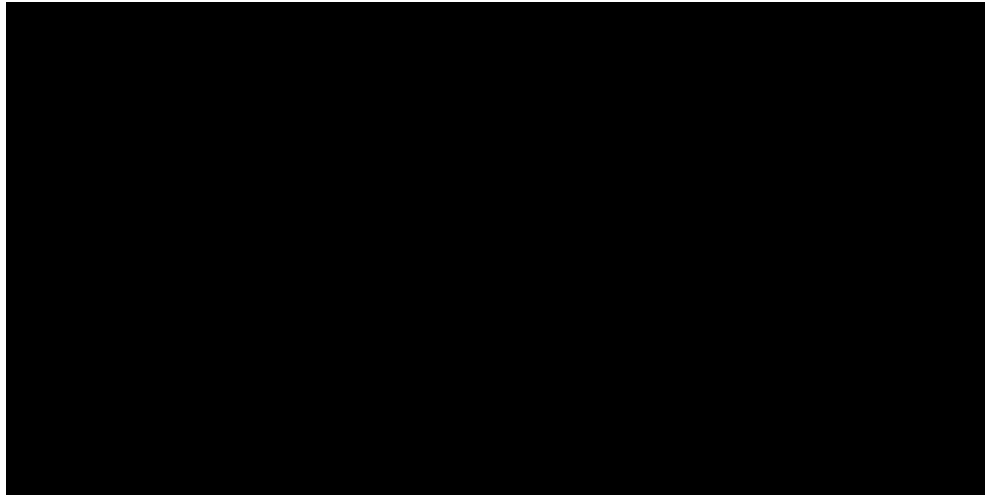


STRATEGY ONE:



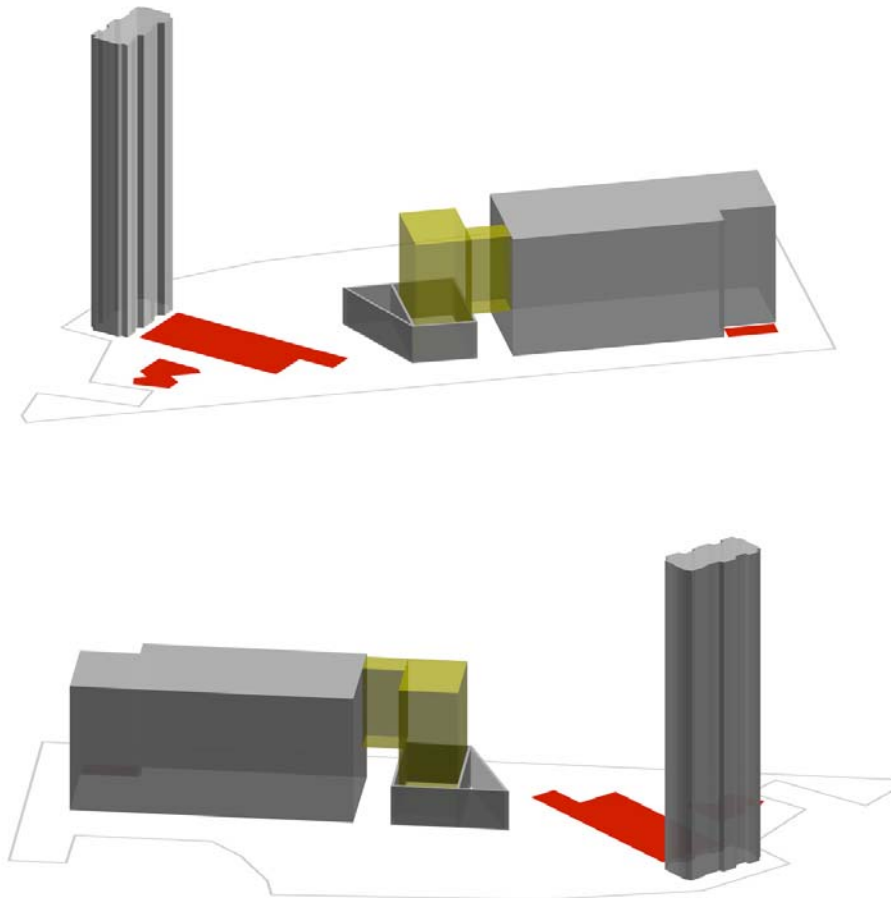
[Fig. 43] This building strategy incorporates part of the wall of the Tobacco Warehouse, encasing it within a new figure. The remaining rectangular wall would become a “gateway” courtyard to the site. This building would be five stories.

STRATEGY TWO:



[Fig. 44] This building strategy is driven by a linear path to the water. It utilizes a bar building and also encases part of the wall of the Tobacco Warehouse. The linear path culminates at a floating bath moored in the East River.

STRATEGY THREE:



[Fig. 45] This building strategy utilizes both the existing walls of the Tobacco Warehouse as well as the abandoned Empire Stores building lying adjacent. In this strategy, the bath and conference facility would exist in the new structure, while the hotel component would exist within the Empire Stores building. There would be a walkway that joined the two figures.

CONCLUSIONS

Conclusions

Ultimately, a project built on a publicly held site should be fully entrusted for public use, thus, the hotel component of the proposed program was eliminated and the program was revised to include a swimming hall. Also, the ruin of the Tobacco Warehouse was left largely untouched with the exception of a small pavilion to be located within the triangulated portion of the building. A second pavilion would hold the restaurant component of the program.

A larger urban strategy proposes a way to engage the existing parks (Brooklyn Bridge Park and Empire Fulton Ferry State Park) with the anticipated conversion to parks of the piers that run southeast between the Fulton Ferry slip and Cobble Hill. This strategy attempts to engage the edges of the existing old boat slips so that the experience along the waterfront does not rely solely on an edge or path along the waterfront but rather brings people to the waterfront more incrementally.

DUMBO is a place that encapsulates a sense of timelessness within New York City. Its deteriorating surfaces suggest how one era may dissolve into another, how the river dissolves into the land, how the surface of the bridge dissolves as it passes over the neighborhood as it meets the land. A Water Culture House provides facilities swimming facilities for the residents of Brooklyn, it also provides a way for residents to be engaged with the river as its surface engages the building.

Revised Programme

Park Offices/Community Space

Park Offices for staff of 10

Admin – 1000sf

Storage – 200 sf

Workroom – 500 sf

Copy Room – 100 sf

Dry Classrooms (related to river ecology, but also used for general community educational purposes, lecture.)

Capacity 15 – 20 students – Small 500 sf each (2)

Large 700 sf each (2)

Wet Classrooms (for water instruction – SCUBA, CPR, kayaking, fishing, etc. located near the pool area)

Capacity 15 – 25 students – Small 500 sf

Large 900 sf

Restaurant/Café

Seating -1800 sf

Toilet/Coats/Telephone – 600 sf

Kitchen Space – 600 sf

Food Storage – 300 sf

Dish Washing – 100 sf

Receiving/Storage

Loading Dock – 150sf

Trash – 100 sf

Compactor – 100 sf

Outdoor Equip Storage – 200sf

Bathhouse

Support

Employee Area – 700sf

Checkin/Service Point – 700sf

Swimsuit/Towel Rental/Return – 100sf

Indoor Facilities

Sauna – 200sf

Steam Room – 200sf

Cold Pool – 200 sf
Tepid Pools – 375 sf
Bathrooms – 400sf each/gender segregated (2)
Showers – 500sf (2)
Changing and Locker Facilities – 800sf (2)

Laundry and Housekeeping
Soiled Linen Room – 500 sf
Supplies/Storage – 500sf
Linen Storage – 200sf
Hot Pools – 375sf

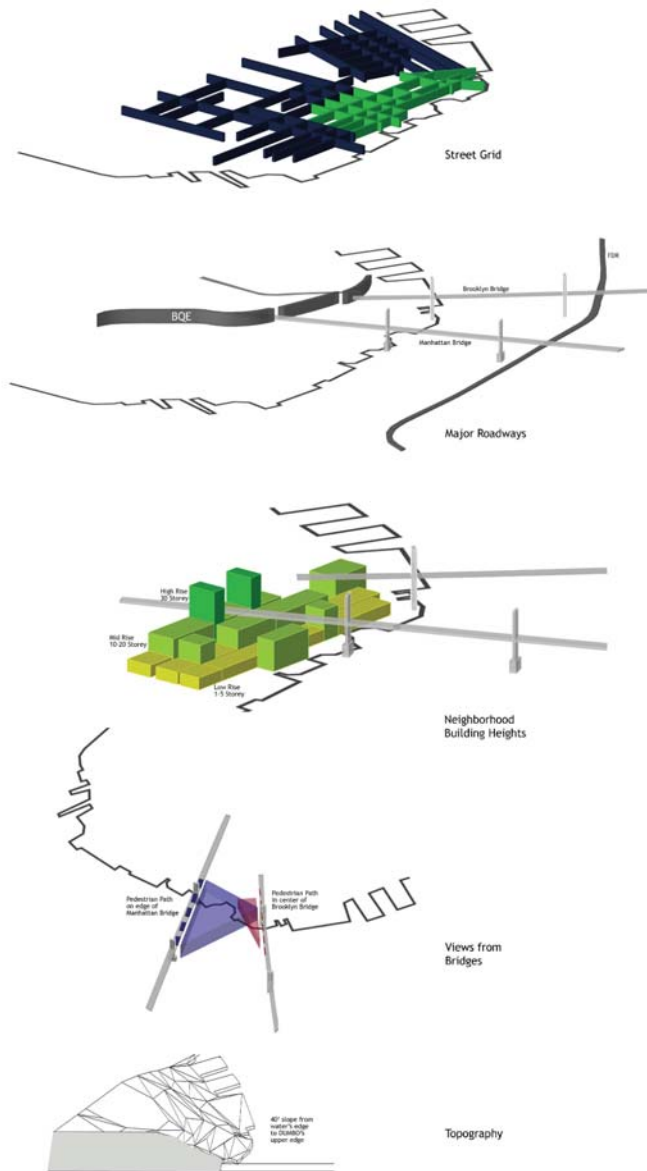
Main Pool – 60'x75' or 45'x75' (if indoor) (outdoor 164'x 54')
Pool Deck Area – TBD

Mechanical Facilities – 4800sf

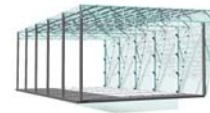
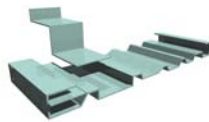
25500 sf
1.3 gross factor (for circulation, etc.)

33150sf

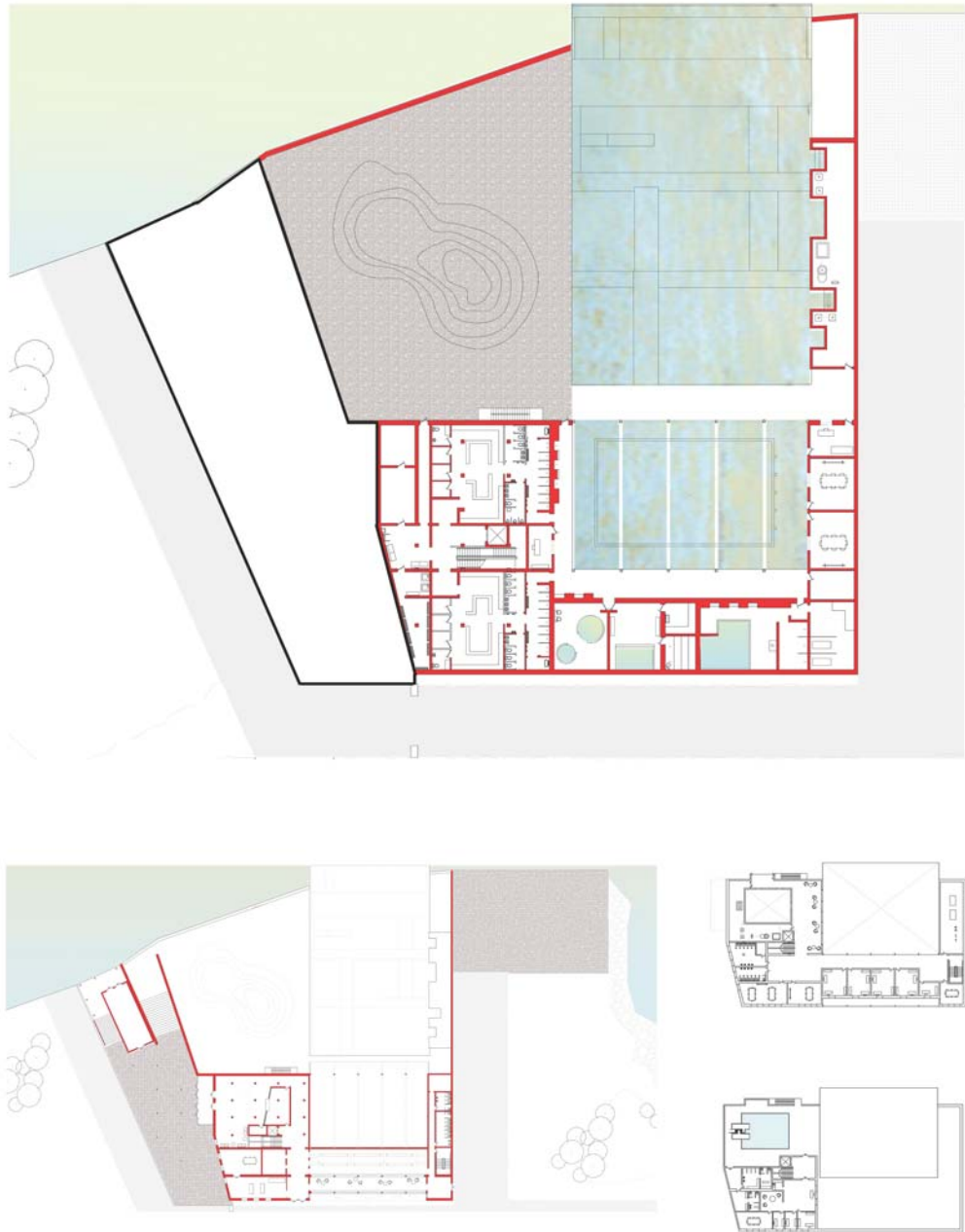
[Fig.46] Diagrams of DUMBO describing the Street Grid, Major Roadways, Building Heights, Building Heights, Views from Bridges, Topography



[Fig. 47] Title board showing Site Plan of DUMBO at 1/50' = 1'-0" and Diagram concepts for the building showing the planes of water as water trays, the concrete anchorweights which hold outdoor pools in place and the glassy structure of the training pool area.

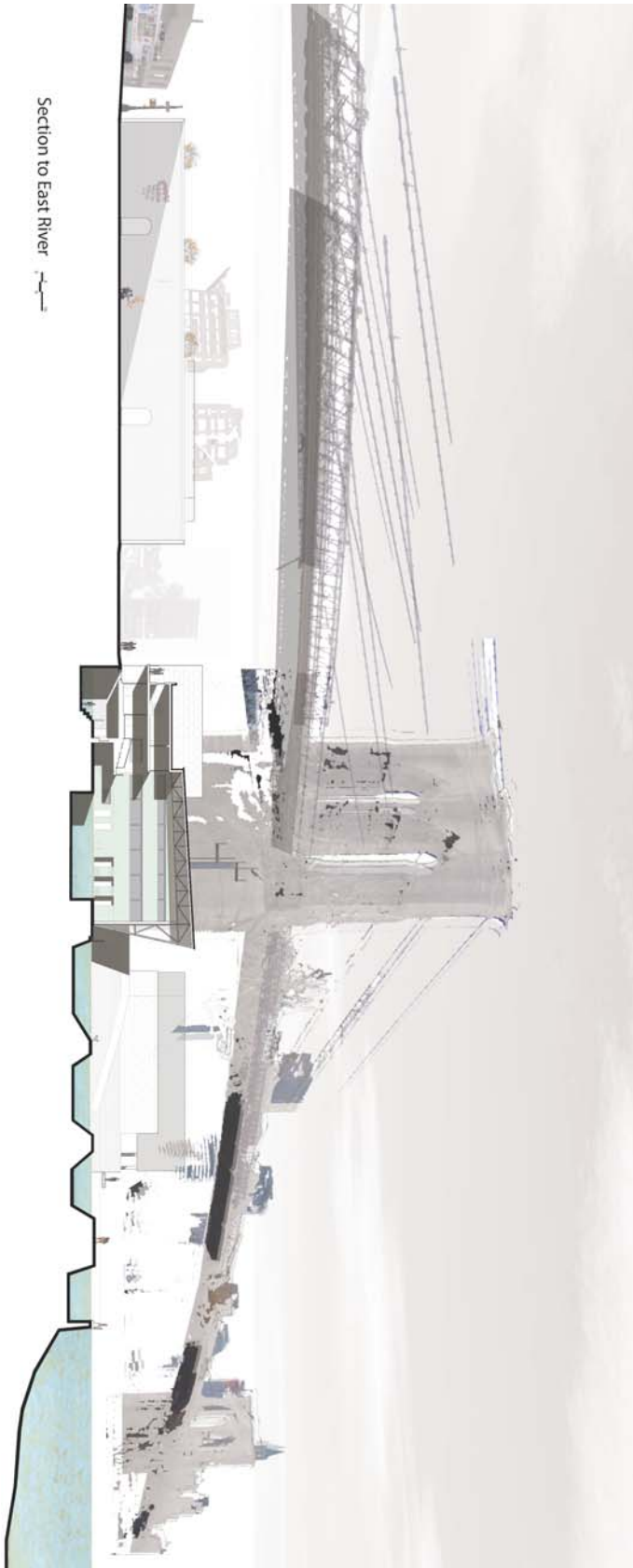


[Fig. 48] Plans of the Water Culture House. The Pool Level is shown at 1/8" = 1'-0", the Entry Level and 2nd and 3rd levels are shown at 1/16" = 1'-0".





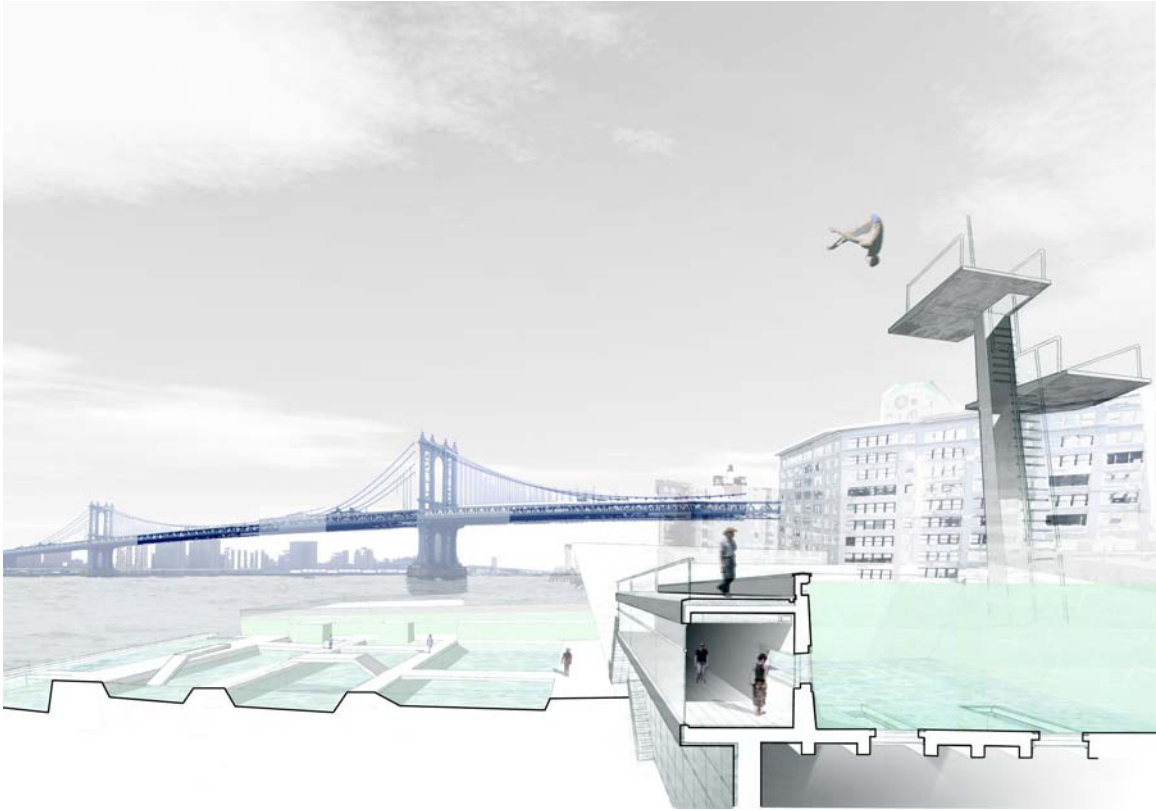
[Fig.49] Site Section through Restaurant Pavilion at 1/16"=1'-0".



[Fig. 50] Section to the East River



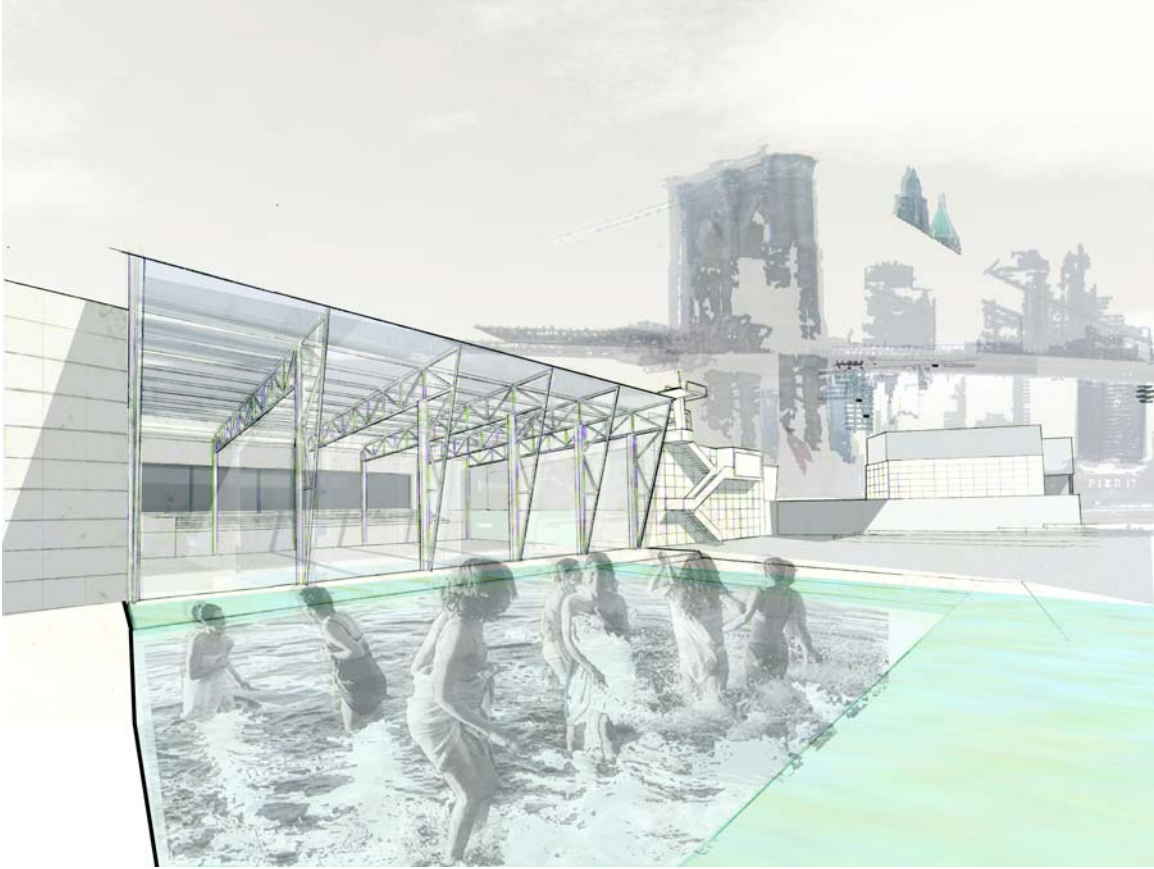
[Fig.51] Section through the park.



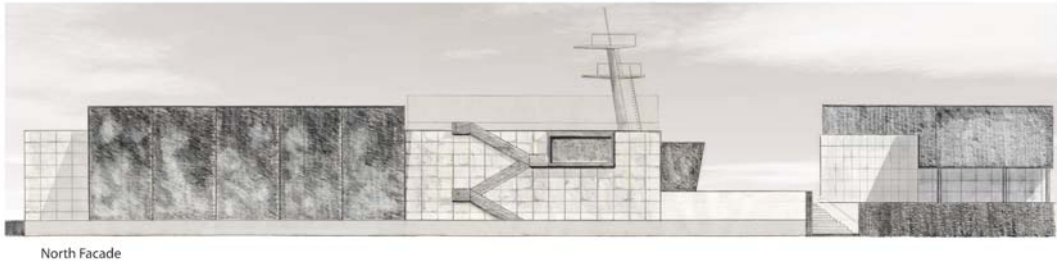
[Fig. 52] Dive Perspective – Section perspective through the roof dive platform looking towards the Manhattan Bridge.



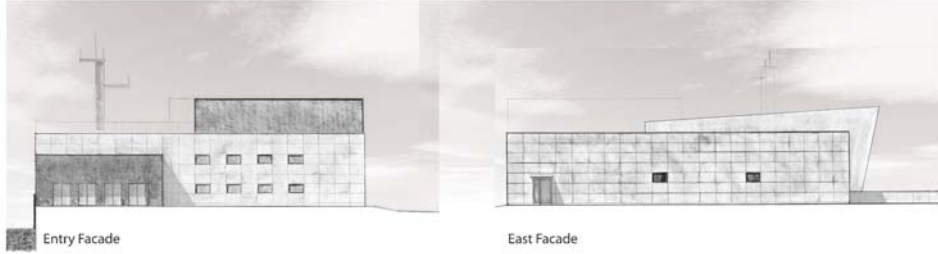
[Fig. 53] Perspective View looking toward Manhattan Bridge showing view of the bathhouse and its location in relation to the ruin, describing the ability of a passer-by to view the interior of the bathhouse.



[Fig. 54] Perspective View showing the exterior pools at the river level.

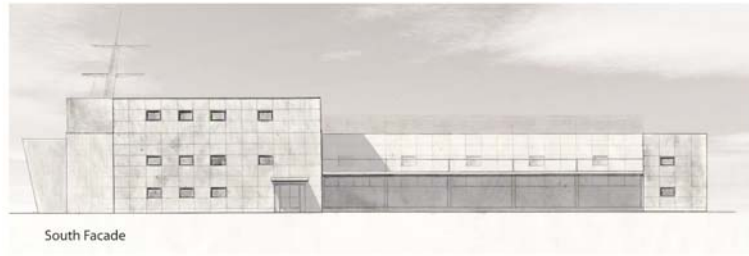


North Facade



Entry Facade

East Facade



South Facade

[Fig. 55] Building Facades.

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