

ABSTRACT

Title: REDISCOVER THE WATERFRONT
THROUGH REDEVELOPMENT – A
CULTURAL AND ENTERTAINMENT
CENTER IN HUIZHOU, CHINA

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Huizhou, only 70 km from Hong Kong, takes a quarter of the Pearl River Delta Specific Economical Region in Guangdong Province, China. With a very strong industrial background and rich in natural and cultural attractions, Huizhou is a fast developing regional hub connecting Guangdong to the world. However, the historical core of city, which once had ports along the main waterfront, has lagged behind the development of the city and it was left for small commercial and residential developments. New interest in this area rediscovered the public importance of the historic district. Revitalization of this waterfront will reinforce the city's civic status in the region and reconnect people to its past as a center for folk culture and commercial.

The primary goal of this thesis is to re-interpret the historic core of Huizhou, by providing a year-round cultural and recreation urban focus for this district and its neighborhoods along the waterfront. The new cultural and entertainment center will include an information center, galleries/public educational spaces, conference/exhibition spaces, hotel, as well as other related recreation programs. This thesis demonstrates how to enhance the city's built environments in dense urban fabric and will spur the development of strong water network of the city.

REDISCOVER THE WATERFRONT THROUGH REDEVELOPMENT – A
CULTURAL AND ENTERTAINMENT CENTER IN HUIZHOU, CHINA

By

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Dedication

To my husband, Libin, who have been so enthusiastically undoubting and supportive
through this life changing educational endeavor.

And to Debbie, Joice and Lumin, whose selfless friendship, support, and patience helped
me get through the longest days, nights, and weeks needed to complete this.

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CHAPTER ONE: HUIZHOU MUNICIPAL REGION

GEOGRAPHIC OVERVIEW

Huizhou is located in the Guangdong Province of China. Guangdong has a 2200-year-long history with a long-established administrative status in China (Fig.1-1).

Huizhou is located at north latitude $22^{\circ}33'$ - $23^{\circ}57'$ and east longitude $113^{\circ}49'$ - $115^{\circ}25'$ on the south coast of Guangdong province, China, and only 70 km from Hong Kong (Fig.1-2). Huizhou is one of the major cities in Guangdong. To the north, Huizhou is adjacent to Guangzhou, capital city of Guangdong Province. On the south, it connects to Shenzhen and Hong Kong. This ideal location creates endless opportunities for the city's future development.



Figure 1-1: Location of Guangdong Province in China. Guangdong Province was marked in red area at the lower right bottom. Red outline is map of China.



Figure 1-2: Location of Huizhou in Guangdong Province. It shows Huizhou is an important city in Guangdong and its close relationship with Guangzhou, Shenzhen and Hong Kong.



Figure 1-3: Location of Huizhou in the Pearl River Delta Special Economic Zone. Pinked area is Huizhou region. The red circle is its downtown. It shows the Dong River passing the downtown and joining the Pearl River in Guangzhou. In this map, it also shows the train connection of Huizhou with its surrounding areas.

Huizhou falls within the South Subtropics Oceanity Monsoon Climate. The Tropic of Cancer passes across the city. The year an average temperature is 19.5–22.5 . Huizhou has a land area of 11,200 square kilometers, as big as one quarter of the Pearl River Delta Special Economic Zone (Fig.1-3). Huizhou is designated as a regional hub and gateway city connecting eastern and northeastern Guangdong, as well as Fujian and Jiangxi. The permanent population of Huizhou is 3.21 million. It has coastline of 223.6 kilometers as well.

Huizhou's history dates from the Shui Dynasty (590AC). It has been called Huizhou since the Song Dynasty (1020 AC). Huizhou is a prefecture-level city with 5 county-level divisions, including 2 districts and 3 counties after 1963. They are: Huicheng County, Huiyang County, Boluo County, Huidong County, Longmen County. This thesis project is located in the Huicheng District (Fig.1-4).



Figure 1-4: Division of Huizhou Municipal Region. Huizhou include five counties. Downtown is located in Huicheng County, where circle indicated.

Local communications and transportation are very convenient with a modern traffic network (Fig.1-5). This network consists of ports, railways, expressways and airports. Huizhou has a deepwater coastline of 30 kilometers and the Huizhou Port is a national first-grade port being located only 47 sea miles from Hong Kong. Huizhou Port has a yearly throughput of 120 million tons. The Beijing-Kowloon Railway and the Guangzhou-Meizhou-Shantou Railway meet in Huizhou (Fig. 1-6). When construction of the Huizhou-Aotou (Port) Railway is completed, these three railways will form a well-developed railway system around Huizhou. Four expressways connect Huizhou with neighboring cities. Huizhou has 7,211 kilometers' mileage open to traffic and a highway density of 65 kilometers per hundred square kilometers.



Figure 1-5: Highway system in surrounding area.

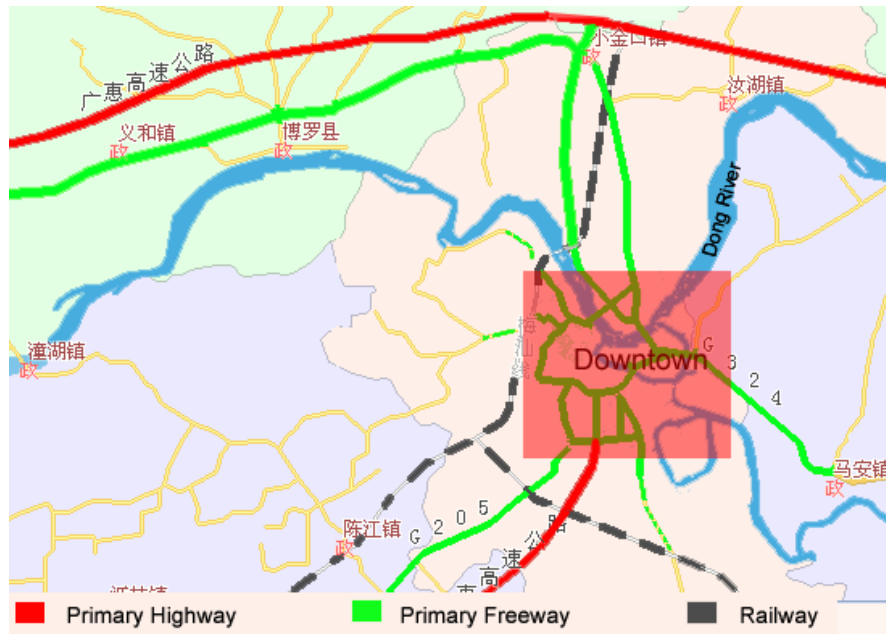


Figure 1-6: Transportation from downtown to surrounding areas.

From Huizhou it is only one hour's drive to Shenzhen Huangtian Airport and 2 hours' drive to Guangzhou Baiyun Airport. The Dongjiang River and Xizhi River, which pass through the downtown of Huizhou, are good for navigation connecting with surrounding areas.

As early as ten years ago, Huizhou already stood among "China's 40 Excellent Cities of Investment Environment" and "The 50 Best Chinese Cities in Comprehensive Strength". Huizhou is a developing city full of vigor and vitality.

HISTORY OF HUIZHOU

With a variety of resources, Huizhou is a combination of natural beauty and cultural attractions. Huizhou is the hometown of a number of historical figures, such as Su Dongpo (famous poet and writer in Song Dynasty), Liao Zhongkai, Deng Zhongyuan, Deng Yanda, and Ye Ting as outstanding representatives. Left behind

them are about 100 historic relics and over 2,000 valuable historic and cultural items.

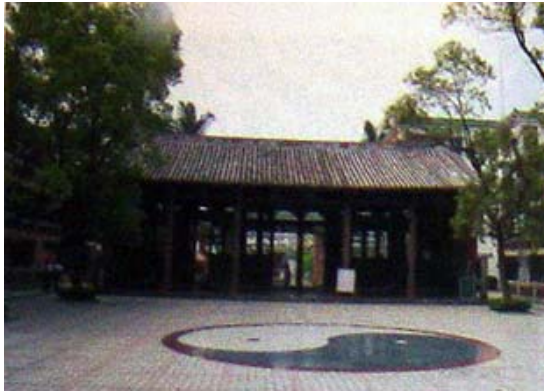


Figure1-7: Historic city college



Figure1-8: View to Jindai Street



Figure1-9: Zhongshang Pailou



Figure1-10: Huang Family College



Figure1-11: Jutian Taoist Temple



Figure1-12: Pinghai Historic City

Huizhou is popular for its historic figures as well as its richness of terrain, which include mountains, rivers, lakes, seas, springs, waterfalls, forests, gorges and islands. During the last ten years, six locations in Huizhou have been listed as nation-level or state-level scenic spots and natural reserves. The only sea turtle nature protection area is also located in Huizhou. Adjacent to Shenzhen and Hong Kong, Huizhou has been endowed a favorable location to develop its industries and tourism.



Figure1-13: View of Huizhou's West Lake



Figure1-14: Night View of West Lake

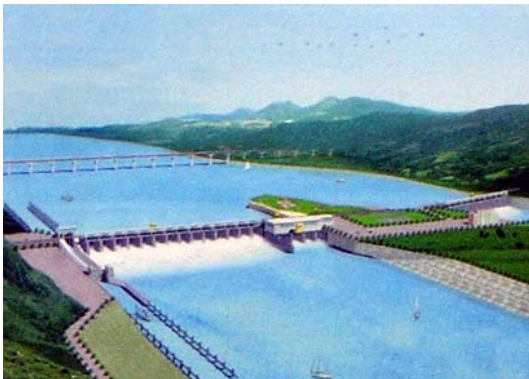


Figure1-15: Proposed Jiantan Dam



Figure1-16: General view of Huizhou



Figure1-17: View of Luofu Mountain



Figure1-18: View of Nankun Mountain

Because of its excellent climate and rich topography, Huizhou is also an ideal area for agricultural production. Many specialties, such as Huizhou meicai (a kind of pickled salty vegetable), salt-baked chicken, Dongjiang glutinous rice wine, Yangcun pomelos and oranges, Huiyang sanhuang chicken and Sanmen abalones, are more famous than the city itself.



Figure1-19: Traditional Water Sport



Figure1-20: Famous Tangquan Chicken

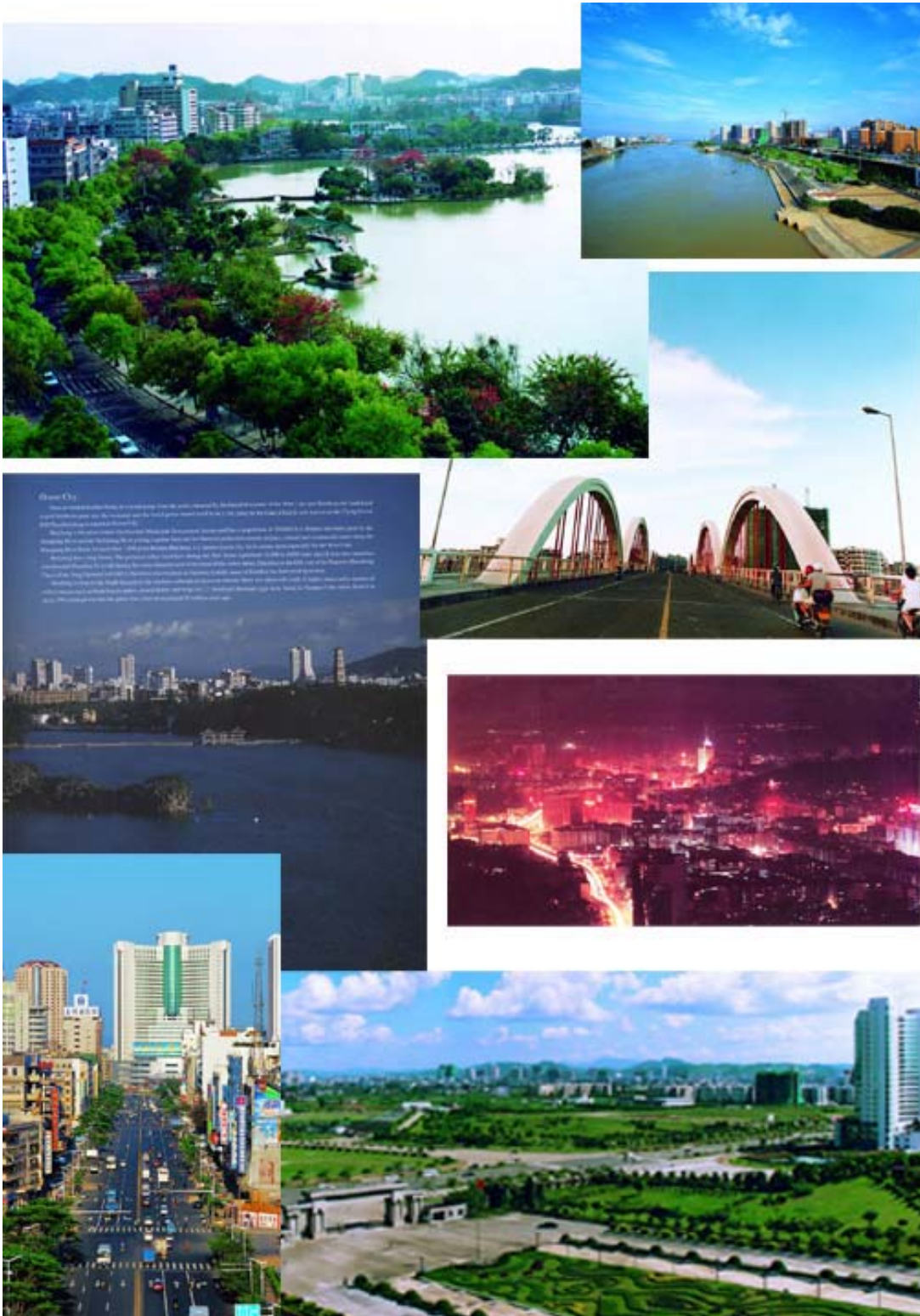


Figure1-21: View of Famous Huizhou Mei Cai and special agricultural products

In the past decades, local industries have been developing amazingly fast with the focus on electronics and light industry. Some of these have become well known brand names, which would form the core players of related trade fairs. Huizhou has the basic industrial backup to develop the convention and exhibition industry. A great number of industrial giants have found their homes in Huizhou such as TCL, Desay, Macat, Foryou, General Electrics, Sony, Panasonic, Samsung, etc, Huizhou has become one of the cities in southern China with the highest development growth, the biggest potential and the best vitality.

A city of such history and beauty should take best advantage of its amenities, of which the waterfront is one of its greatest and most neglected, especially in the downtown area. By design this cultural and entertainment center will help to reclaim the waterfront and bring civic identity to this historical area.

CHAPTER TWO: DOWNTOWN HUIZHO AND SITE



DOWNTOWN HUIZHOU

OVERVIEW OF DOWNTOWN

Downtown is located in the Huicheng County of Huizhou. It is the center of municipal, economic, cultural, and transportation of Huizhou as well as the whole Dong River Region. Huicheng County has a land area 1,400km². It was divided into five urban sub-districts (Quarters) and sixteen rural sub-districts. Downtown Huizhou covers the five urban quarters, including Qiaodong, Qiaoxi, Jiangnan, Jianbei and Longfen. (Fig.2-1) Huicheng County has 645,000 residents.

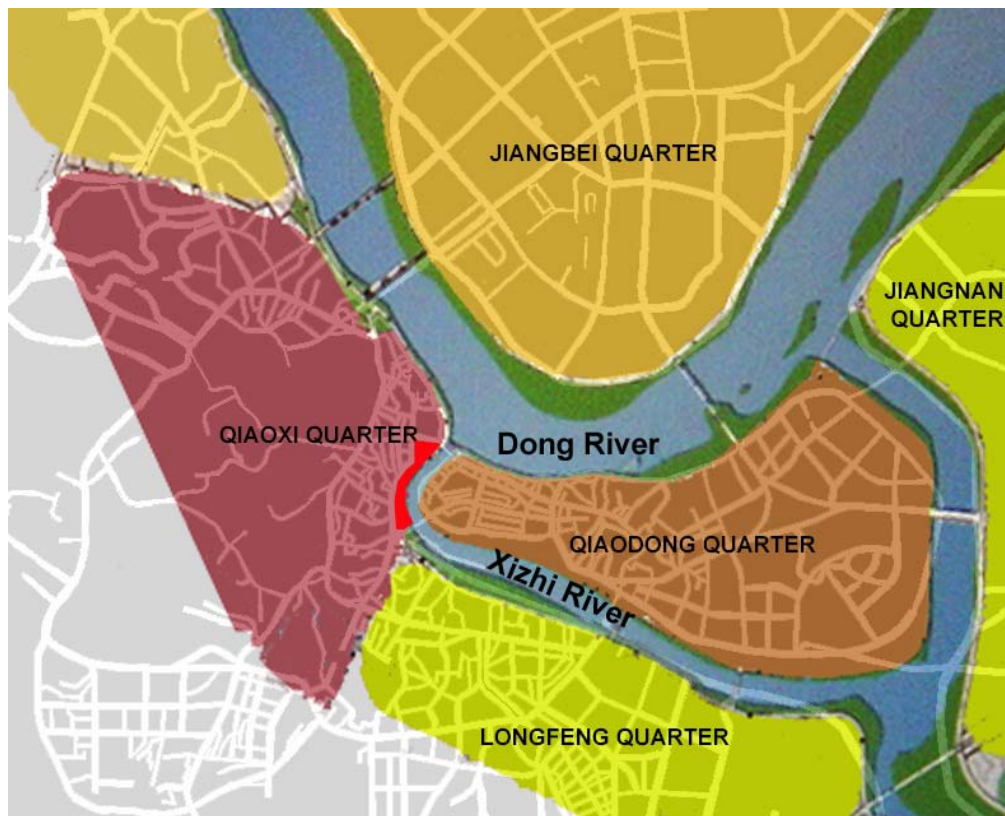


Figure 2-1: Division of Downtown Huizhou. This is a detailed view of the circle area in Figure1-4. Red area is the location of the thesis site.

The downtown started to develop at the intersection of the two rivers. The center kept growth along the rivers and finally sprawled in all directions (Fig2-2, Fig2-3, Fig 2-4). The Beijing-Kowlon Railway and the Guangzhou-Meizhou-Shantou Railway meet in this district. Huizhou Airport has regular flights connecting this city to the other parts of China and the world.

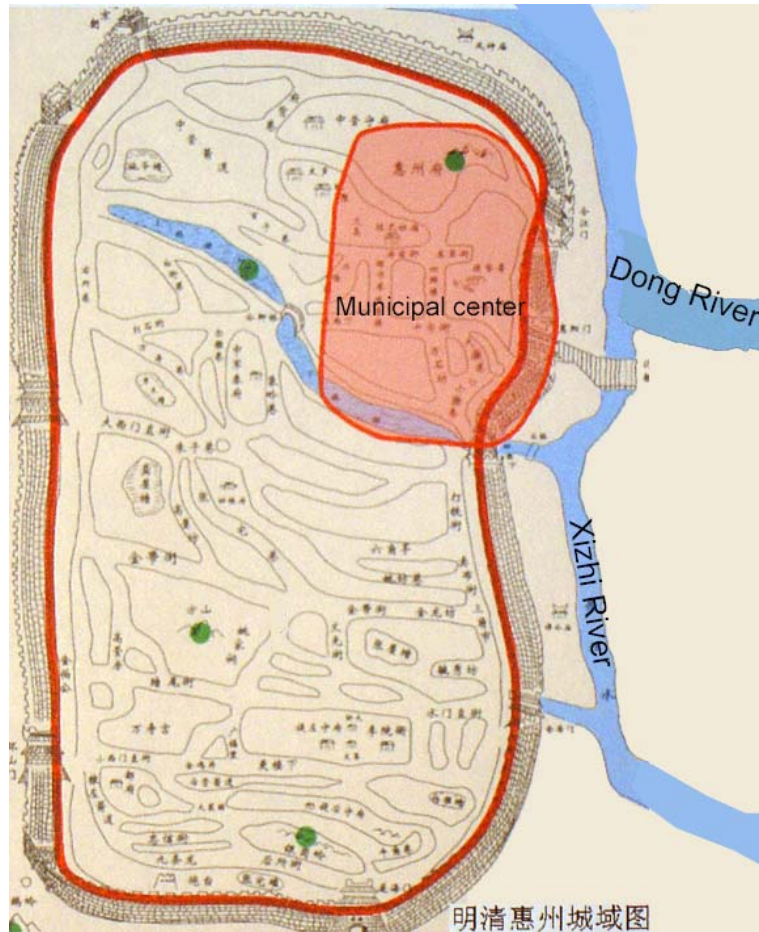


Figure 2-2: Historic map about 600 years ago. First residence started from the confluence area where the municipal center was.

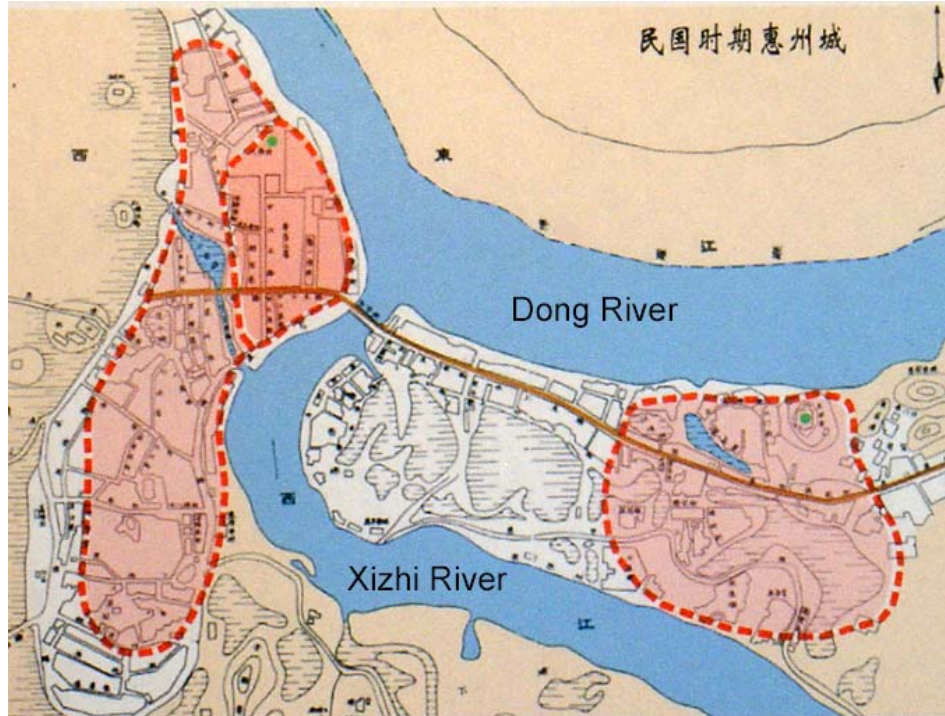


Figure 2-3: Historic map about 100 years ago. City developed along the rivers.



Figure 2-4: Existing City Blocks. During the last several decades the city has expanded dramatically. Because the geological limitations on the west side (hills, water), the new city hall was built in the Jiangbei Quarter (upper north across Dong River) in order to accommodate the requirements of new development. Therefore, it is very obvious that this thesis site is a perfect place where new will be connected to old.

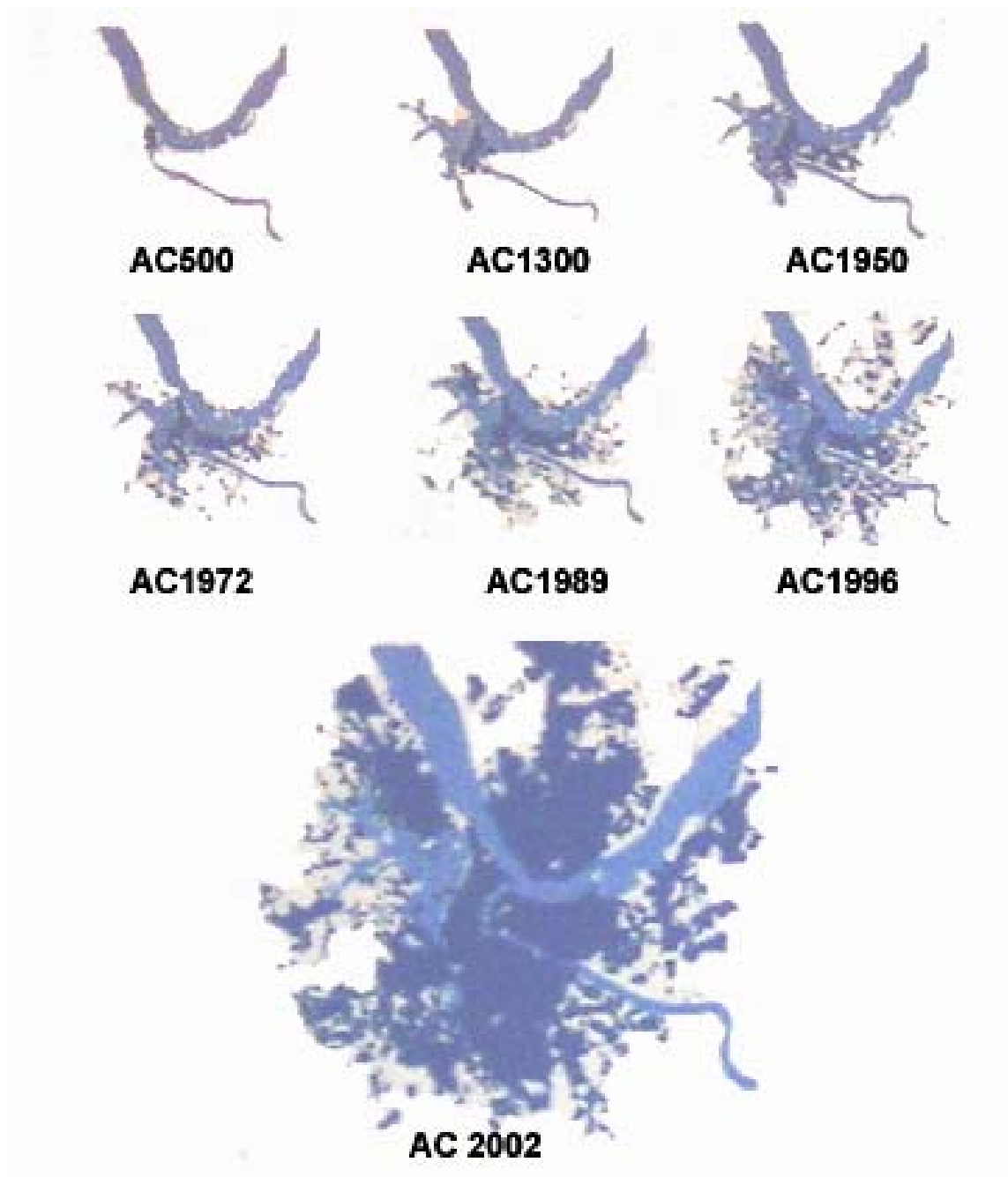


Figure 2-5: The growth of the city through history.

Lingnan culture is a general name refers to all kinds of the traditional folk culture in the southwest part of China. Huizhou is located at the intersection of three main traditional folk culture of this family. They are the Guangzhou culture on north, the Hakka culture on southeast and the Chaozhou culture on southwest. Unique location,

prosperous economic, constant immigration of the people allow Huizhou to be able to accept and adopt various cultures and maintain an open-mind to the outside of the world. Huizhou developed its own folk culture from this melting-pot process. The city's history reveals strong threads in the face of adversity, and a tradition of welcoming immigration. These characteristics are often referred to as part of the city's continuing cultural identity today.



Figure 2-6: Existing city's major roadways and streets.

From the existing city's street hierarchy (Fig.2-7), the city has started to develop a beltway system as primary traffic circulation in the downtown area. From there the secondary streets was connected to both inward and outward. We also can see that growth of the city was oriented toward the water in A area. The streets were

perpendicular to the water. Therefore, created easier access to the water on both side. In area B and C, the city block were more parallel to the water. Direct access to the water is much less. In those more newly developed area of E, D, and F, a better street hierarchy can be seen. The site for this thesis is located in A area. It already has a good basic street layout. However, there is an absence of main streets. This thesis will try to coordinate the city's master plan (please refer to the section 'city's master plan' in this chapter) and create a better circulation network and bring more access to the water and design a pedestrian friendly environment in this area.

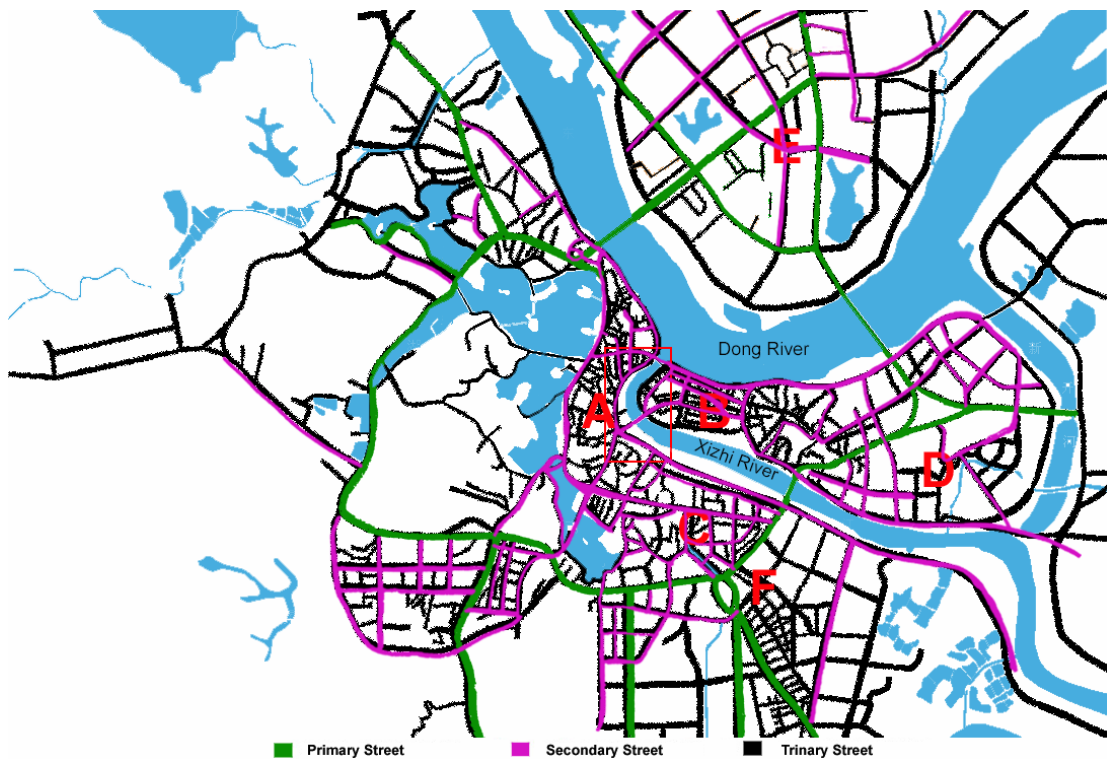


Figure 2-7: Street Hierarchy in the Huizhou downtown

THE TWO RIVERS – DONG RIVER AND XIZHI RIVER

Downtown has a high coverage of the water surface (Fig. 2-8). Understanding the importance of the water will be helpful to understand the importance of taking a waterfront as the site for this cultural and entertainment center.

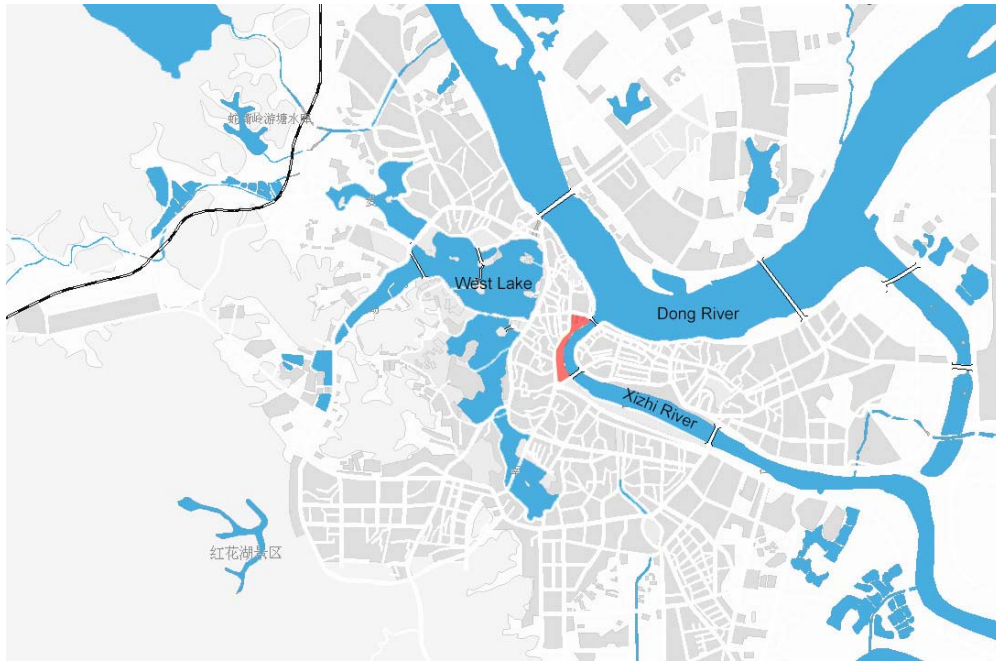


Figure 2-8: Existing water system in the Huizhou downtown. Site is located in red area.

Two rivers – Dong River and Xizhi River meet in the downtown. The original settlement first started at the west bank of the confluence as showed in Fig.2-2 and Fig.2-5. Many historic heritage sites of Huizhou are located in and around the confluence area (Fig.2-9).

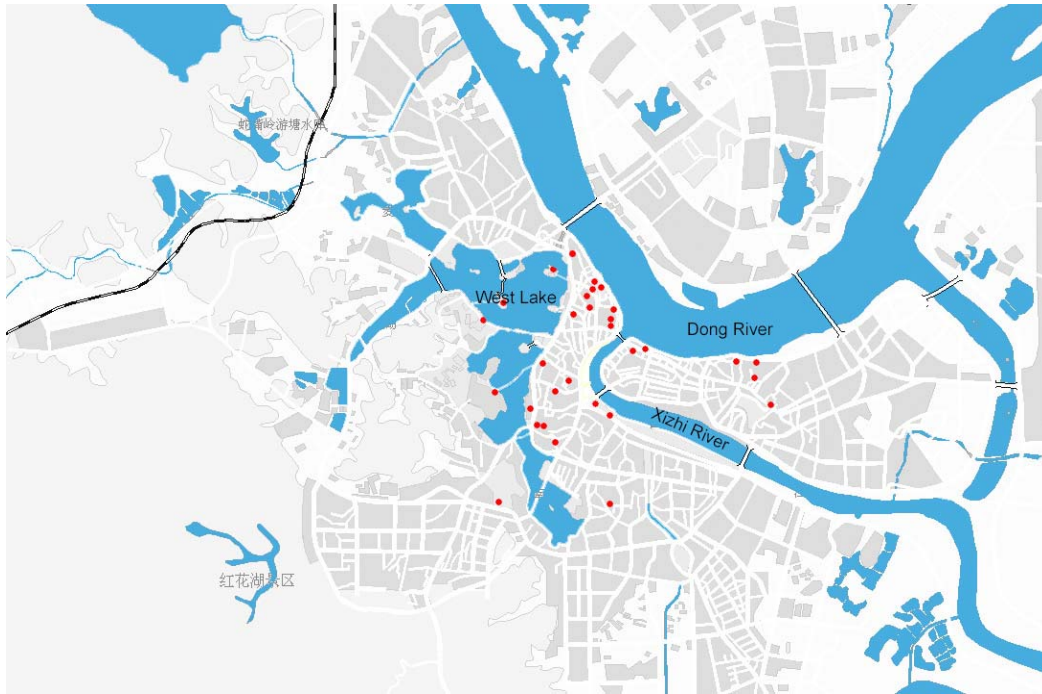


Figure 2-9: Main heritage sites in the downtown Huizhou.

Dong River is Huizhou's mother river and it is also one of three main branches for the Pearl River. It starts from Big Bamboo Peak, Wuxian, Jiangxi Province and winds about 562km total. It passes through Huizhou goes toward northwest, and joins Pearl River at Guangzhou. Boats were the main transportation hundred of years ago in this region. The old Dongxin Port, which was located at the west bank of the intersection of Dong River and Xizhi River, could park 100 commercial boats at the same time at its peak time. More than 80 commercial clubs lined up on the streets along the river in the Song Dynasty. The Dong River extends 26.6km across downtown Huizhou from east to west like a "V". It is the divider of new Jiangbei Quarter and historical Jiangnan Quarter (Fig.2-1). As mentioned in the last chapter, the development of the new municipal center in Jiangbei Quarter across the Dong River broke the geographical limitation of the old city and gained new space for future growth. However, that does not means the city will

shift away from the water. The development along the Dong River becomes critical to the future growth of the city. The waterfront becomes the interface of the old and new, becomes the joints of the history and future. The Dong River, along with its long historical significance and generous physical dimension, will bring a new life to Huizhounians. To fulfill its duty, this waterfront is calling for a facility that can serve as a meaningful link both between the city and people, and past and future. This thesis will explore this idea by designing a cultural and entertainment center at the intersection of the two rivers.

The Xizhi River is another important river that passes through downtown Huizhou. It starts from Bamboo Cove, Zijin, Guangdong Province. It extends 176km total and 6.9km in downtown. It passes by Huidong District, Huiyang District, and Huicheng District of Huizhou. It joins the Dong River at Dongxin Bridge, where the old Dongxin Port was located, in downtown. The site for my thesis is also located in this confluence area (Fig.2-8).

The Rivers are the most important component that gives Huizhou its precious cultural background. It is also the most important place to study the historic, cultural, economical development of the city. The Dong River and the Xizhi River area had been designed as the green axis for ecology, landscape, cultural and entertainment developments in the city's master plan (please refer to the section 'city's master plan' in this chapter).

GREEN SPACE ALONG THE RIVER

From the city's green space diagram (Fig. 2-10), we can see high coverage of the green spaces around West Lake and also in the west part of the city where there are dramatically topographical changes and dense urban development could not exist. These green areas make a tremendous contribution to the beauty and livability of the city. From the east side of the West Lake, the topography of Huizhou is relative flat and is the areas where dense urban development happened. However, it is obvious that there is not enough green space in these areas. In my thesis, I am going to explore how to bring nature to the heart of the city.

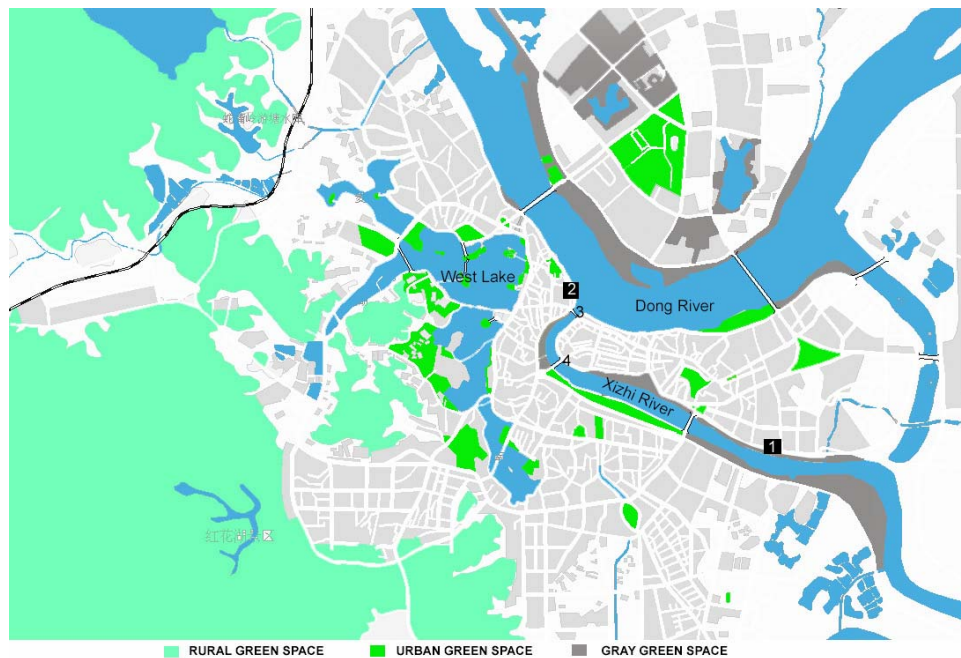


Figure 2-10: Existing green space. In this diagram, it shows the large area of green on the west side of the city. That is mostly hillside. The beauty nature and access to downtown make it attractive to both local residents and tourist. Also it shows large areas of green around West Lake and the newly developed municipal center. However, it is obvious that there is no green system in the high-population-density areas along the river, except Xiapu Wwaterfront Park on the southwest bank of Xizhi River. Gray green space means it could be period flooded areas and no good landscape strategy in those areas (Fig.2-11, 2-12). Some of them will be permanently covered once Jiantan Dam is built. However, there is still a great chance to gain some additional green space along the river.



Figure2-11: Waterfront view of Xizhi River.
This location was marked as 1 in Fig.2-10



Figure2-12: Waterfront view of Dong River.
This location was marked as 2 in Fig.2-10

In 1998, Xiapu Waterfront Park was built (Fig. 2-13 & 2-14). It reclaimed 17.75ha water edge along Xizhi River. It contains large area of green landscape space and a main hard surface central square. It has green buffer zone along the street, special designed rest area and pavilions and has some entertainment elements and small café and bar areas. It created a much better people friendly environment along the river and set enough room for sustainable development of the city. This project was honored as one of the “top ten public squares in Guangdong”. This well designed green space highly promoted the values of the areas around it. It was a big success in the city for reclaiming its waterfront. However, the programs in this big green area are not wide enough to attract people at all the ages and most of the facilities do not open on year-round-base, especial during night. For these reasons, the park is under used. This might be an interesting topic that worth to explore in my thesis.



Figure 2-13: Views of Xiapu Waterfront Park (sidewalk & plaza)



Figure 2-14: Views of Lower Part of Xiapu waterfront Park (sidewalk on left)

My thesis will propose a Watergate Park that connects with Xiapu Waterfront Park at Watergate Bridge (marked as 4 in Fig.2-10) along Xizhi River. It will connect Zhongshan Park (built) and Wenbita Park (in construction) in Qiaodong Qu, Dongjian Park (not built yet) in Jiangbei Qu, and Xiapu Waterfront Park to form a green belt along two rivers. This thesis will explore the idea that creates a green lung in downtown.

SITE AND CONTEXTUAL DESCRIPTION

GENERAL BACKGROUND

The location of the site is in a developing waterfront area in the historic area of Huizhou downtown (please refer to the section of 'city's master plan' for area definition). The specific site location includes Watergate Bridge from the south, to Watergate Street and Guoqing Street on the west, Zhongshan East Street on the north and Xizhi River on east (Fig. 2-15).

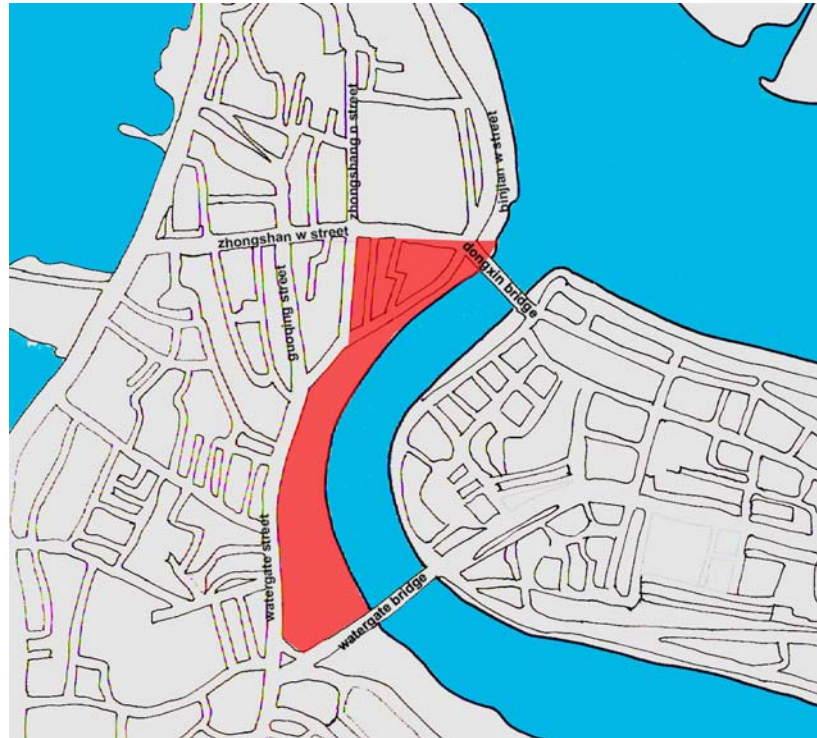


Figure 2-15: Site location

Without well-designed development, this area became strictly a small commercial and residential district. However, based on city's 2005 master plan, the site will serve as the main thoroughfare on the waterfront for visitors arriving by train, car and boat. A public facility that suits for this site should have multifaceted identity instead of single use. Combination of daily and event-oriented programs in this thesis assume to create a reason for being at the waterfront for all of residents, and a place of interest that also communicates the cultural identity of the city to visitors

THE NEEDS FOR A CULTURAL AND ENTERTAINMENT CENTER

Each day, thousands of people from all over the world come to enjoy the charms that Huizhou has offered. For many of them, their first visit is met with confusion from the local orientation and frustration of trying to find comprehensive information. A clear, distinguishable urban focus must be created to attract visitors and guide them in limited time.

Huizhou offers more than enough amenities to warrant a prominent cultural and entertainment center. From the newly developed Jiangbei Municipal center to the historical city core, the natural beauty of West lake and Flying Goose Hill, the historic features are numerous, but widely scattered throughout the city. A lot of the wonderful places are rarely seen by first-time visitors. In addition, Huizhou has no place that citizens and visitors can gather or hold events, such as cultural festivals except in a few municipal buildings. Such a space which is much less connected with political functions would be well known among Huizhounians and would be an ideal assembly spot for both visitors and local residents.

The convenient transportation network and the abundance of tourist resources, such as the famous Luofu Mountains, the picturesque Nankun Mountains and the scenic West Lake enable Huizhou to become a holiday resort. Developing more tourist souvenirs with classy, exquisite designs play an important role for sustainable development of the tourism. 3,076,200 tourists visited Huizhou during Jan 2005 to May 2005 and 1248700 of them stayed overnight (www.huizhou.gov.cn). In the table (3-1), it showed very clearly that tourism is becoming an important component in Huizhou's

GTP. The development of tourism also promotes the development of the Third Industry, which includes restaurant, hotel, entertainment & etc. However, there is no facility in Huizhou that was designed to provide the tourists with comprehensive guides of interests and events that are happening in town. The design of this cultural and entertainment center will also provide a place where tourists can exchange their experience and explore more about Huizhou.

Year	Total Number of Tourists (10,000)				Tourism Income (Billion)		
	Total	Stay Overnight	International	Chinese	Total	RMB (Billion)	Dollar (10,000\$)
2003	521.48	271.5	22.25	249.4	26.21	21.45	5756
2004	750	352.0	31.2	320.8	38.9	31.9	8585.8
2005							

Table 3-1: Statistic numbers of the tourist information (from Yearbook of Huizhou 2005)

The construction of the Jiantan Dam will increase the water level of the river significantly. The water area of the two rivers in the city will reach 28km². If we called West Lake expressive of the scenic quiet beauty of the city, then the Dong River would represent the vigor and vitality of Huizhou. The increase of the water area and loading capacity of the river will bring huge potential to revitalize the waterfront life. Reconstruction of the historic ferry and the restoration of scenic spots along the river will bring people to the city from land as well water. The point where two rivers meet is ideal for a facility like my thesis proposes.

PHYSICAL CHARACTERISTICS AND DESCRIPTION OF SITE

This site has an irregular shape. It sits and curved along the water. Site's longitudinal axis is oriented towards northeast and embraces the waterfront of Xizhi River on east side. Its orientation indicated the site has great views and the building will need reasonable solar and ventilation strategy on different elevations (Fig.2-16). Combined with local climate, there is huge potential to apply sustainable design strategies in this thesis.

Site has total about $17,500\text{m}^2$ in area, which includes period flood plains and does not include the street area along the site. It is about 550m along the river, 600m along Watergate Street. On the south end at the Watergate Bridge it extends 65m. On the north end of the site, the triangular lot is 100m on west side and 110m on north part. Two sides of this triangle lot are perpendicular to each other (Fig.2-17)

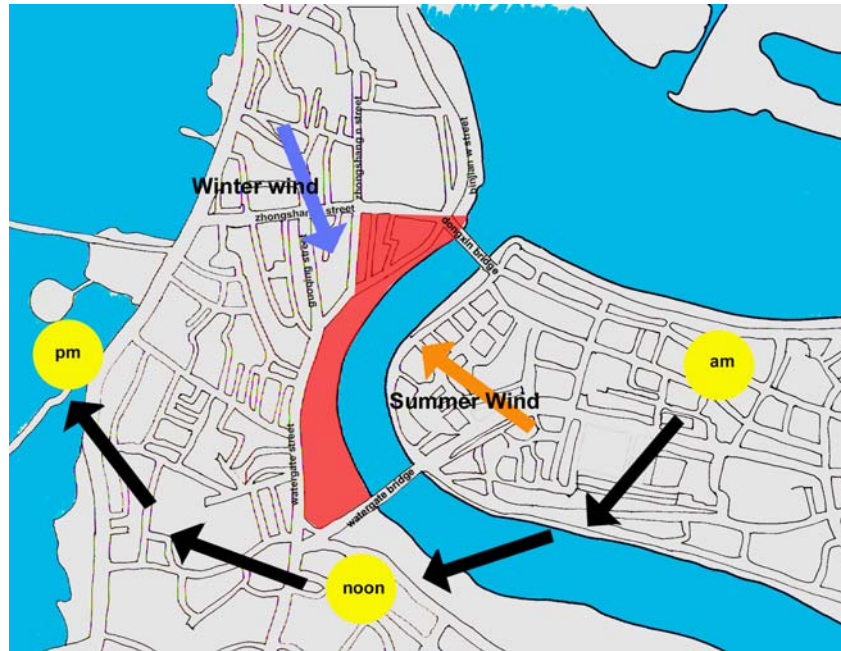


Figure 2-16: Solar Orientation and wind direction of the Site

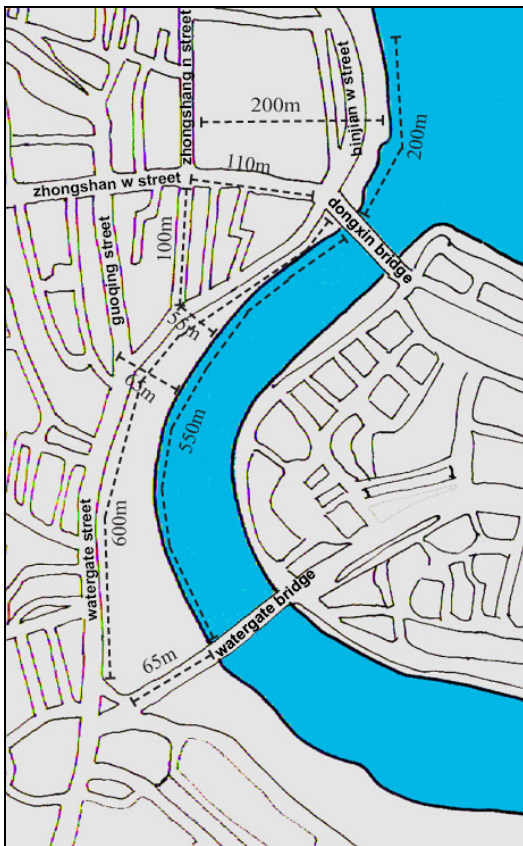


Figure 2-17: Site Dimensions

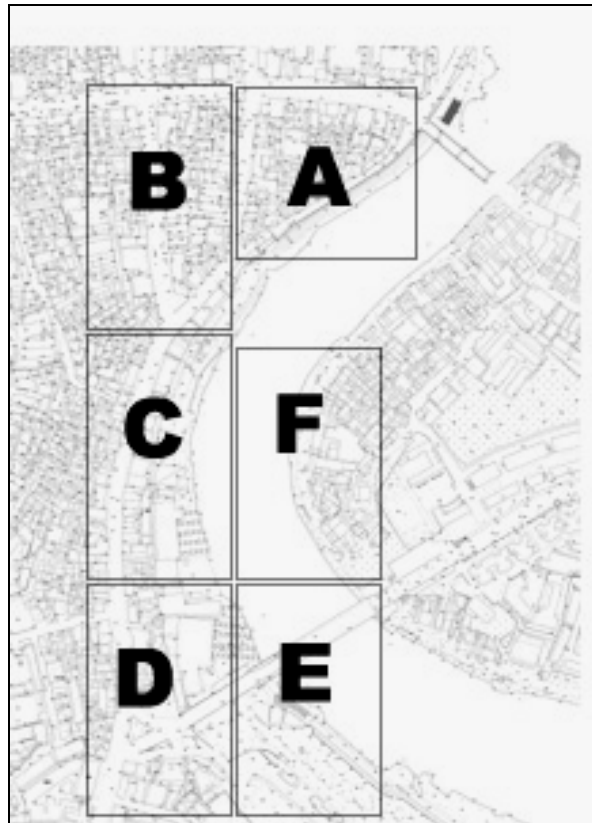


Figure 2-18: Site Topography (See following pages for details)

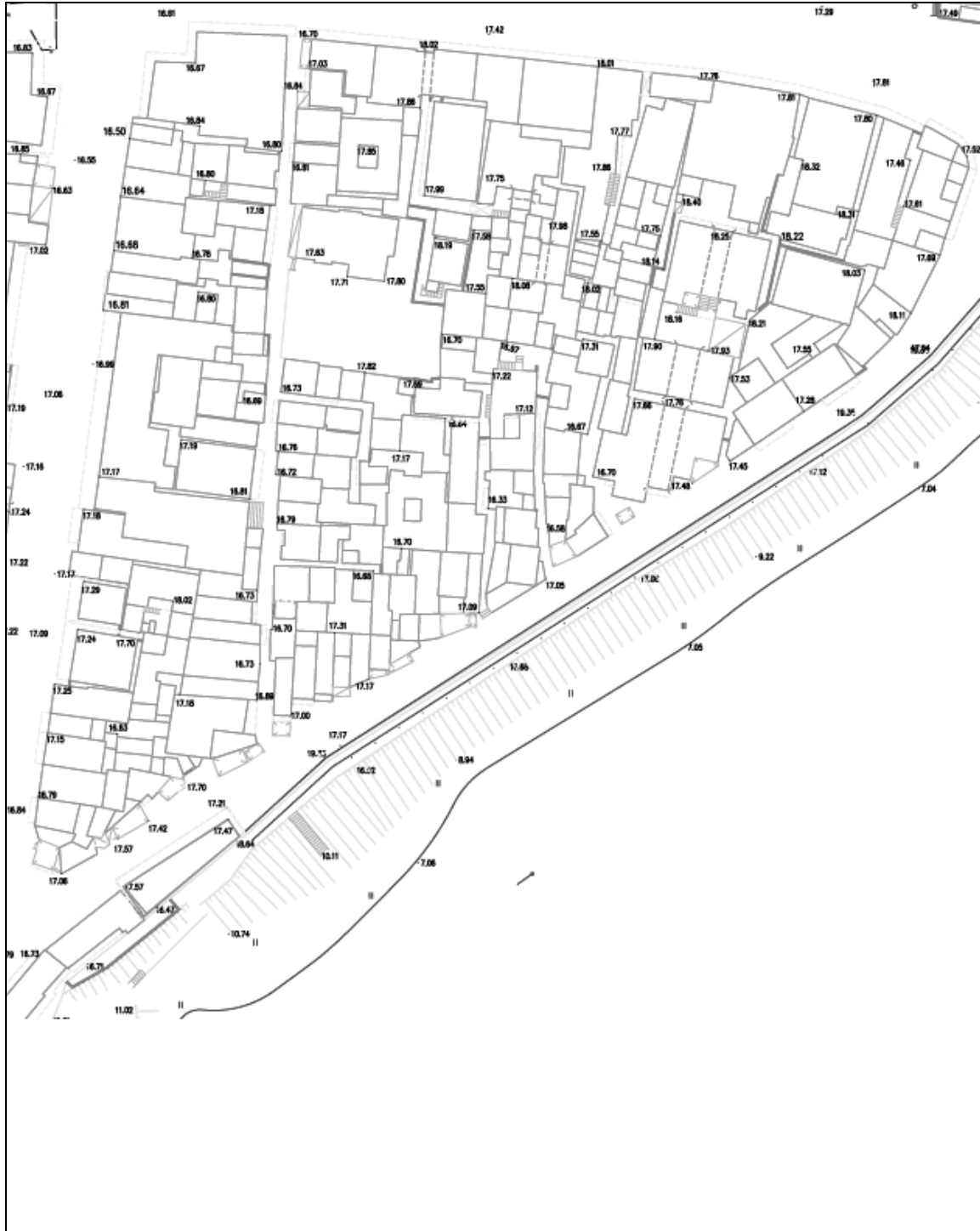


Figure 2-18A: Topographical detail of part A. (see Fig.2-18 for legends) From topo mark, we can see that dramatic slope happens only at the river's bank. It is relative flat in most areas. (Scale = 1:20)

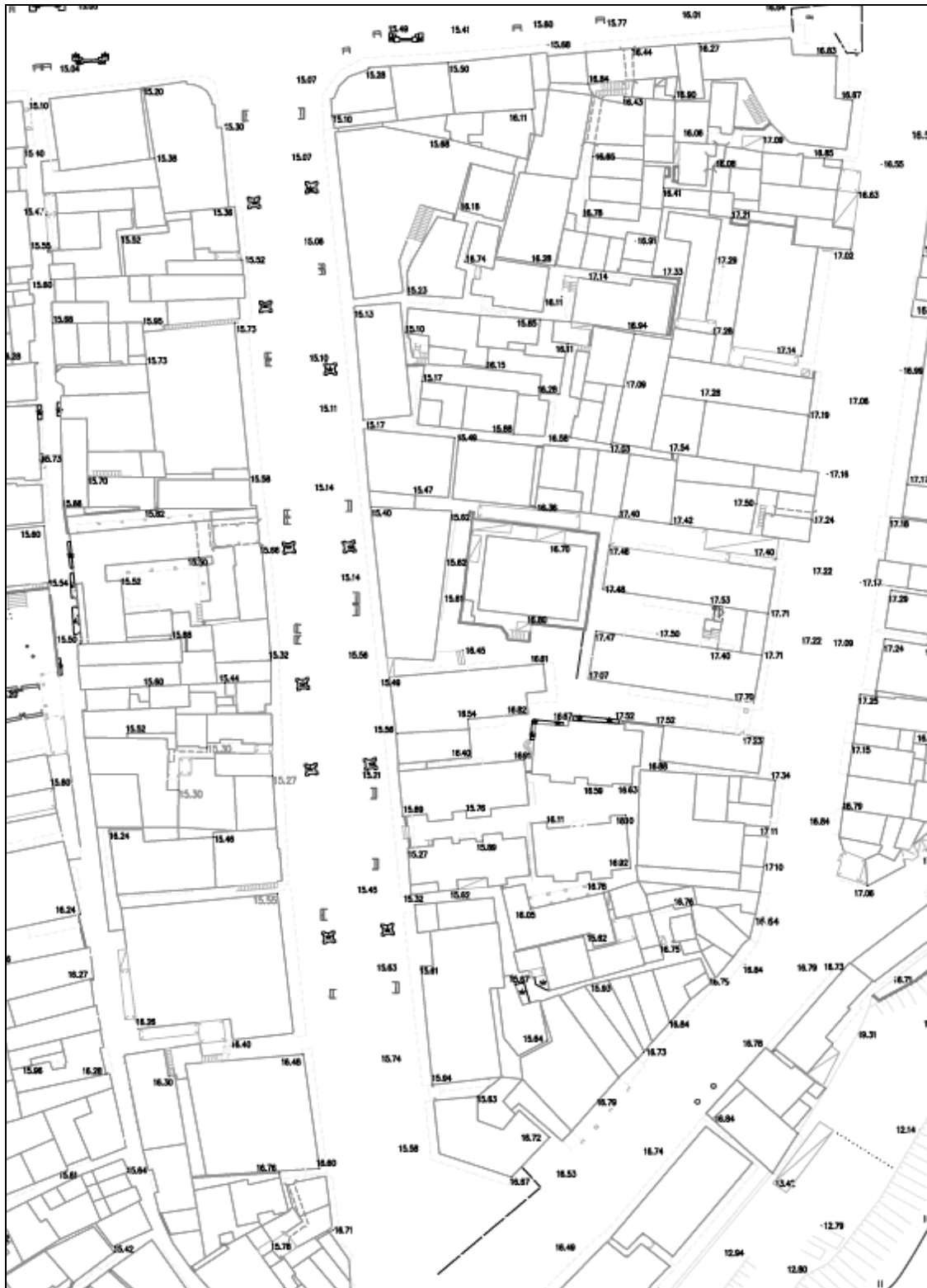


Figure 2-18B: Topographical detail of part B. (see Fig.2-18 for legends) From topo mark, we can see that dramatic slope happens only at the river's bank. It is relative flat in most areas. (Scale = 1:20)



Figure 2-18C: Topographical detail of part C. (see Fig.2-18 for legends) From topo mark, we can see that dramatically slope happens only at the river's bank. It is relative flat in most areas. (Scale = 1:20)

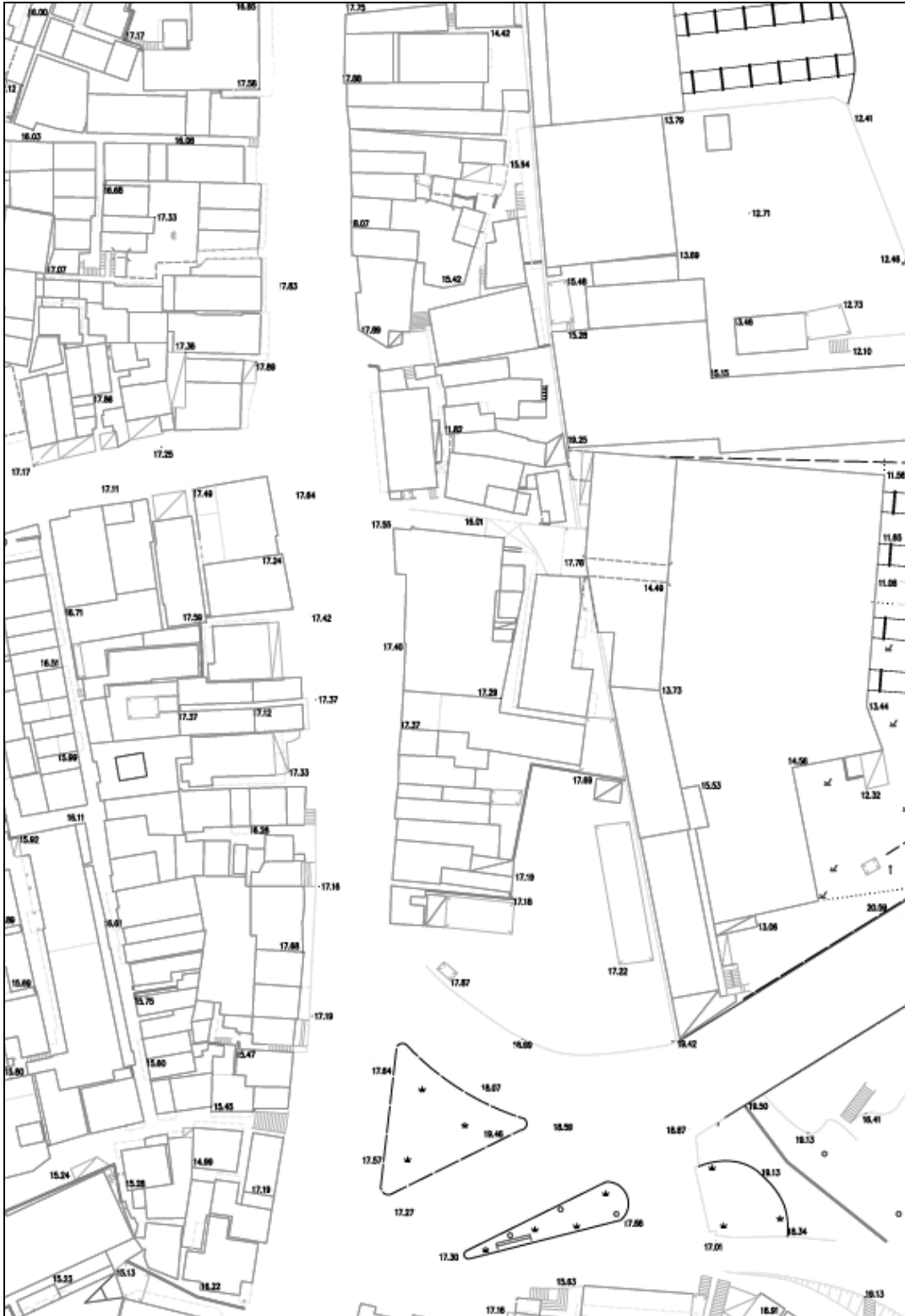
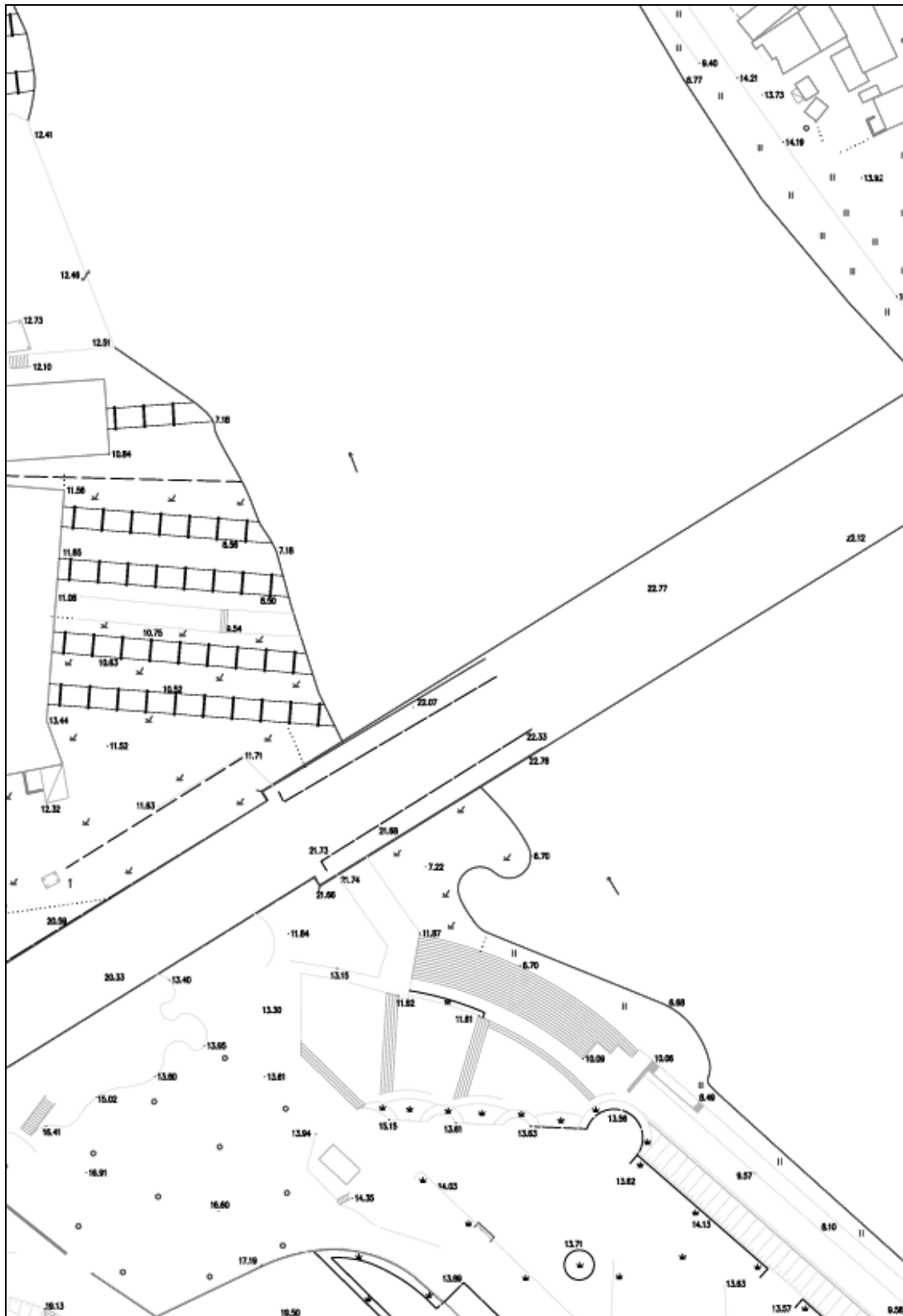


Figure 2-18D: Topographical detail of part D. (see Fig.2-18 for legends) From topo mark, we can see that dramatic slope happens only at the river's bank. It is relative flat in most areas. (Scale = 1:20)



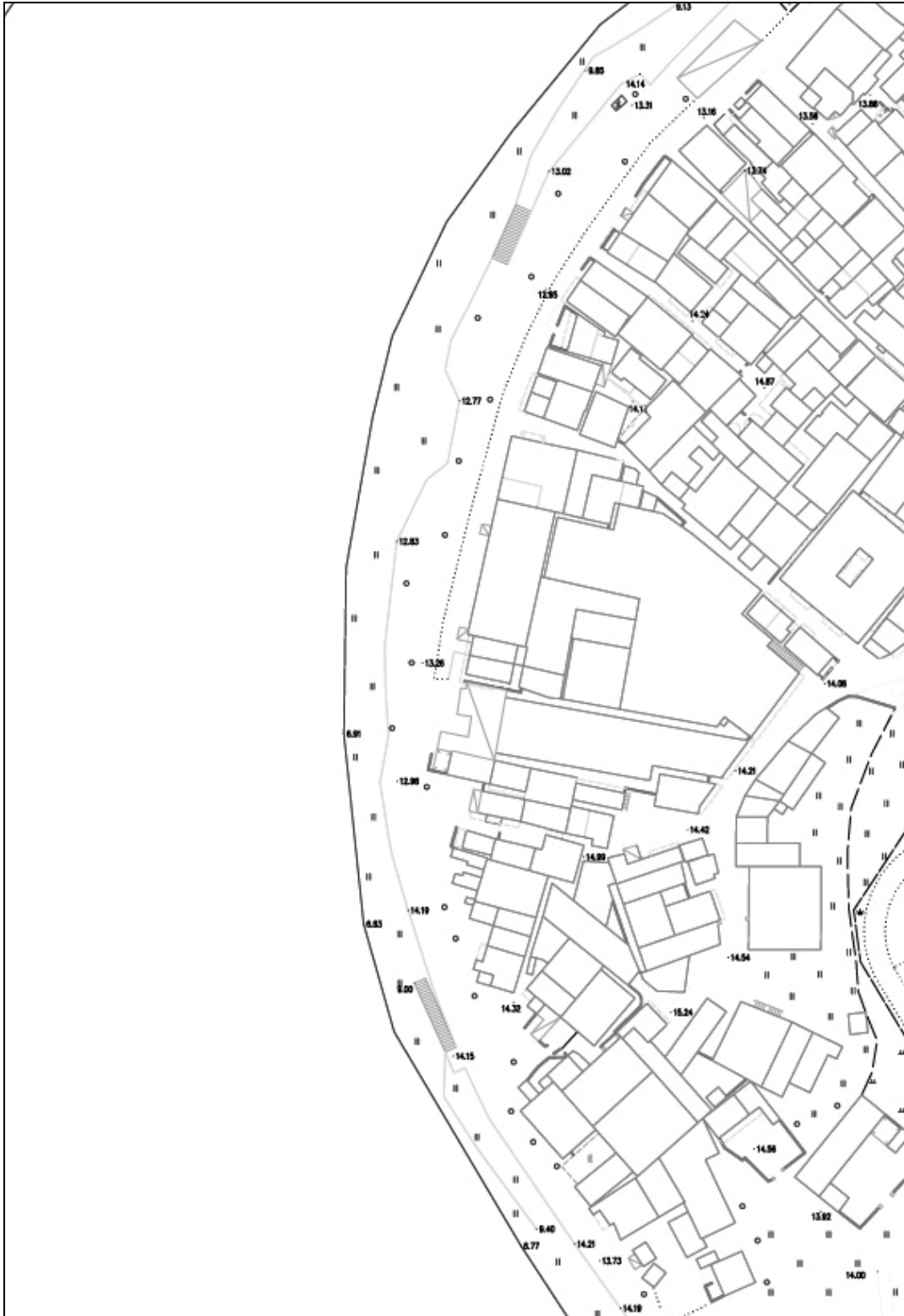


Figure 2-18F: Topographical detail of part F. (see Fig.2-18 for legends) From topo mark, we can see that dramatically slope happens only at the river's bank. It is relative flat in most areas. (Scale = 1:20)

Beginning at the water edge, there is a period flooding plain Water level at the site will be elevated and kept at a more consistent level once Jiantan Dam is built. (please refer to the section of ‘city’s master plan’) The river bank slopes to the edge of the exist buildings. The slope is different at different points of the site. Once it reaches the Watergate Street, it becomes relatively flat (see Fig. 2-18 A-F) towards west.

Watergate Street forms the west boundary of the site. It is highly activated commercial area in the city. Along the both sides of the street are small commercial which includes retail, restaurants, galleries, grocery, small business, etc. One third of the street has nice street trees on both sides. More detail will be discussed in the section of “site edge conditions”.

HISTORICAL CHARACTERS OF SITE

This waterfront site was once the busiest commercial center along Dong River region. It was the one of most important ports along Dong River. However, with the development of other transportation sources, it eventually was forgotten. The construction of the Jiantan Dam and development to tourism provide a perfect chance to revitalize this waterfront site and tell people where to start understand the culture and history of Huizhou. It is the main threshold between world and Huizhou. The site is surrounded by several historical spots (Fig. 2-9), which could encourage more tourist activity in downtown area. The importance of this site has been discussed a lot in previous sections. It is an ideal place that represents the past, present and future of Huizhou. It is self-evident site for this cultural and entertainment center.

SITE AND CONTEXTUAL ANALYSIS

APPROACH TO SITE

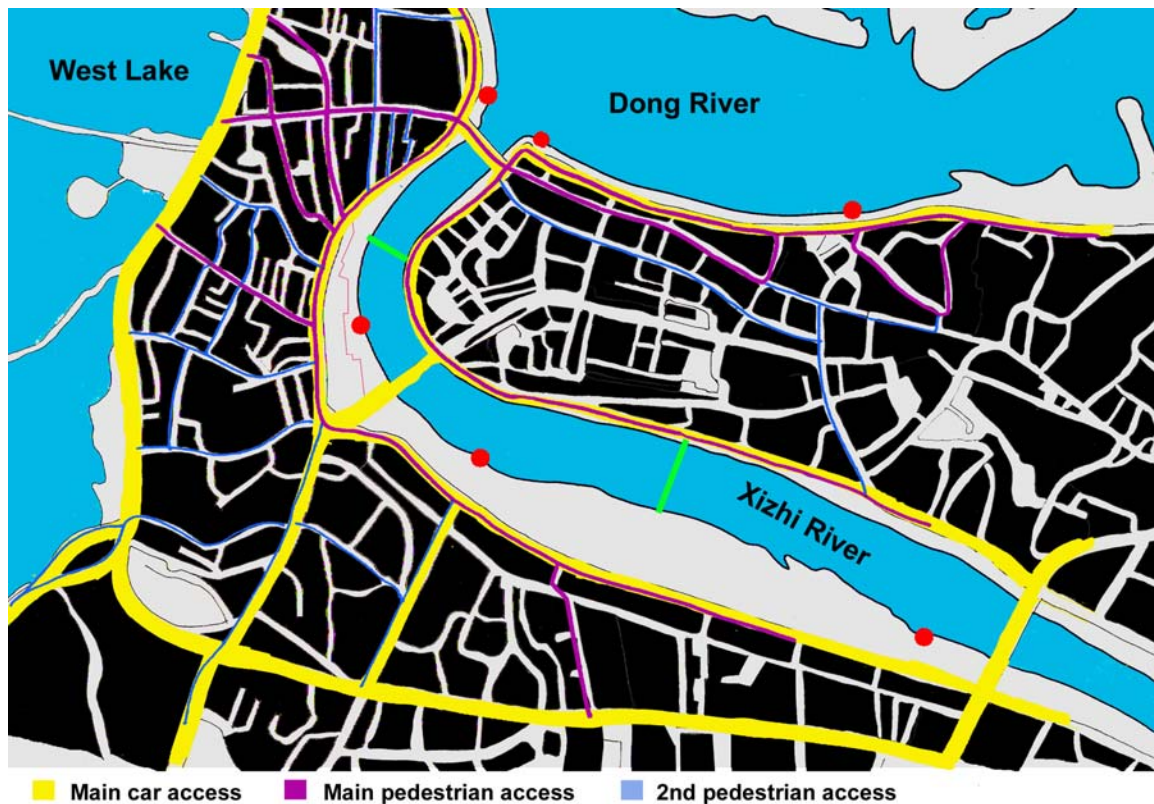


Figure 2-19: Access to the site. View with proposed pedestrian bridges (green) and ferries (red dots). Pink line on the site indicates the existing building footprints.

In the existing circulation diagram (Fig. 2-19), it shows that the approaches to the site on Watergate Street from south and Binjiang W Street from north are the most direct route to the site by automobile, as Shuidong Street connects directly to the Dixin Bridge from Qiaodong Quarter. Given that the waterside appearance is the first view that most tourists visiting by car will experience, I will redesign the intersection of these three roads in this thesis. The existing conditions at the end of the Watergate Bridge are not

ideal. There is no separation between pedestrian and cars, no parking spaces, no open space and it was isolated away from water. Additionally, because this intersection will also be more heavily used by pedestrians, improvements to the streetscape should be considered.

This site has excellent access from river. It can be connected from all other parts of Pear River Delta Area by boat. It is at the confluence of the two rivers and it was used as an important port before and increasing of the water area by building the Jiantan Dam will attract more attention to this waterfront site.

SITE EDGE CONDITIONS

The site has extremely varied edge conditions with respect to both circulation and current use. To the north side of the site, it is bordered by the Zhongshan E. Street. Zhongshan E. Street is connected to the downtown's busiest pedestrian-only commercial zone at the west end and becomes Zhongshan W. Street. Zhongshan E. Street has shade trees with wide sidewalk and it is a highly mix-used area. (Fig. 2-20 add pictures later) the city's opera house, the Xinghua bookstore and the city's historic civic center exist in this area. The pedestrian only commercial zone is a very attractive spot in the city. This area has nice paved street, designed bench and rest area. Trees on both sides of the street keep people in shade. (Fig. 2-21) Many shops have commercial uses on the ground level and residential uses above.



Figure 2-20: Views along Zhongshan E Street. Left: view from the inter section of Zhongshang E and W streets. Right: View towards Dongxin Bridge construction site.



Figure 2-21: Views of pedestrian commercial zone along Zhongshan W Street.

To the west of the site, most of the buildings on the waterfront side of Watergate Street were built in early and middle 20thC. They are relatively old and in poor condition.

And originally they were most used for commercial and industry activities that accompany a busy, active port. As activity in the port diminished and industry relocated to the outside of downtown, the buildings were mostly taken by residential and small commercial. In their place, some unrelated and quite uncharacteristic buildings were constructed. The development of these waterfront properties appears to have been carried out by independent developers without respect for the historic context or for each other. And the access to the water was cut off from the street. (Fig.2-22, 23) However, about one third of Watergate Street, started from the intersection with Guoqing St to Zhongshang E. St, was in much better condition than the other parts. It was lined up by street-trees and buildings are in better condition. It might worth to adopt reuse for redesign this waterfront. (Fig. 2-24)



Figure 2-22: Views of the Watergate St. River is on the left side of the street.

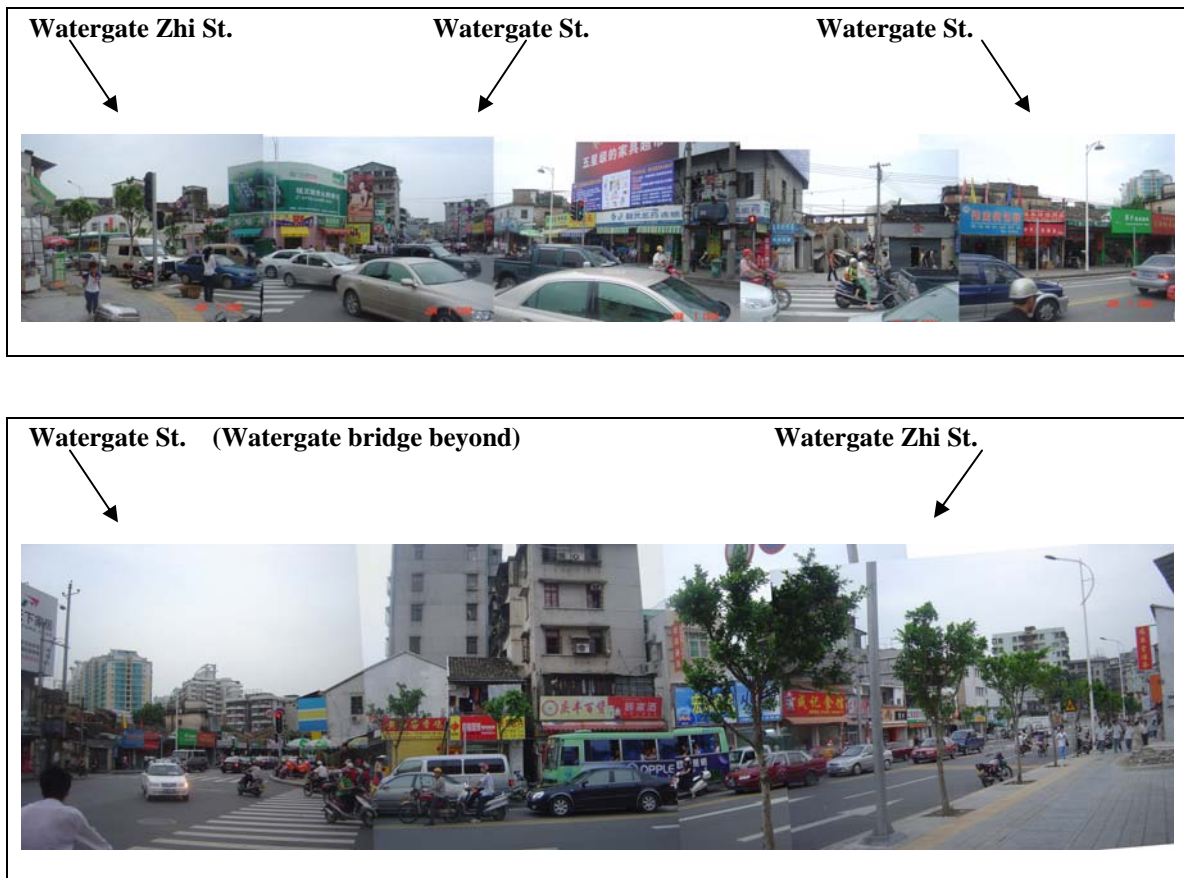


Figure 2-23: Views of the intersection of Watergate St. and Watergate Zhi St.



Figure 2-24: Views of the Watergate St.. Top: Intersection of Watergate St. and Guoqing St.; Lower twos: Closer look of pointing area above on Watergate St.. River is beyond right side of the pictures.



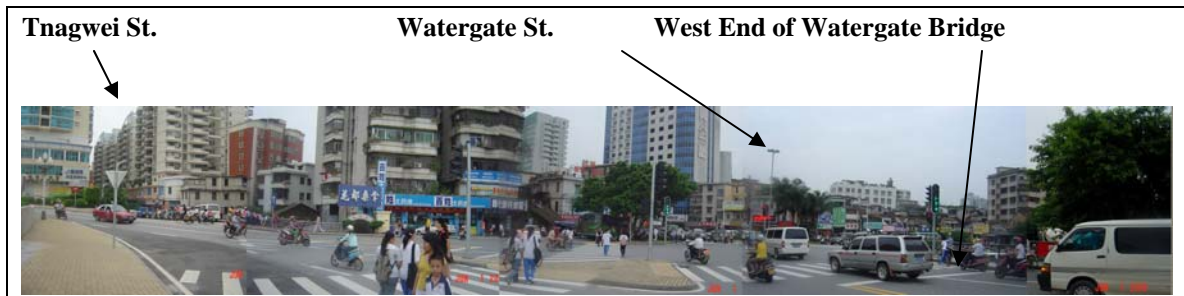
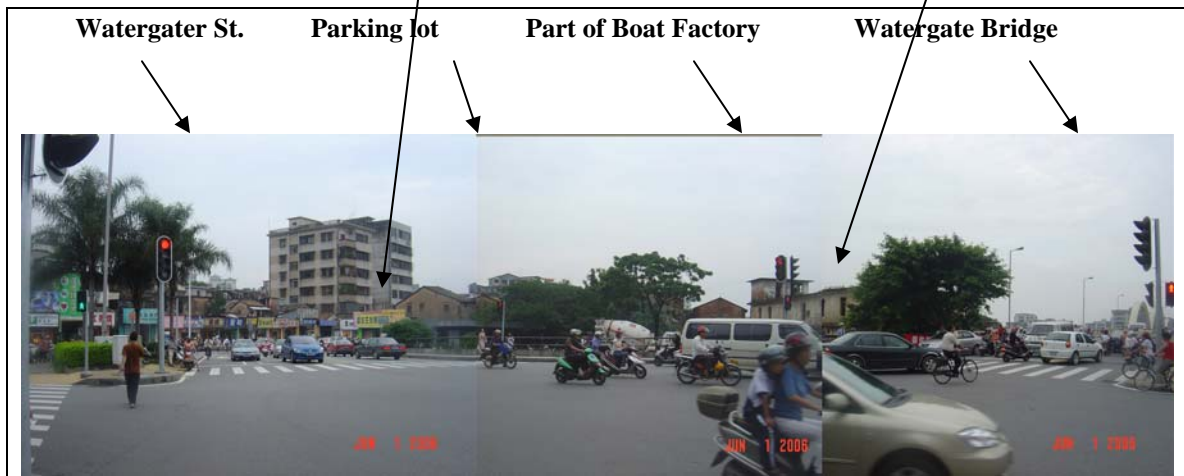


Figure 2-25: Aerial views (top 2 photos) of the traffic node at the west end of Watergate bridge. Watergate St. curved to right. Lower two photos were taken at the red spot indicated on photo above them. View toward the Watergate St. (L). View toward water (R).

To the south side of the site, area close to Watergate Bridge is a very busy traffic node. Buildings around this area are in various conditions (Fig.2-25, 26, 27)



Figure 2-26: Aerial view of the site with rivers. The Xizhi River was showed in two photos above. In the lower photo, Dong River was showed in further



Figure 2-27: Aerial views to east bank of the Xizhi river.

Right next to the north end of the site, there is a beautiful five-story-brick tower, which has 300-year-old history. (Fig.2-28) It will be restored and there will be a plaza/park in surrounding area and eventually connected with Zhongshan Park, located upper north. (Fig.2-29, 30, 31) (please refers to the section ‘city’s master plan’ in this chapter)



Figure 2-28: View of WenTower (left) & View From Tower toward Dongxin Bridge (right, Dongxin Bridge in reconstruction on right)



Dong Xin Bridge Construction site (Dong River on left)



Figure 2-29: View of Wenbi Tower surroundings. View From Tower toward Watgate St. (left). Site of the park (right).



Figure 2-30: Proposed view of Wenbi Tower Park.



Figure 2-31: Existing View of Wenbi Tower from Dong River.

MASTER PLAN BY CITY OF HUIZHOU

The city of Huizhou has designated this area as the historic core area for future development (Fig.2-32). It has been argued that the city would benefit from increased tourist revenues by improving incoming tourists access the city and its amenities. As a result of this decision, the city created a tourism orientated Master Plan for the city, which has focused its efforts primarily on the development of the waterfront, from Jiantan Dam to where the Dong River and Xizhi River enter downtown Huizhou (Fig.2-33, 34). A new circulation network (Fig.2-35) and a series waterfront spaces were proposed around downtown.

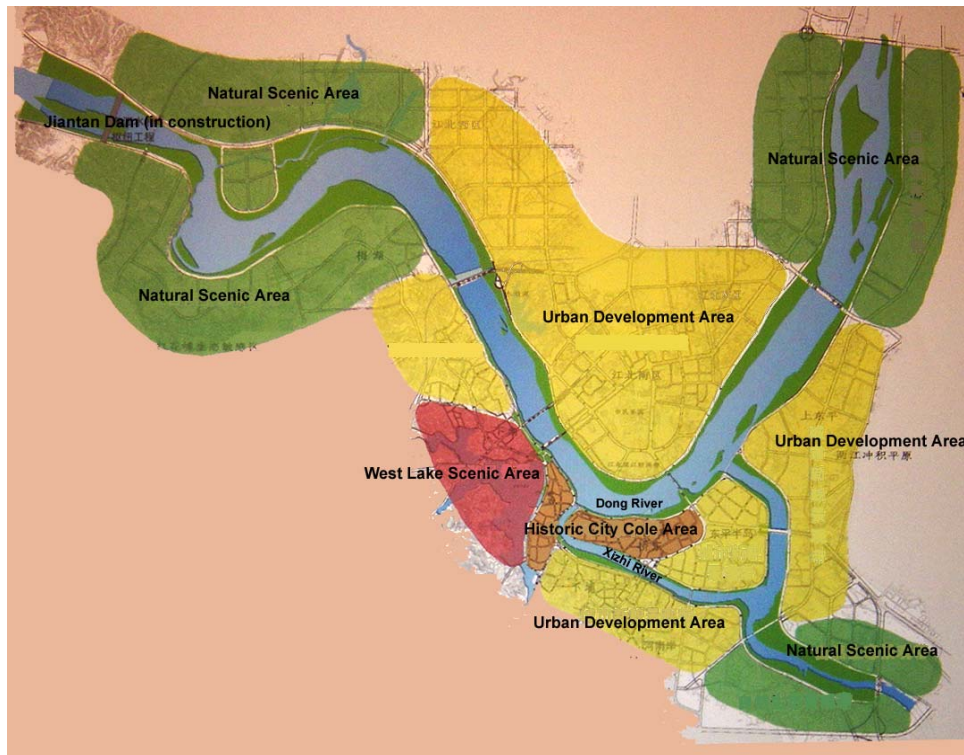


Figure 2-32: Definition of the each area of the city in Master Plan. The thesis site is located in Historic city core area. Jiantan Dam is located about 9.4Km from the downstream of Dong River from the site and is in construction.

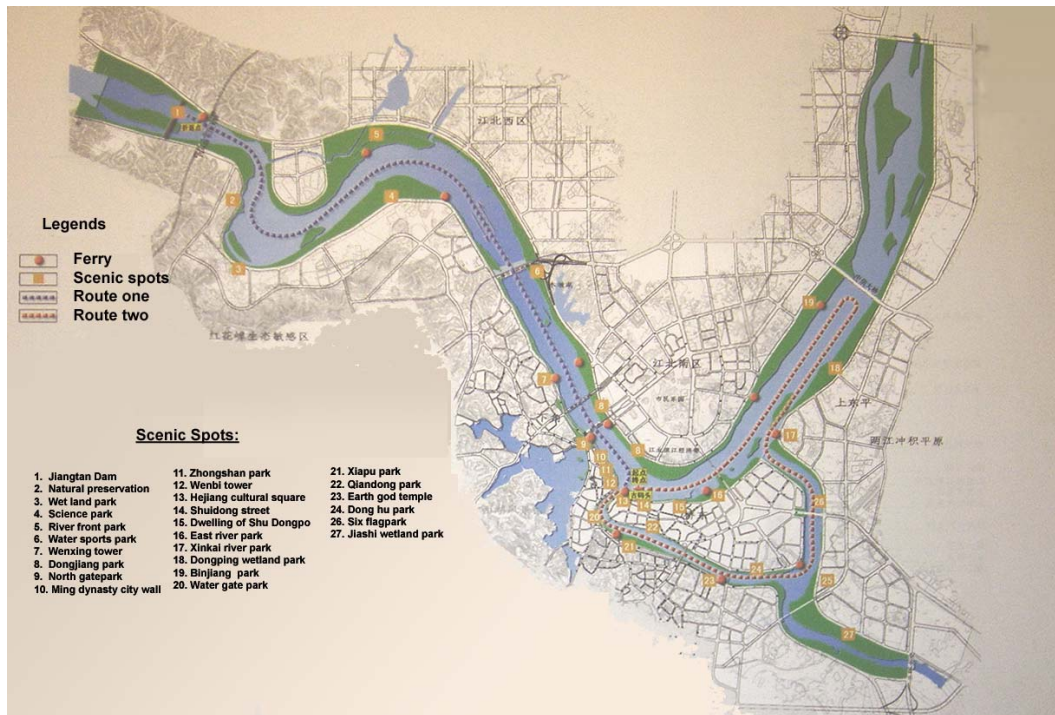


Figure 2-33: Scenic Spots and green system along Rivers in Master Plan.



Figure 2-34: Proposed land use in Master Plan.

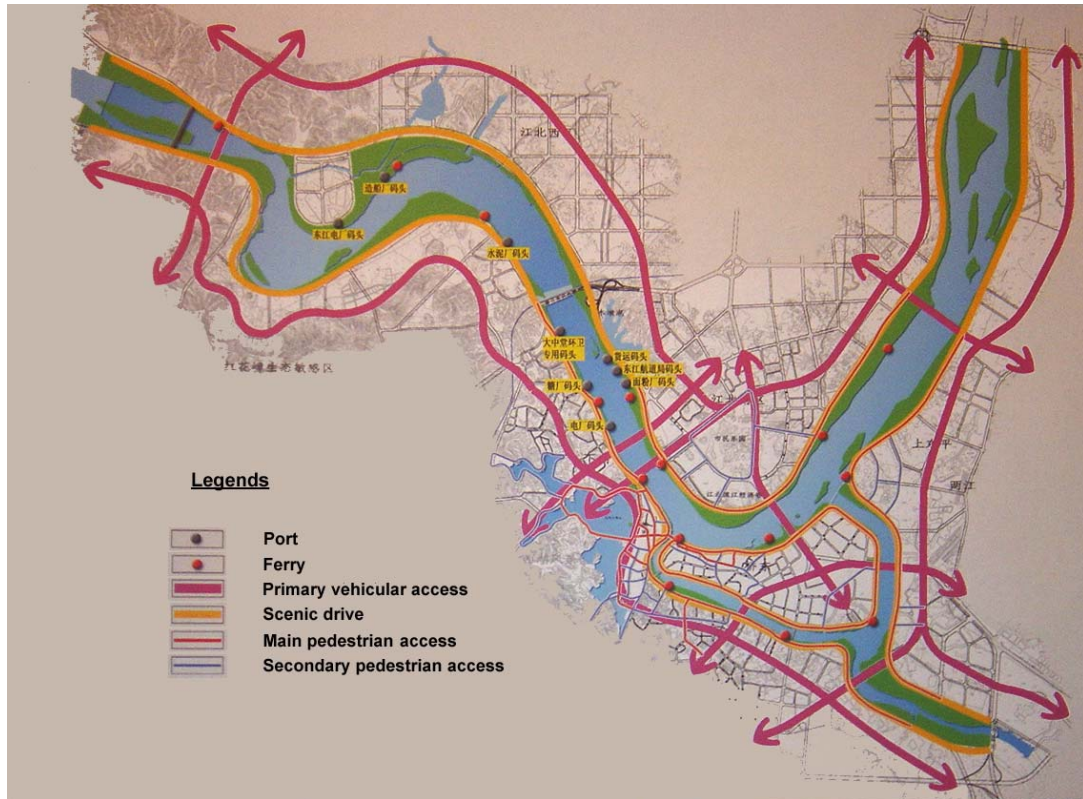


Figure 2-35: Proposed circulation system in Master Plan.

The greatest impact of the Master Plan to downtown area is the construction of Jiantan Dam. Jiantan Dam is located at 9.4km downstream of Dong River from downtown (Fig.2-32, 33, 36). The water level in downtown will be elevated about 5m once Jiantan Dam is built. It will have a dramatic influence on the waterfront of the city. This water feature cannot be neglected. The effort that dedicated to design a better and more secured waterfront need to take place from right now. In the Master Plan, the waterfront on this site was designed as a cultural square with retail elements in it. It is similar with Xiapu Waterfront Park next to the site (Fig. 2-37). However, all the proposals that Master Plan recommended are kept at schematic level. This thesis will develop further detailed design and assume that by design this water space will enhance the importance of this cultural and entertainment center.



Figure 2-36: Proposed view of Jiantan Dam.

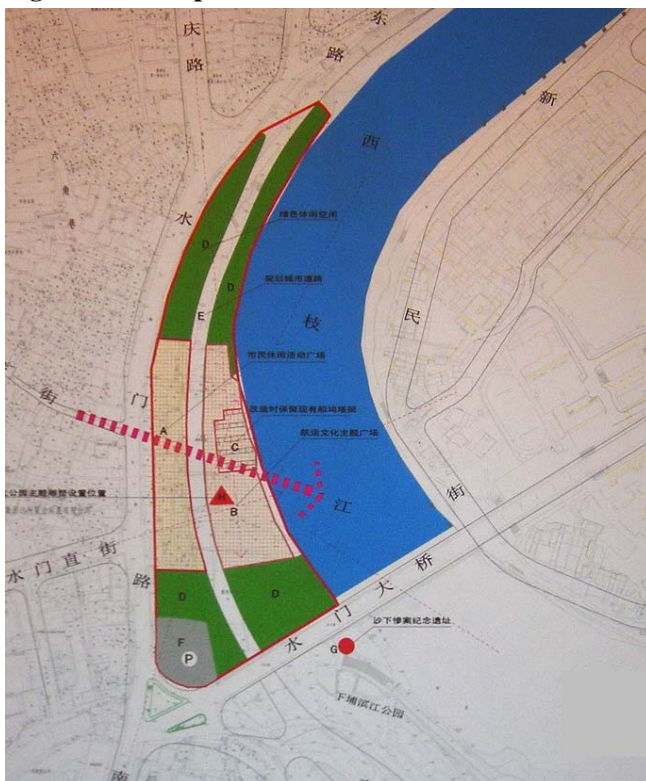


Figure 2-37: Master plan for part of the thesis site. Red arrow comes from another main pedestrian street, Jindai St., that city proposed to restore in future. C represents the preservation of old boat factory dock. A&B are hard-surface square; P for parking and others are for green space.

EXISTING PROBLEMS AND DESIGN ISSUES

Waterfront can serve as a meaningful link between city residents and an increasing flow of tourists. Creating a facility that can involve both visitors and community members would serve to communicate the multifaceted identity of Huizhou.

There are more than 25 historical sites in Qiaodong Quarter and Qiaoxi Quarter. Most of them are mixed in the high-density residential area. The challenge is how to integrate these historic sites into this new development of the site.

The existing uses along the river are mostly small retail or residential with commercial at the lower levels. There is no noticeable public space on the site and city and residents are little direct access to waterfront. The edge of the waterfront is not well designed and not pedestrian friendly. How to reconnect people to water will be a big issue in master plan. This thesis design should ensure that local residents will maintain access to the water and assume that this cultural and entertainment center has an iconic presence in this historic area, which was the original city center.

A major commercial area has been developed around the site. However, the buildings along the river are mostly in poor condition. How can new architecture responds to the surrounding commercial and residential environment? This will also need to be explored.

The relationship between vehicular access and pedestrian access will be another important issue for this project. How to make it pedestrian friendly and convenient for vehicles as well needs to be researched.

The existing bridges do not have enough space for generous sidewalks and for scenic viewing. And those bridges are the only way connecting four different quarters of

the city around rivers. Creating pedestrian/recreation network among four different quarters along water edge will increase the site's value. This should be explored in master plan and design.

This thesis will explore the integration of new development with existing downtown circulation and fabric; integration of new buildings with historic background on the site; integration of the facility with waterfront open space also to be an important part of this thesis.

CHAPTER THREE: PROGRAM

PROGRAM DESCRIPTION

This cultural and entertainment center will include four major components:

First, it will house the historic district's cultural 'heritage center' for both visitors and local citizens.

Second, will be the entertainment component consisting of that can be shared by all components in this thesis.

Third, it will be a hotel component as host for the premier destination for tourists and business travelers.

Fourth, will be the landscape aspect of public spaces of the waterfront and its connections to the city that the site provides.

This thesis will propose the revitalization of the waterfront by bringing more new public functions while maintaining coherence within the existing historic core area of the city.

I. The Cultural Component

The cultural center will be the first stop for information, culture, history and adventure in the Huizhou region. It houses a visitor's center and also public spaces designed for cultural and educational programs. The visitor's center provides a comprehensive orientation to the culture, history, shopping and dining options available throughout the Great Huizhou region, promoting tourism and economic development opportunities for city and Guangdong Province. The center has a 50-seat auditorium

space, for the “Huizhou Experience”, a film that takes visitors on an exciting tour; this space could also be used for lectures. Within the larger cultural center, there is permanent exhibition space to display the city’s heritage artifacts and crafts. It will also provide space for conference, classes, and other temporary exhibitions, as well as an auditorium for traditional art performance.

II. Entertainment Component

The entertainment facilities will house two 200-seat cinema theater, a 125-seat restaurants, small deli/café, small retail spaces, game rooms, and outdoor rental, etc. It will have a good relationship to adjacent components and public spaces along the waterfront.

III. The Hotel Component

The hotel will be an ideal place to attract people to stay in the heart of this historic area to explore its history, culture, and shopping within the surrounding pedestrian friendly commercial districts. The hotel will have different room arrangements to serve different clientel such as singles, couples, and families. A small restaurant will be connected with the lobby space on the ground level to serve both guest staying there and the public. It will also have a small exercise room, an indoor swimming pool, and a public entertainment/ball room for special events. It will have maximum visibility from both the land and water. The location of this hotel within the complex provides accessibility and connection between the public spaces and the support programs.

IV: Public Green Space and Plazas

Public outdoor green space and plazas offer both the city and the complex a breathing space and the opportunity for complimentary outdoor activity, Public space will offer a forum for lunch time and would host other activities, such as outdoor performance, exhibitions, festivals, water activities that provide insight into the center's work. By involving the local residents in those activities, it will incorporate the historical city community into the daily life of the center.

The four components together will develop an environment that is welcoming and convenient for visitor and residents. This thesis is going to be a catalyst for improving the public importance of this area. It will give the city its own civic identity which matches its status in its regional context and demonstrate how to enhance the city's existing built environments of dense urban fabric.

PROGRAM TABULATIONS

I. The Cultural Component

Program	Function	Square footage
Lobby	Orientation, access to other programs	250 sqm
Huizhou Visitor Center		350 sqm
Treasures of Huizhou Gallery	displays the permanent collection of city's culture and history	350 sqm
Performance Hall (250 people)	music, dance, literary, and theater presentations	1400 sqm
Center's Shop	Display, sales position	300 sqm
Café	Seating for 50 and small kitchen	250 sqm
Two gallery space	150 sqm/each	300 sqm
Visual art studio	painting, paper cuts, pottery, carving	250 sqm
Dance studio	provide performances and rehearsal space as	200 sqm
Musical studio	well as workshops and lectures	200 sqm

Administration/office		300 sqm
Multi-purpose spaces		350 sqm
Receiving, preparation, adjacent work space		100 sqm
Toilets		180 sqm
Mechanical, utility spaces		250 sqm
Total		5030 sqm

II. Entertainment Component

Program	Square footage
200-seat theater @ 2	870 sqm
125-seat restaurant	650 sqm
Small deli/cafe	700 sqm
Game place	300 sqm
Small retails	1000 sqm
Total	3380 sqm

III. The Hotel Component

Program	Square footage
Lobby	200 sqm
Restaurant (includes kitchen)	250 sqm for 50-seat
Ball room	300 sqm
Exercise room	200 sqm
Room 150 in different size: 35, 50 & 75 m ²)	(35x50+50x75+75x25)= 7375 sqm
Lounge	200sqm
Laundry & service	250 sqm
Pool	700 sqm
Mechanic	180 sqm
Circulation	1450 sqm
Total	11105 sqm

IV: Public Green Space and Plazas

Outdoor Plaza; Main Plaza;

Outdoor Green Park; exhibition space;

Arts Avenue, Paking; Public transportation area

IV. Total Program Tabulation: 23,115 sqm

Some of the programs will remain in a master planning level. The exception is the cultural and entertainments components, which will be developed in detail.

PROGRAM RELATIONSHIPS

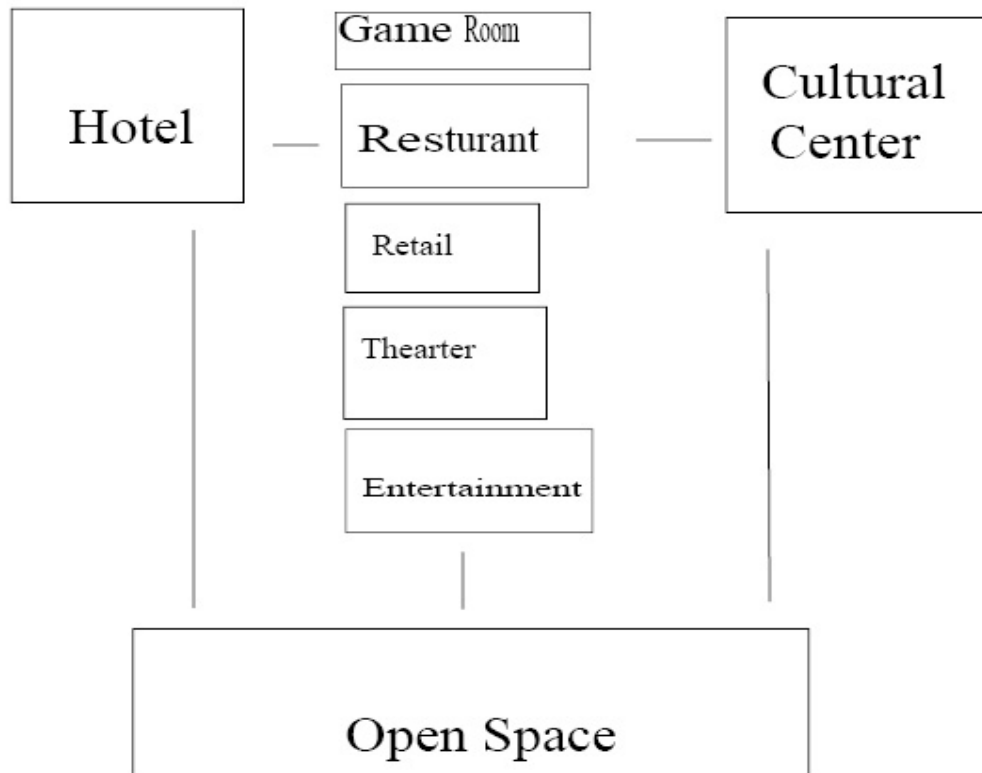


Figure 3-1: Relationship between different design components.

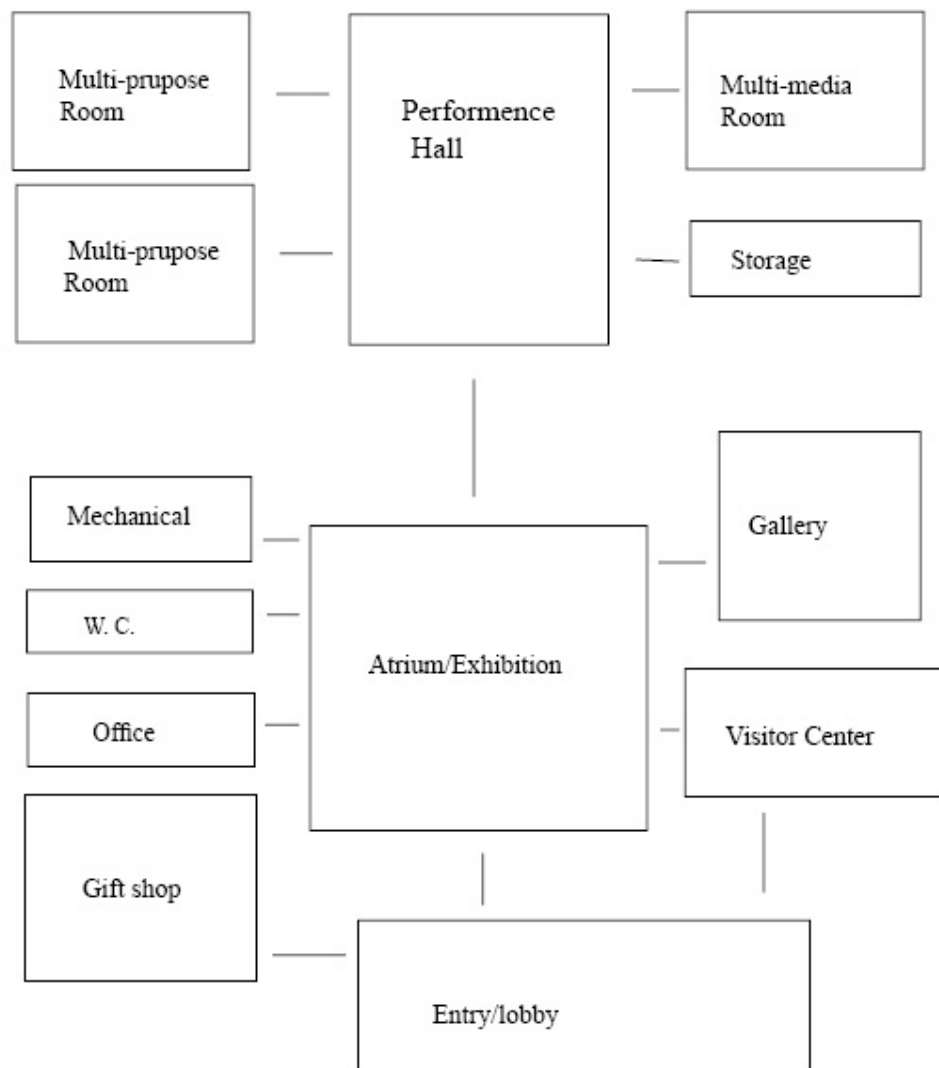


Figure 3-2: Program relationship in cultural components at lower level.

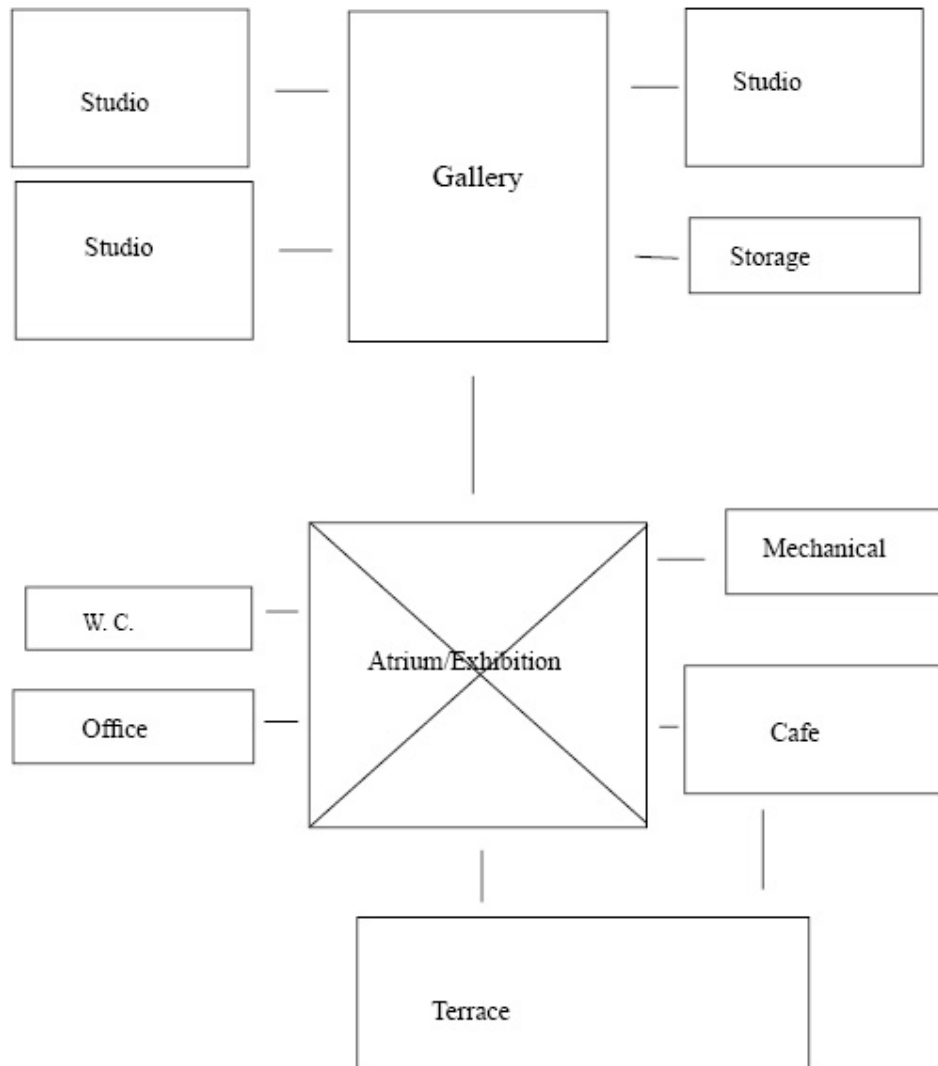
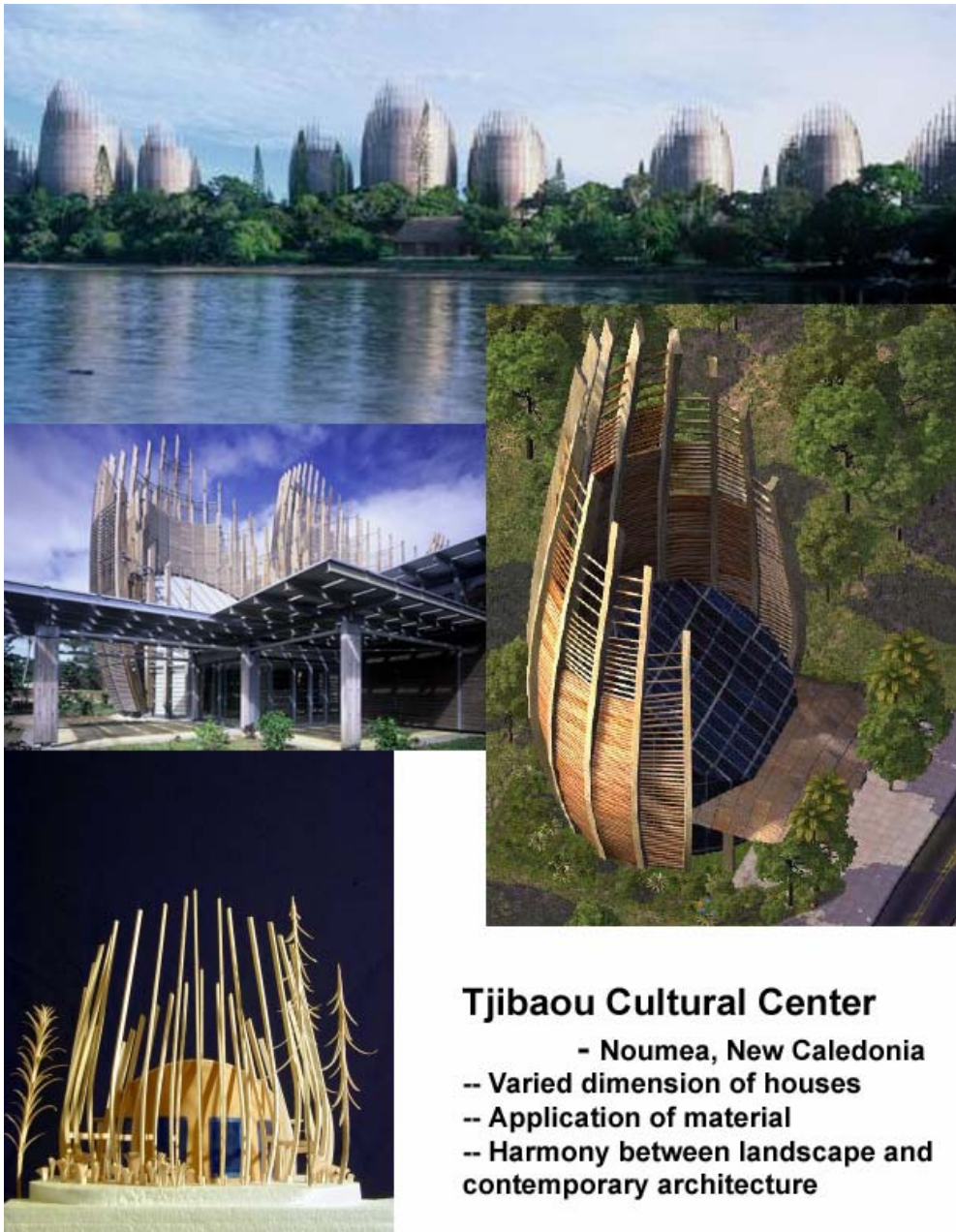


Figure 3-2: Program relationship in cultural components at upper level.

CHAPTER FOUR: PRECEDENTS

CULTURAL CENTER

1. Tjibaou Cultural Center



Tjibaou Cultural Center

- Noumea, New Caledonia

- Varied dimension of houses
- Application of material
- Harmony between landscape and contemporary architecture

ENTERTAINMENT CENTER AND URBAN LANDSCAPE

2. Sony Metreon & Yerba Buena Garden



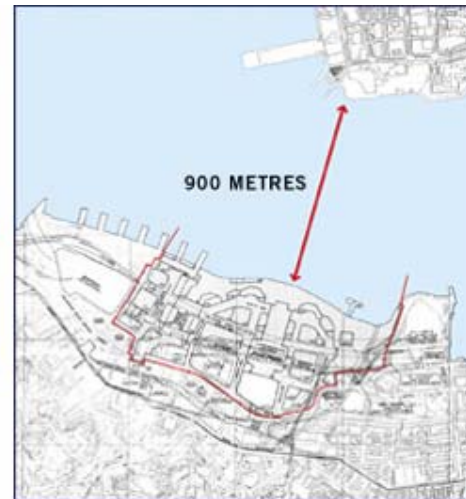
Sony Metreon
Yerba Buena Garden,
Sanfrancesco, US



UNBAN WATERFRONT AND LANDSCAPE

3. Hong Kong Central Waterfront





- A series of public projects to work together to improve environmental quality

- Create strong like other parts of the city

- The crescent is enhanced by three generators of civic activity: the Historic, Arts, and Civic Corridors.

CHAPTER FIVE: SITE INTERVENTIONS

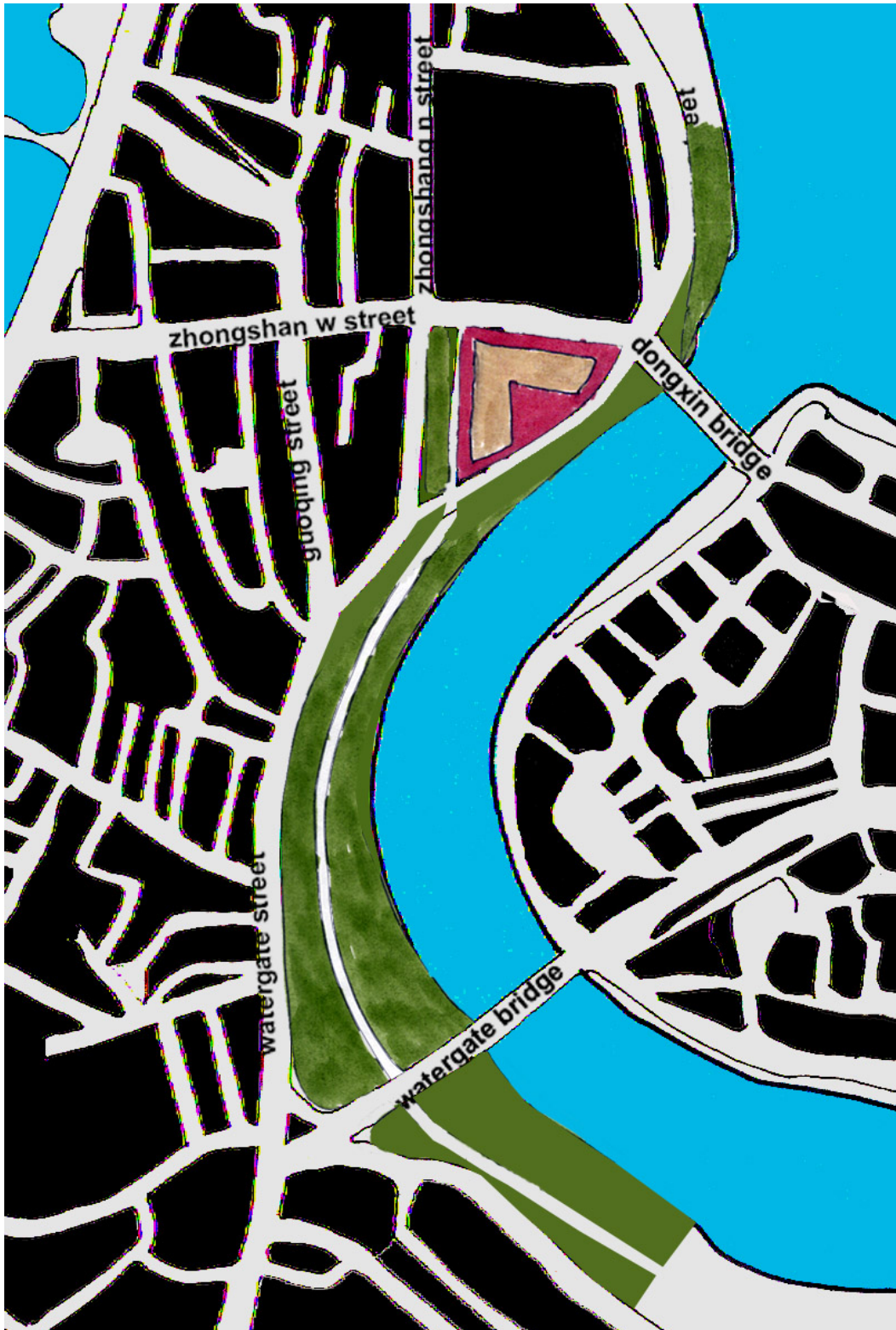


Figure 5-1: Site alternative one: site plan

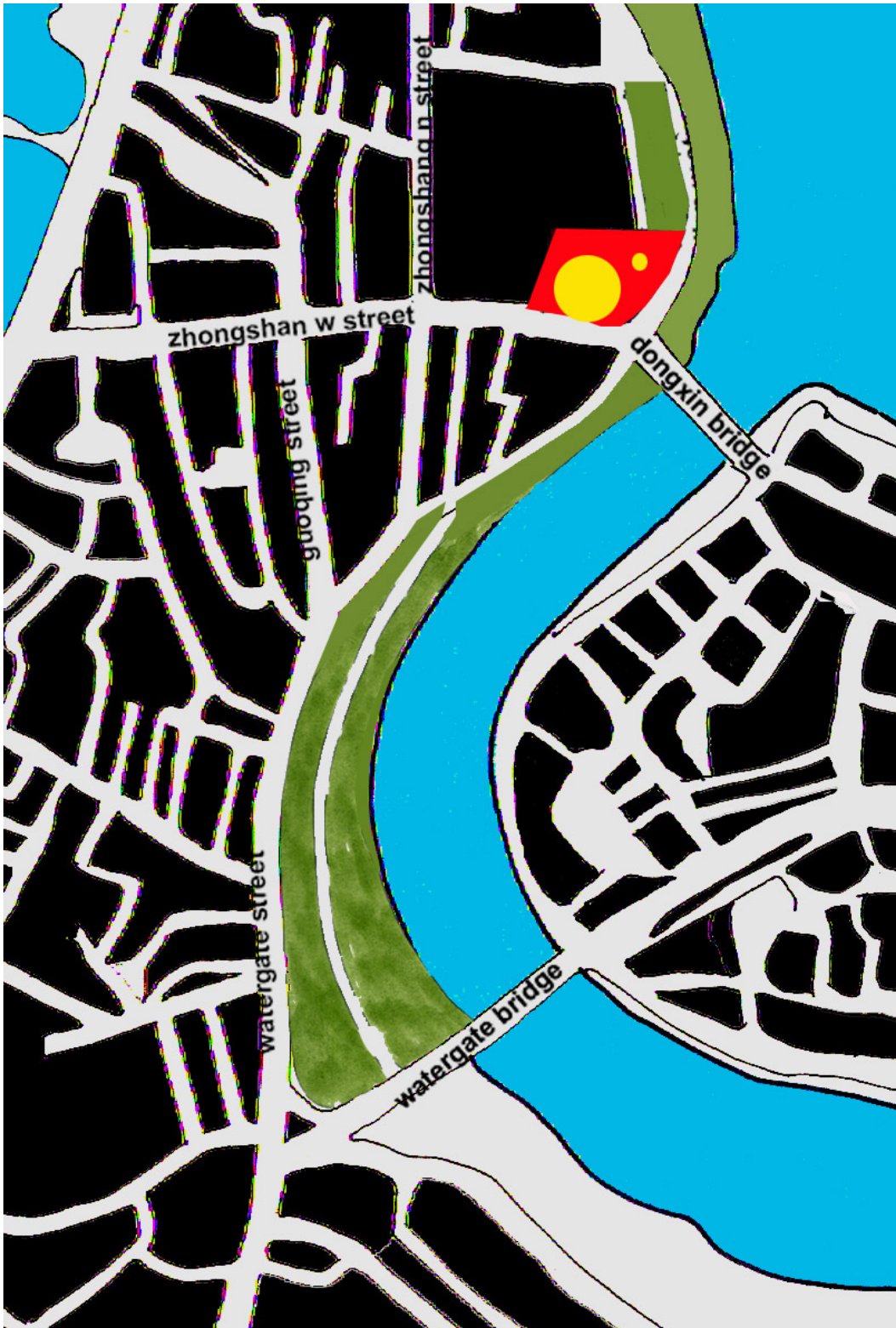


Figure 5-2: Site alternative two: site plan

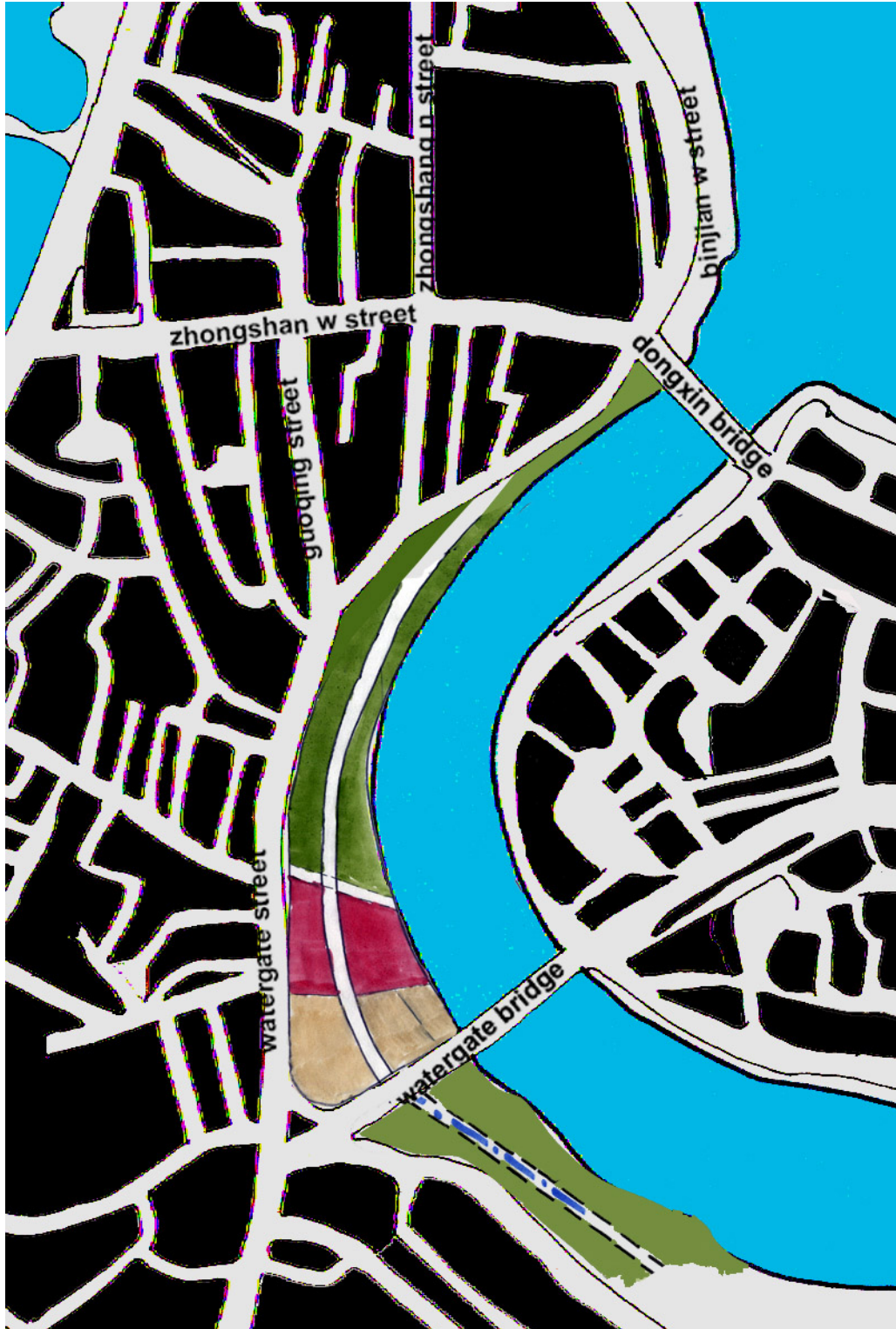


Figure 5-3: Site alternative three: site plan

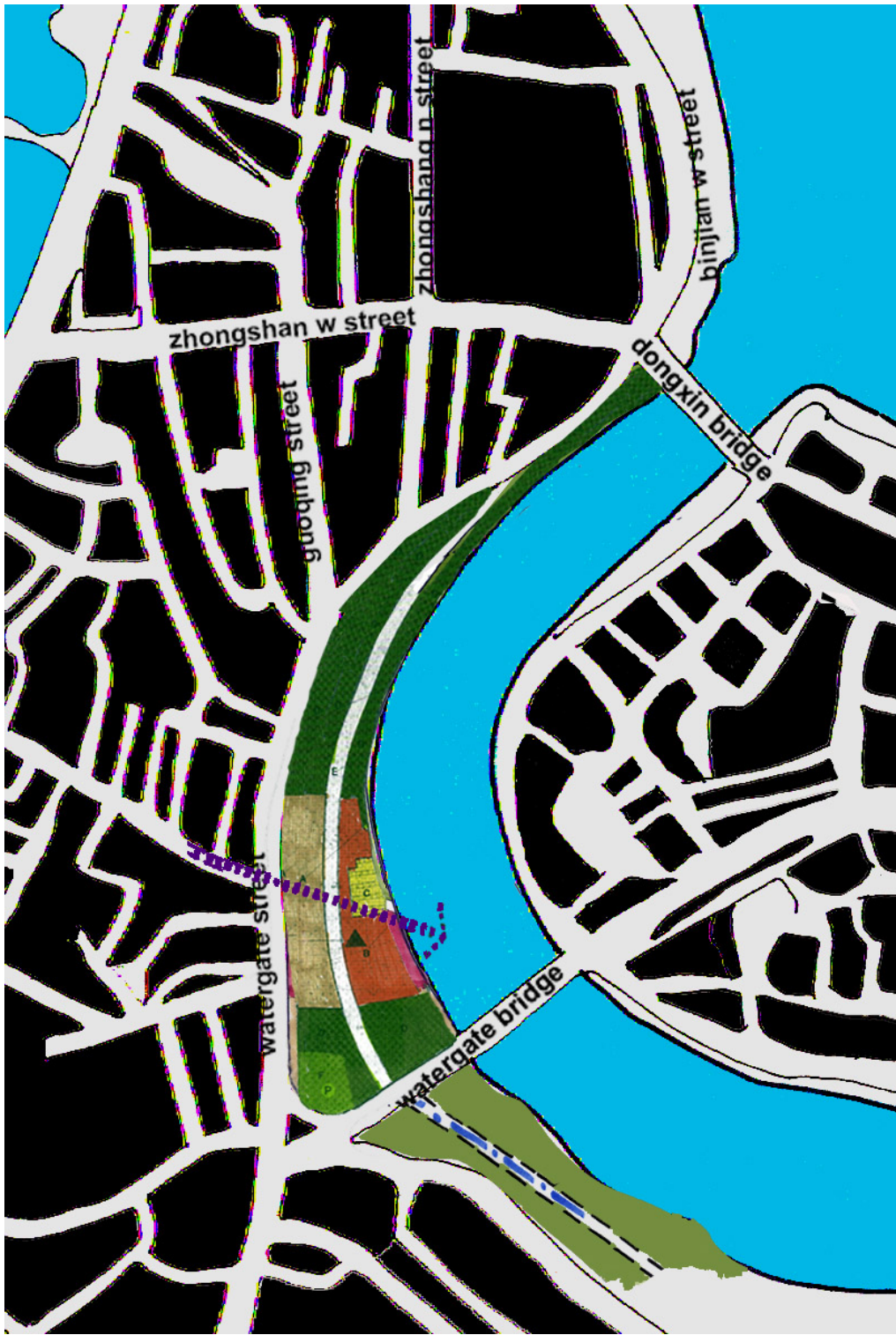


Figure 5-4: Site alternative four: site plan



Figure 5-5: Site alternative five: site plan

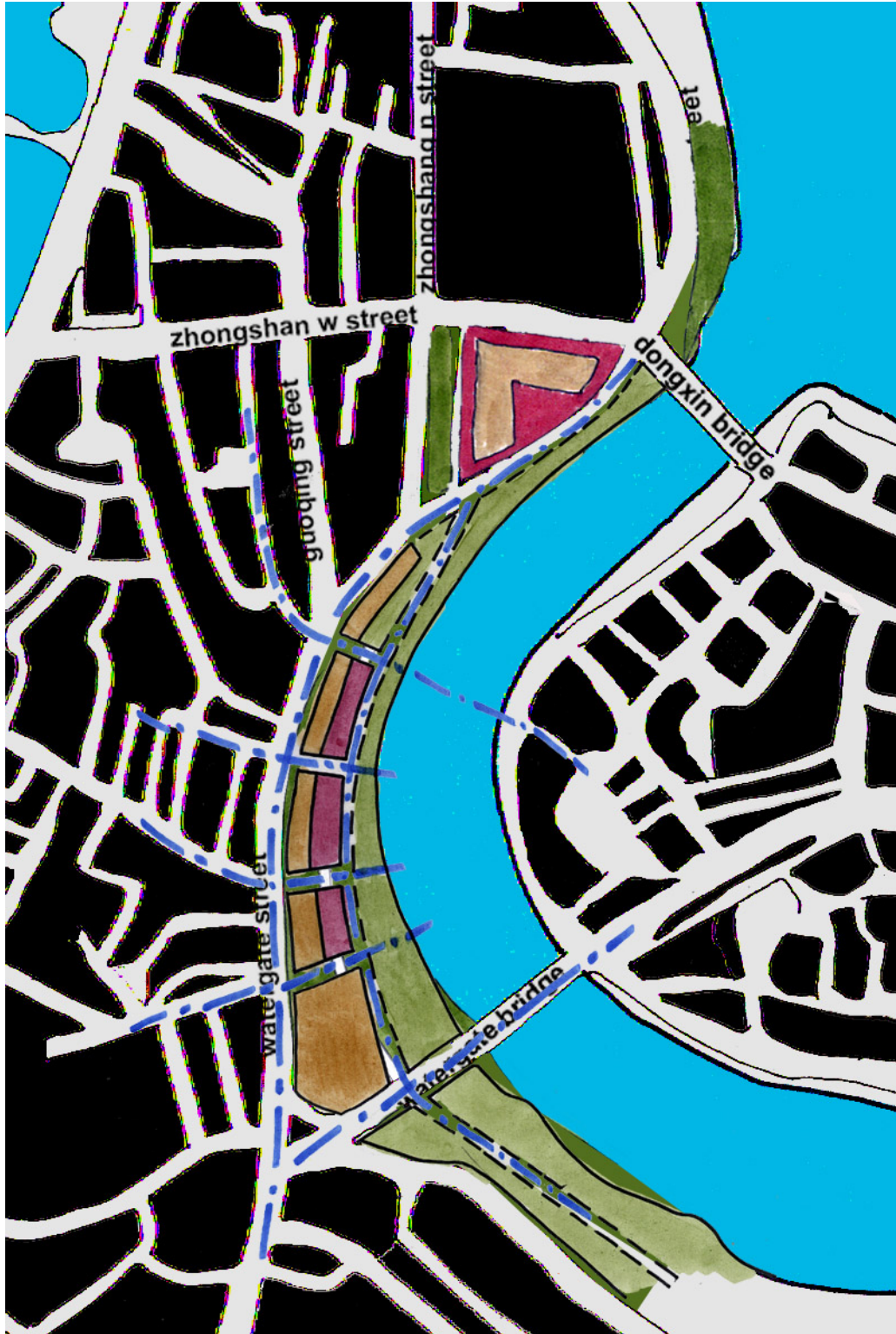
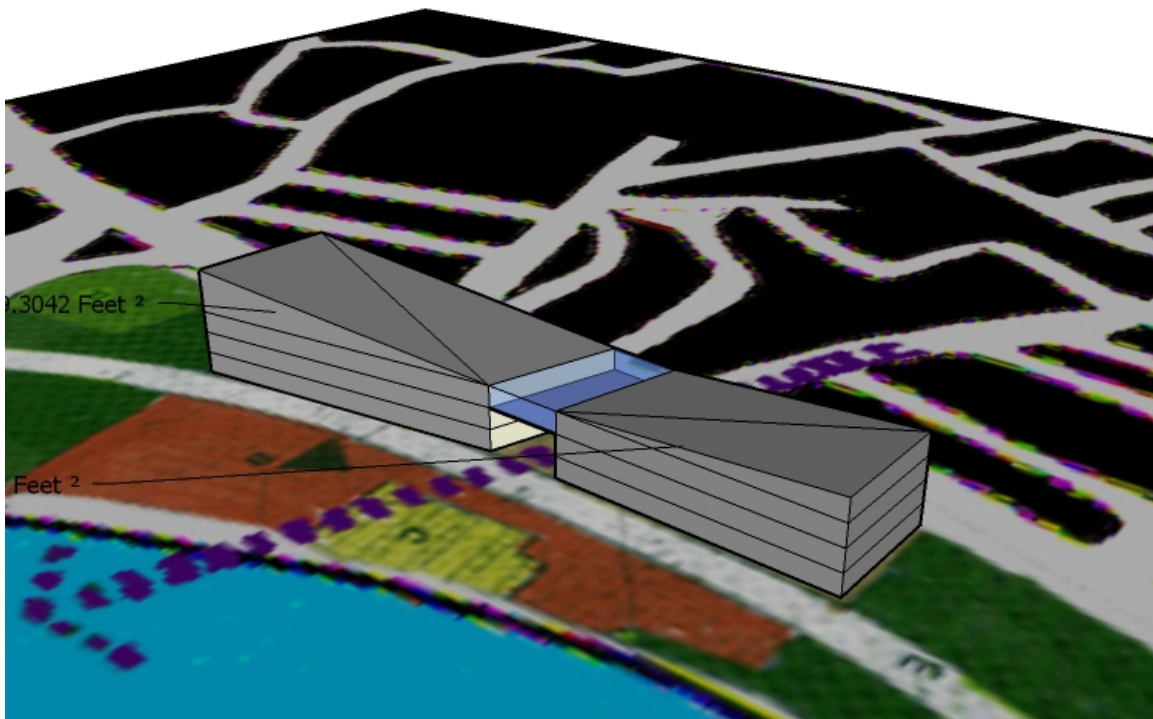


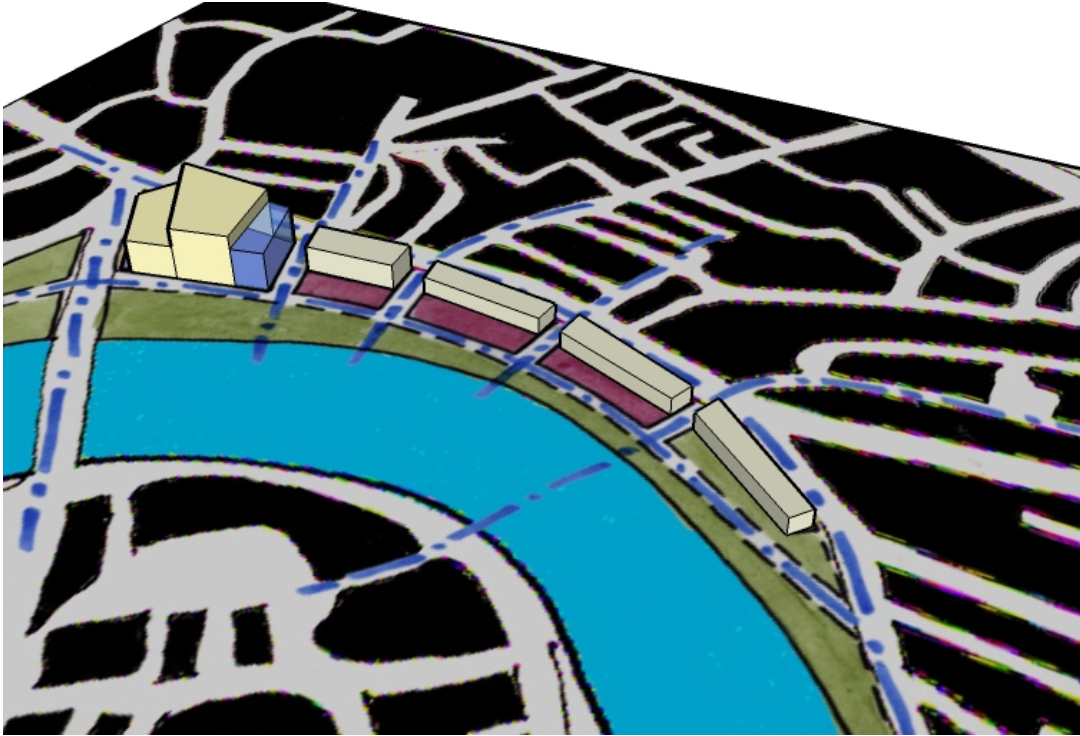
Figure 5-6: Site alternative six: site plan

CHAPTER SIX: DESIGN STRATEGIES

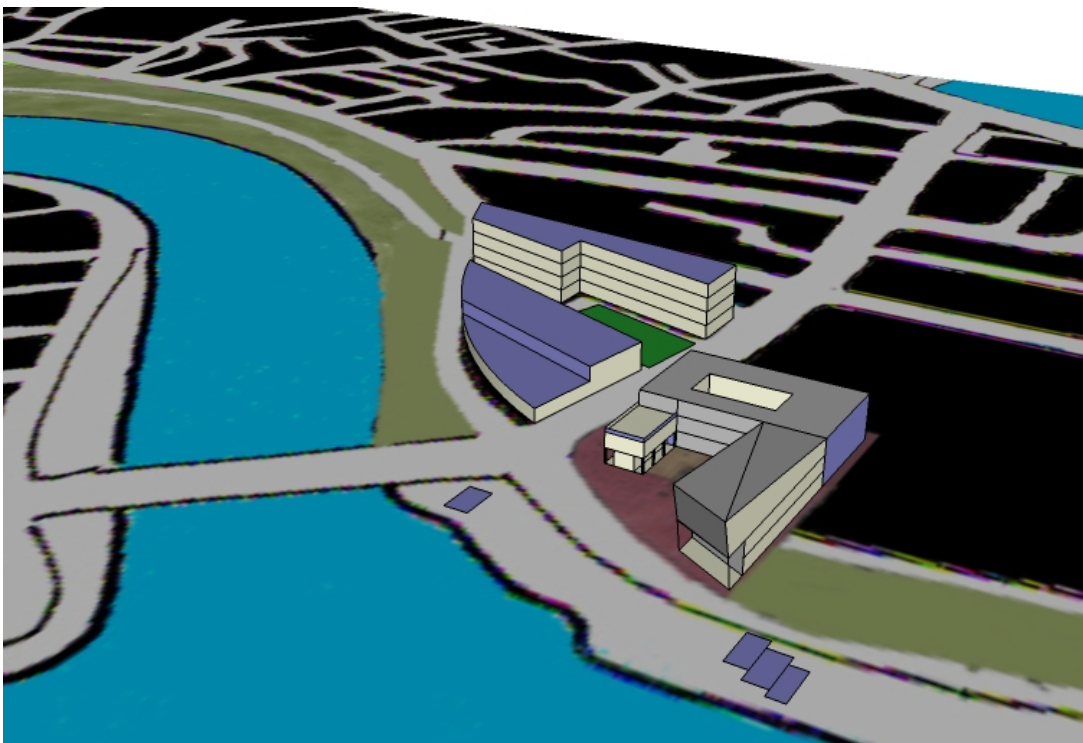
SCHEME ONE:



SCHEME TWO:



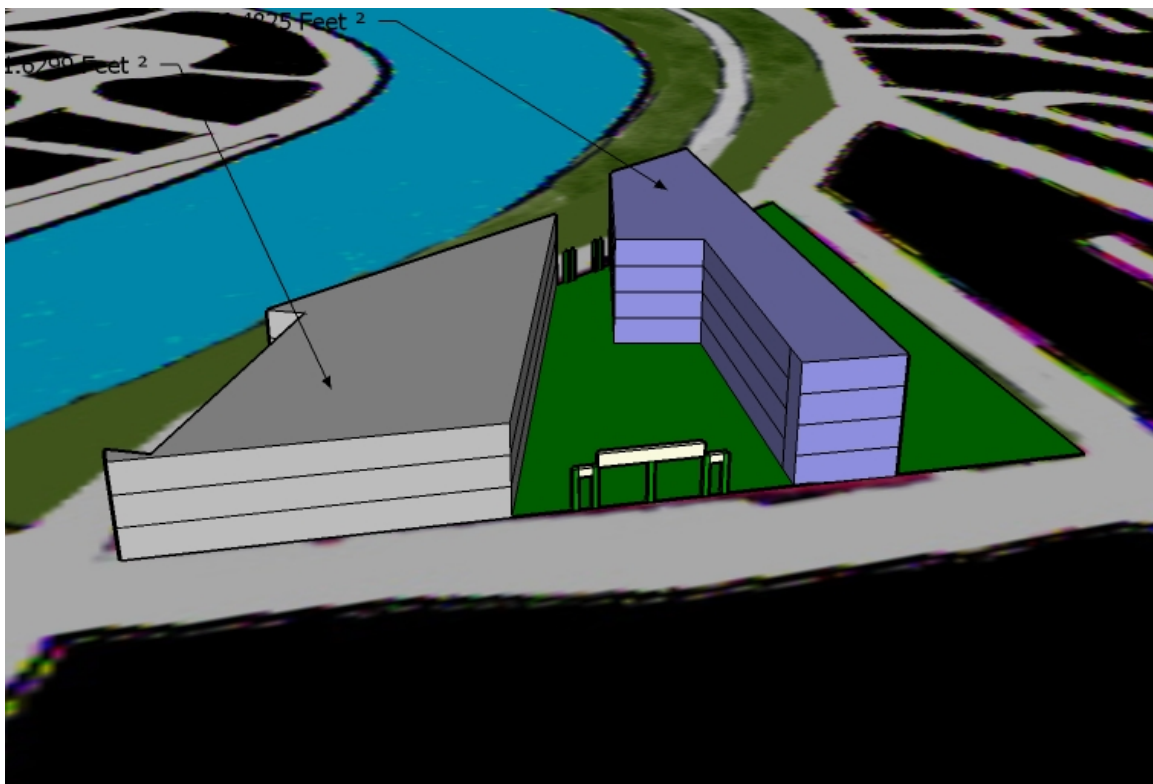
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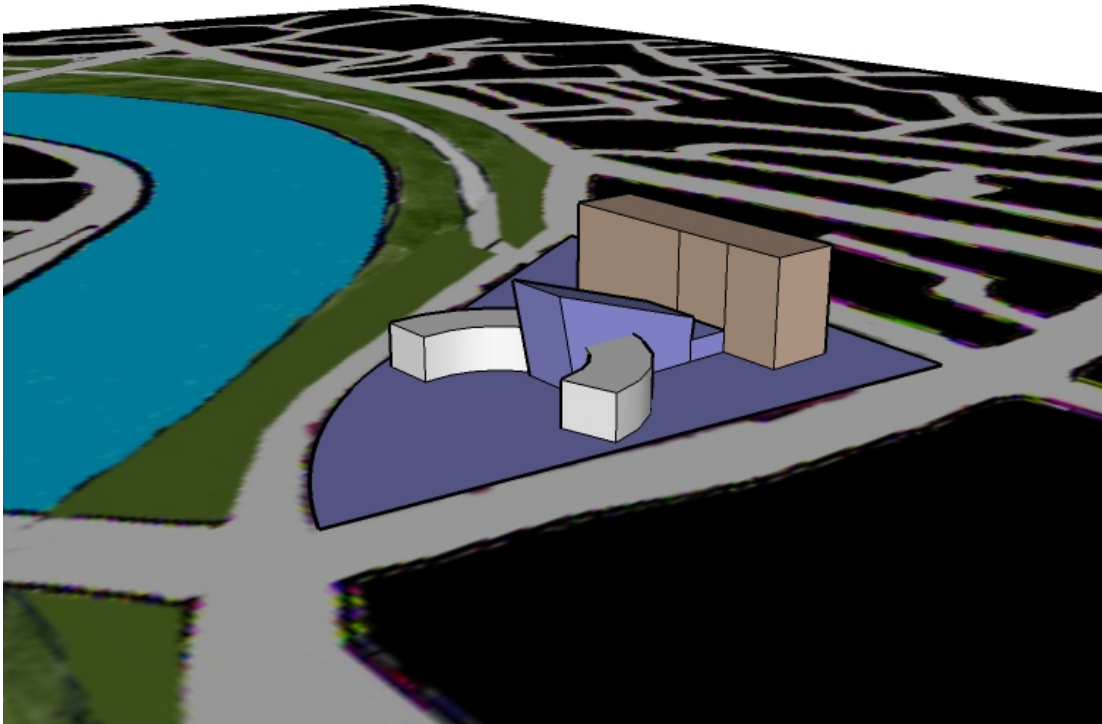
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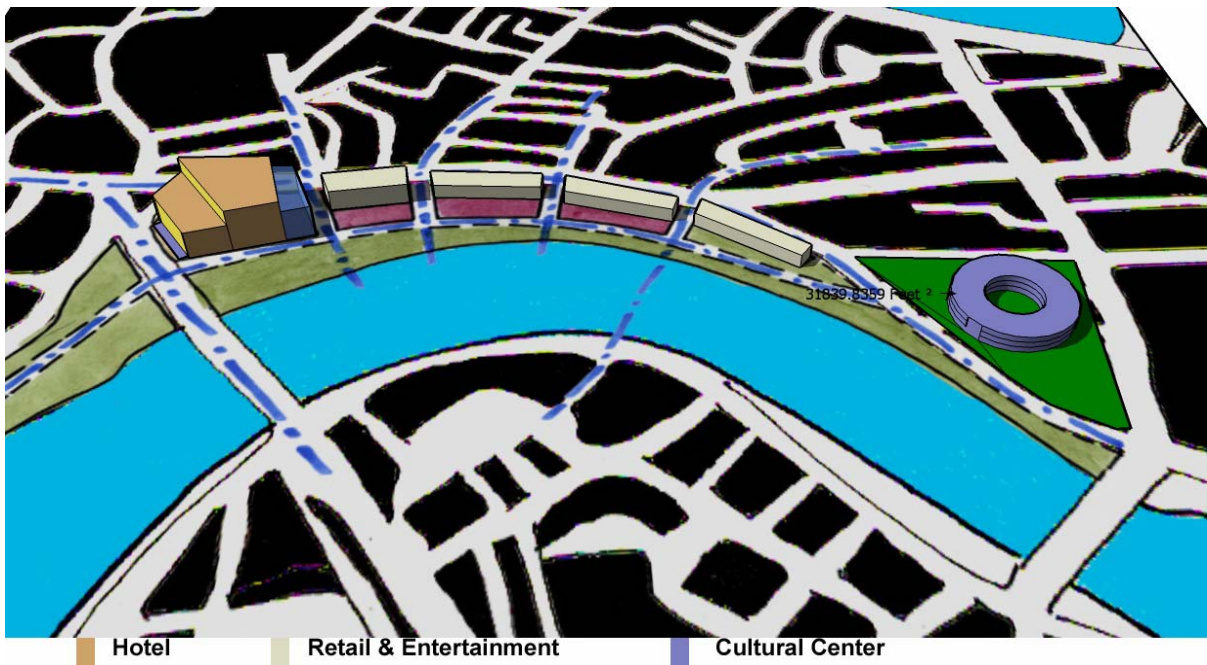
SCHEME FIVE:



SCHEME SIX:



SCHEME SEVEN:



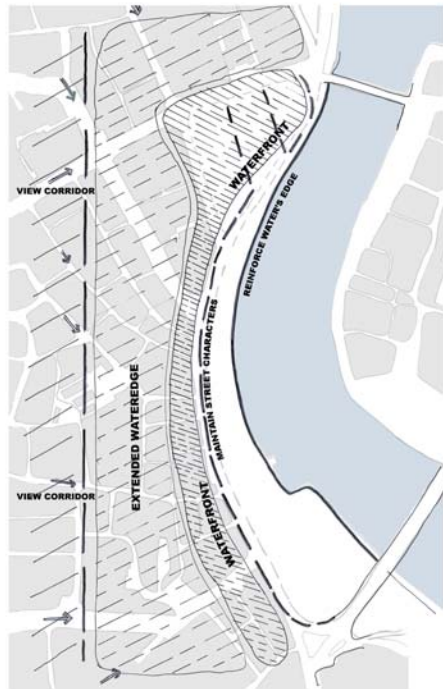
CHAPTER SEVEN: FINAL DESIGN

URBAN DESIGN STRATEGIES

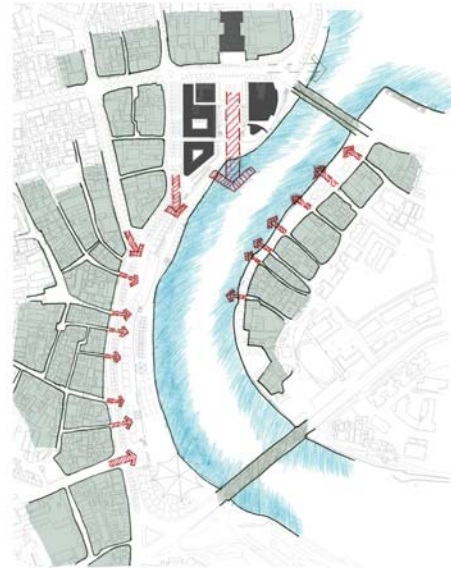
Main idea of this thesis is revitalizes the abundant city's heart and creates a great urban waterfront. This design reemphasizes the important civic status of the site and reactive city's Opera house. It visually and physically extends accessibility to waterfront and connect city to water. It concerns the linkage to existing fabric in scale, street grid, fabric grain, orientation, and massing. It creates continuous waterfront promenade at different levels and connecting them by a series of nodes, thresholds, landmarks and gateways.

This design emphasizes the pedestrian friendly environment and creates a strong open space network connecting West Lake and river waterfront. Public spaces in this network have different scale regarding to street sections, space sizes, and public/private. It is a design dedicated to public and civic life. This area is developed as a highly mixed use area. Marina building, water taxi, shops, restaurants, galleries, bars serves as pavilions that people can move in and through the site.

This thesis design ensures that local residents will maintain access to the water and ensure his cultural and entertainment center has an iconic presence in this historic area, which was the original city center.



PRINCIPLE ELEMENTS



**CONNECTION TO WATER
LINKAGE TO EXISTING URBAN FABRIC**



WATERFRONT PROMMANNADE



PUBLIC SPACE NETWORK



REVITALIZE THE CORE OF THE CITY

Figure 7-1: Design principles

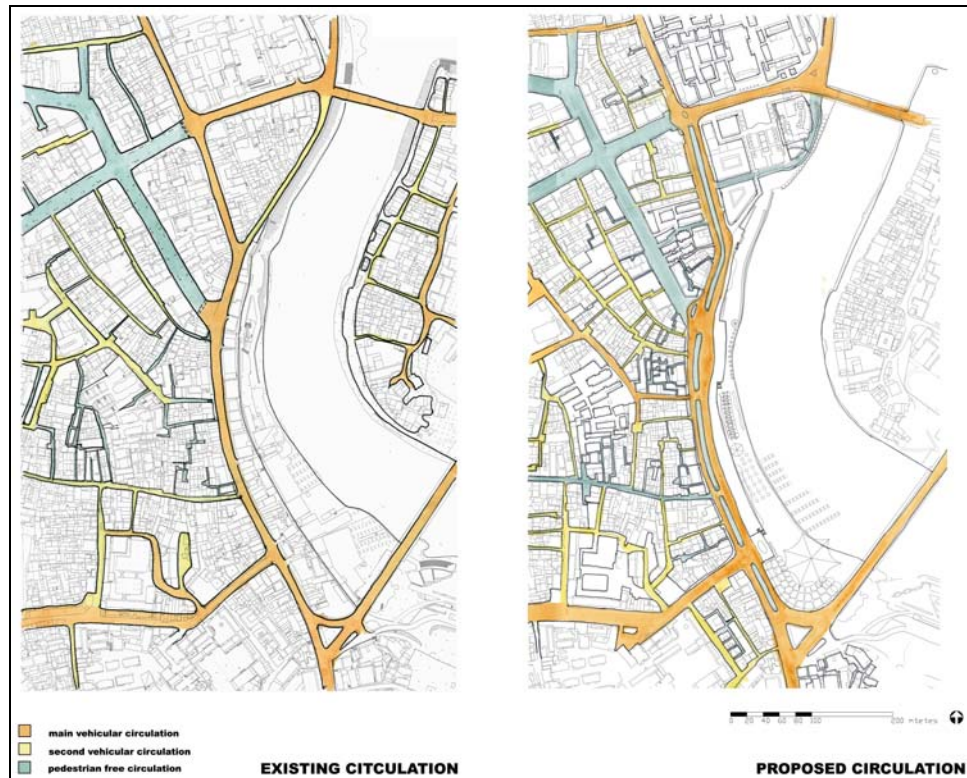


Figure 7-2: Existing and proposed circulation system

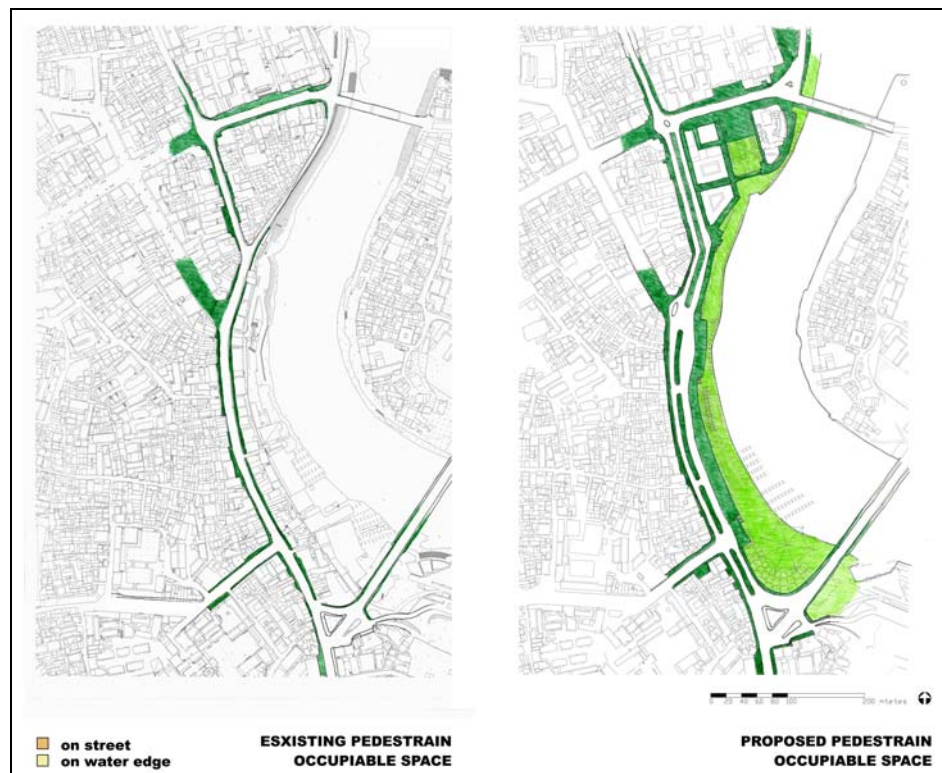


Figure 7-3: Existing and proposed pedestrian occupiable spaces

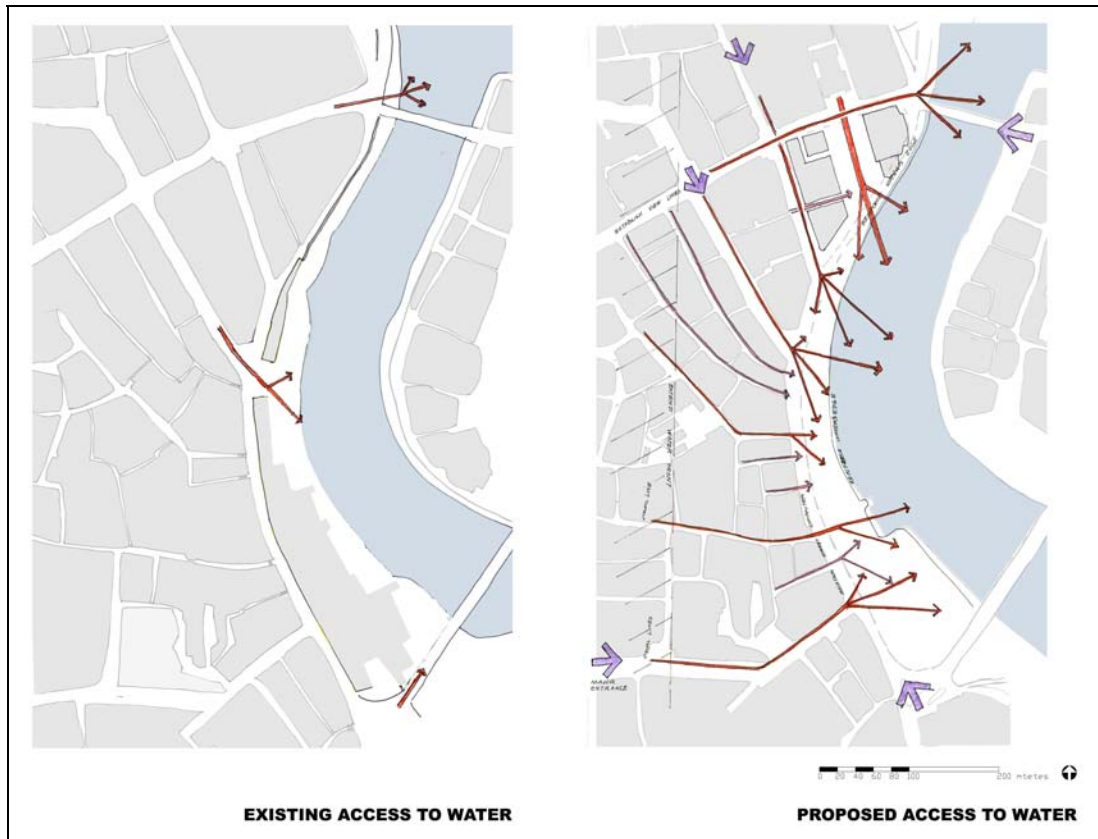


Figure 7-4: Existing and proposed access to water

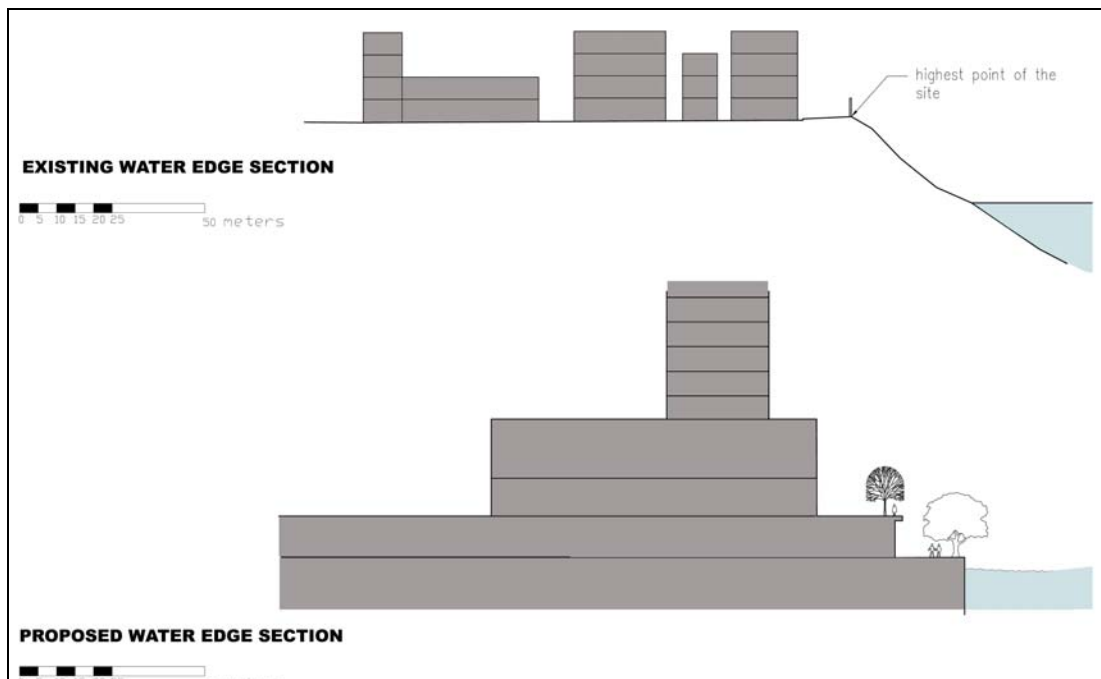


Figure 7-5: Existing and proposed waterfront street section

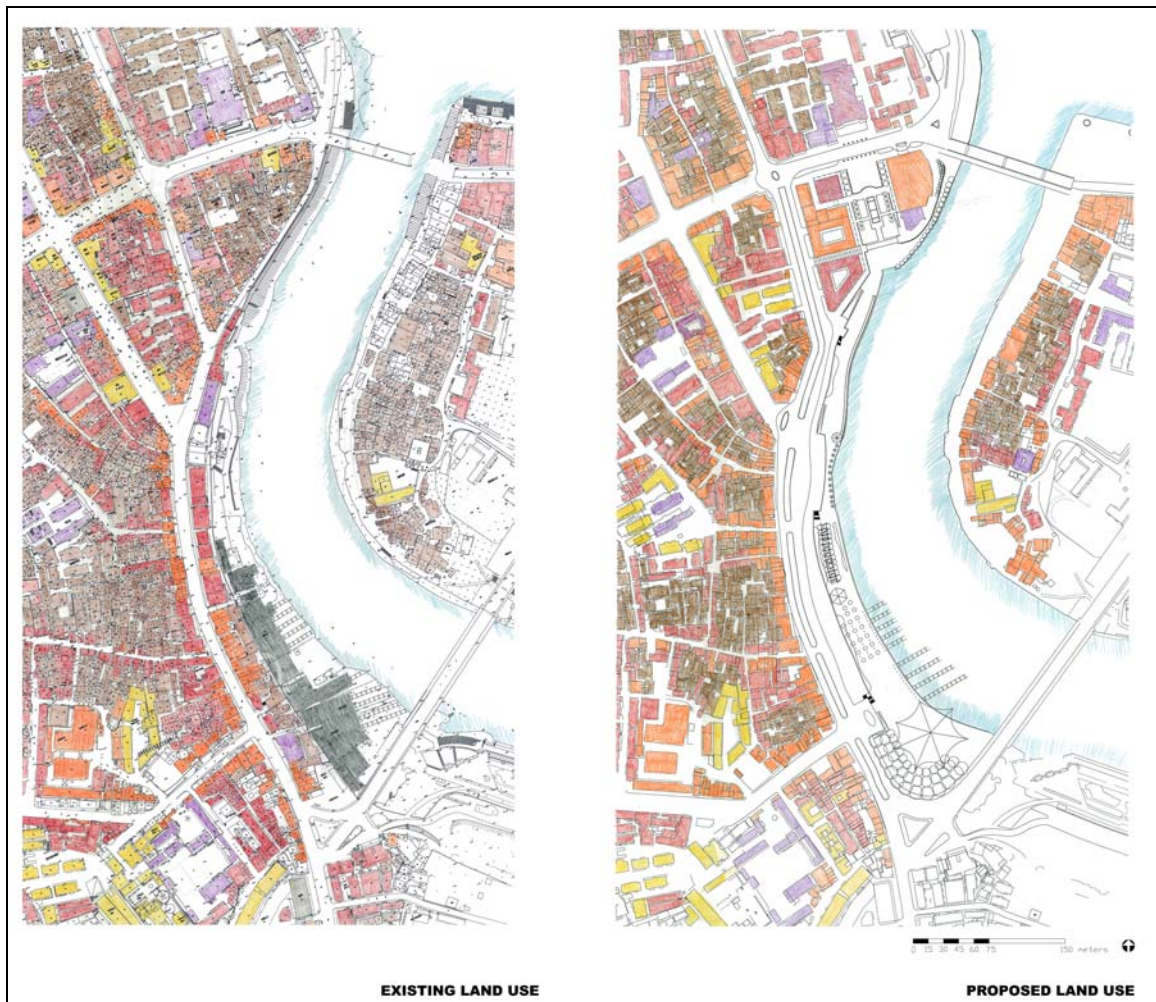


Figure 7-6: Existing and proposed land use



Figure 7-7: Existing and proposed figure/ground



Figure 7-8: Proposed site plan



Figure 7-9: Waterfront view one (looking north at lower level)



Figure 7-10: Waterfront view two (looking north at lower level)

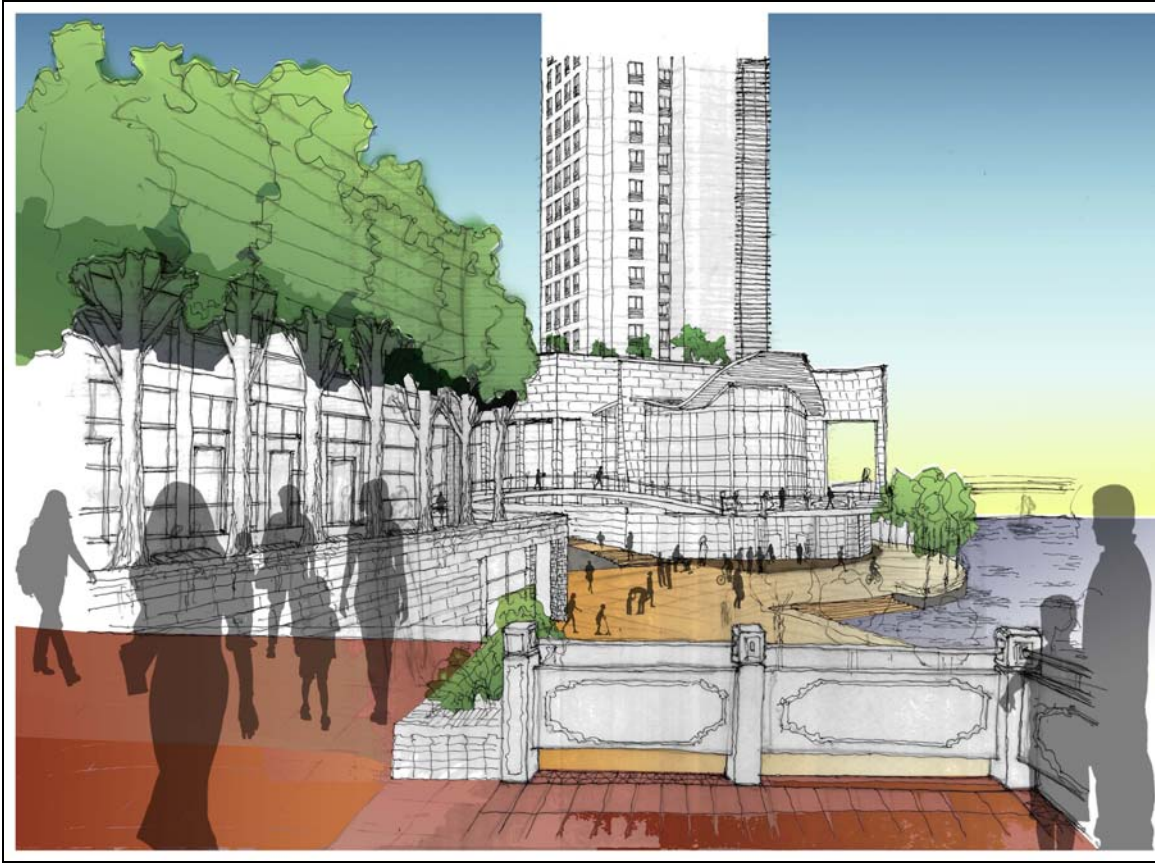


Figure 7-11: Waterfront view three (looking toward plaza at upper level)

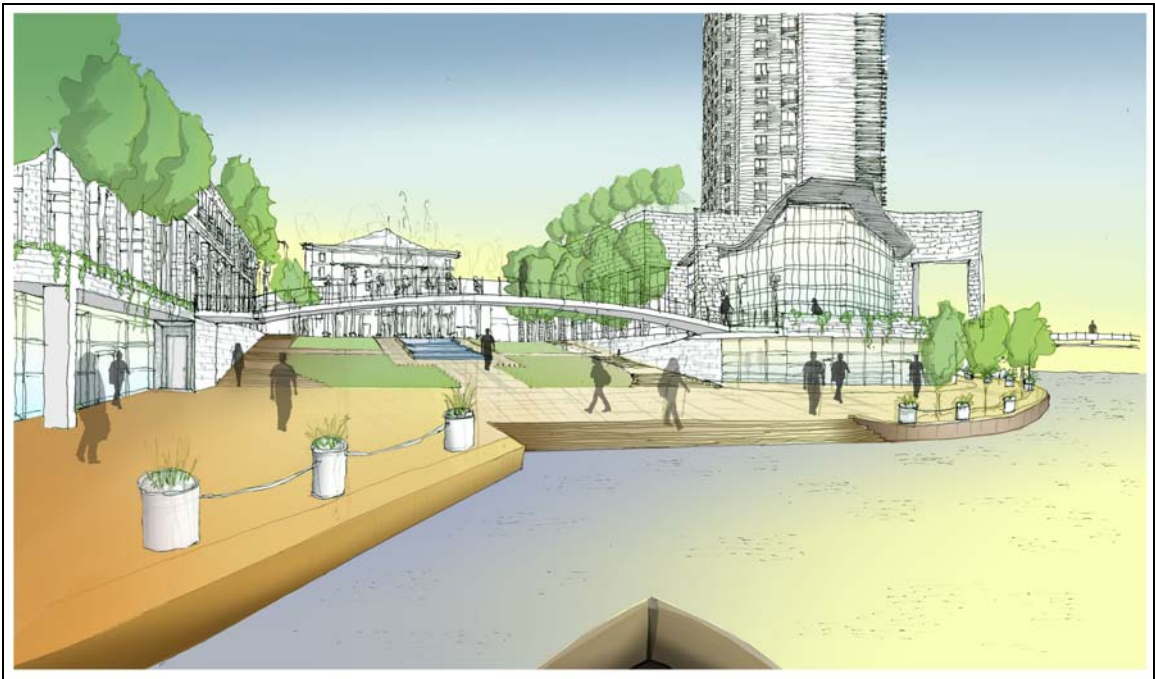


Figure 7-12: Waterfront view three (looking toward plaza at water edge)



Figure 7-13: View of the plaza



Figure 7-14: View to hotel from south

DESIGN OF THE HUIHE HOTEL

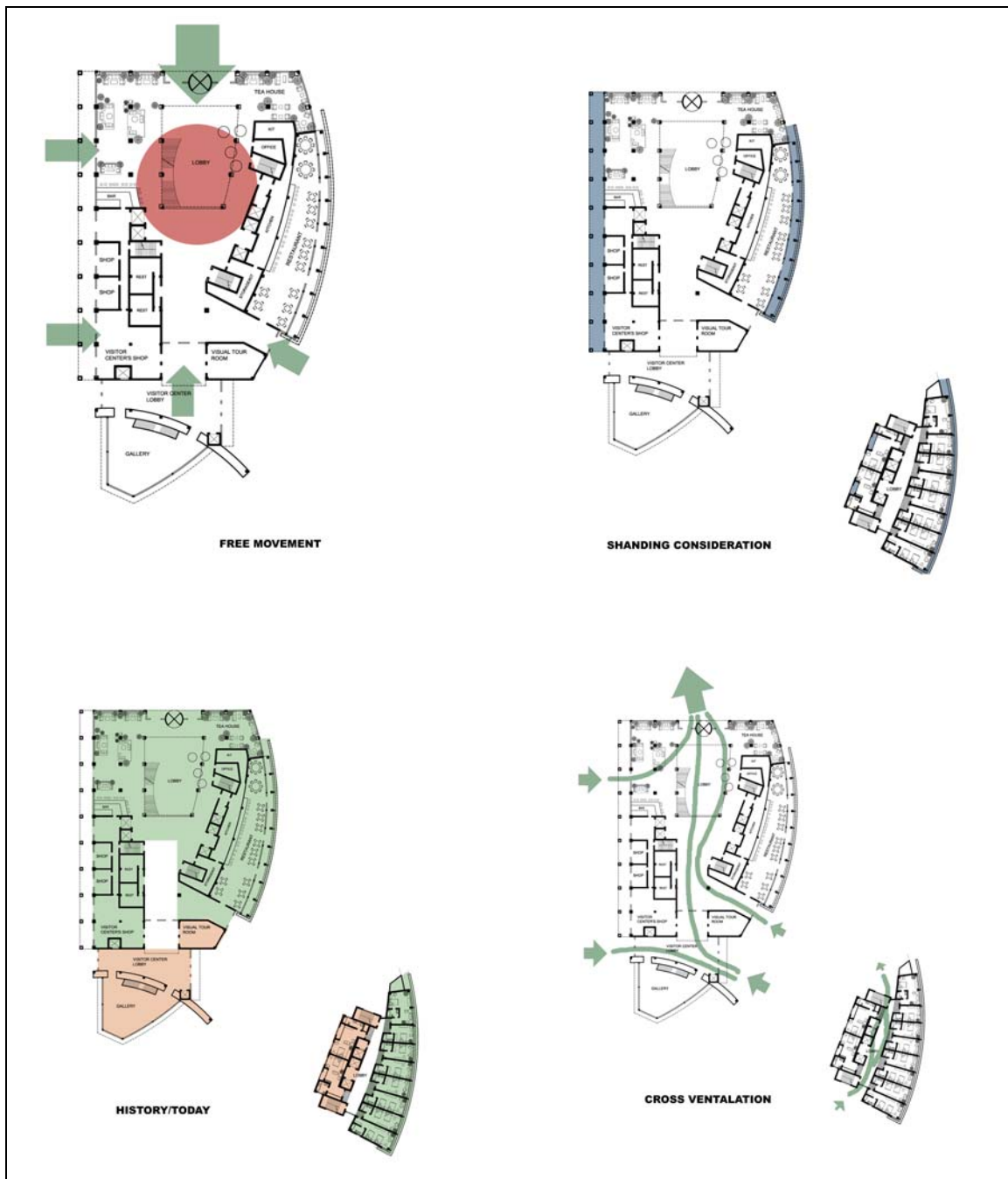
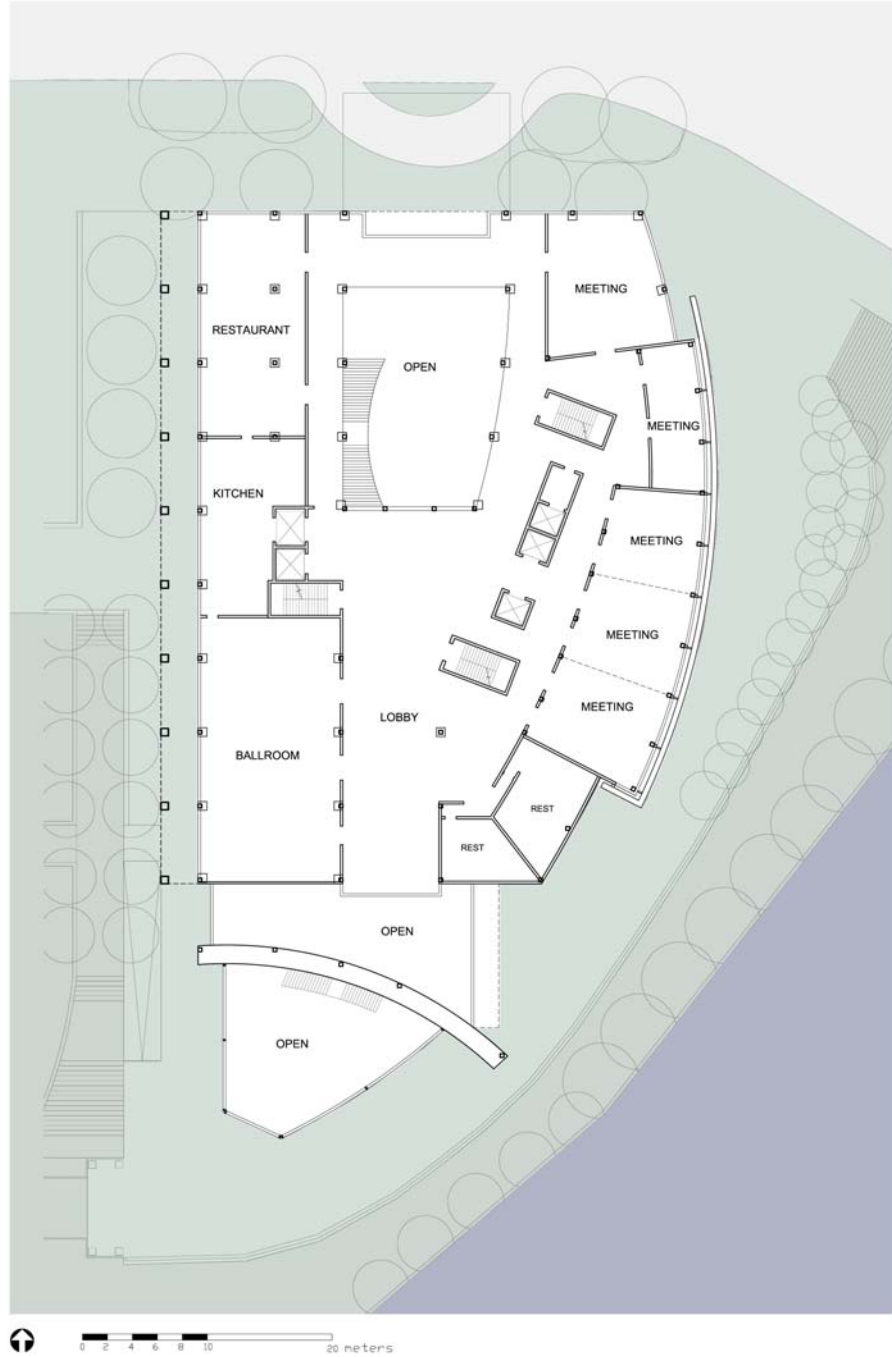


Figure 7-15: Design considerations



Figure 7-16: First floor plan in context



SECOND FLOOR PLAN

Figure 7-17: Second floor plan in context

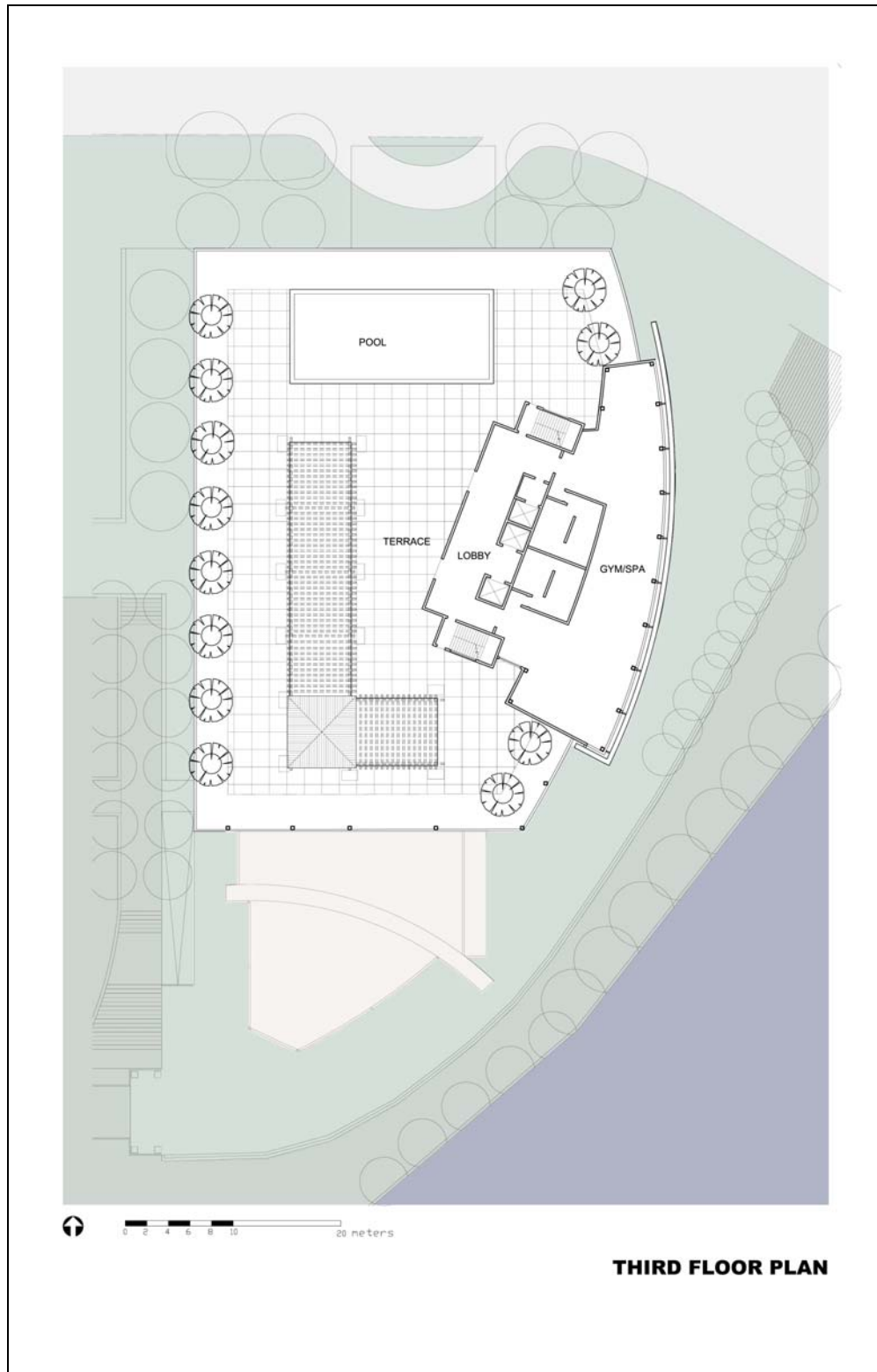


Figure 7-18: Third floor plan in context

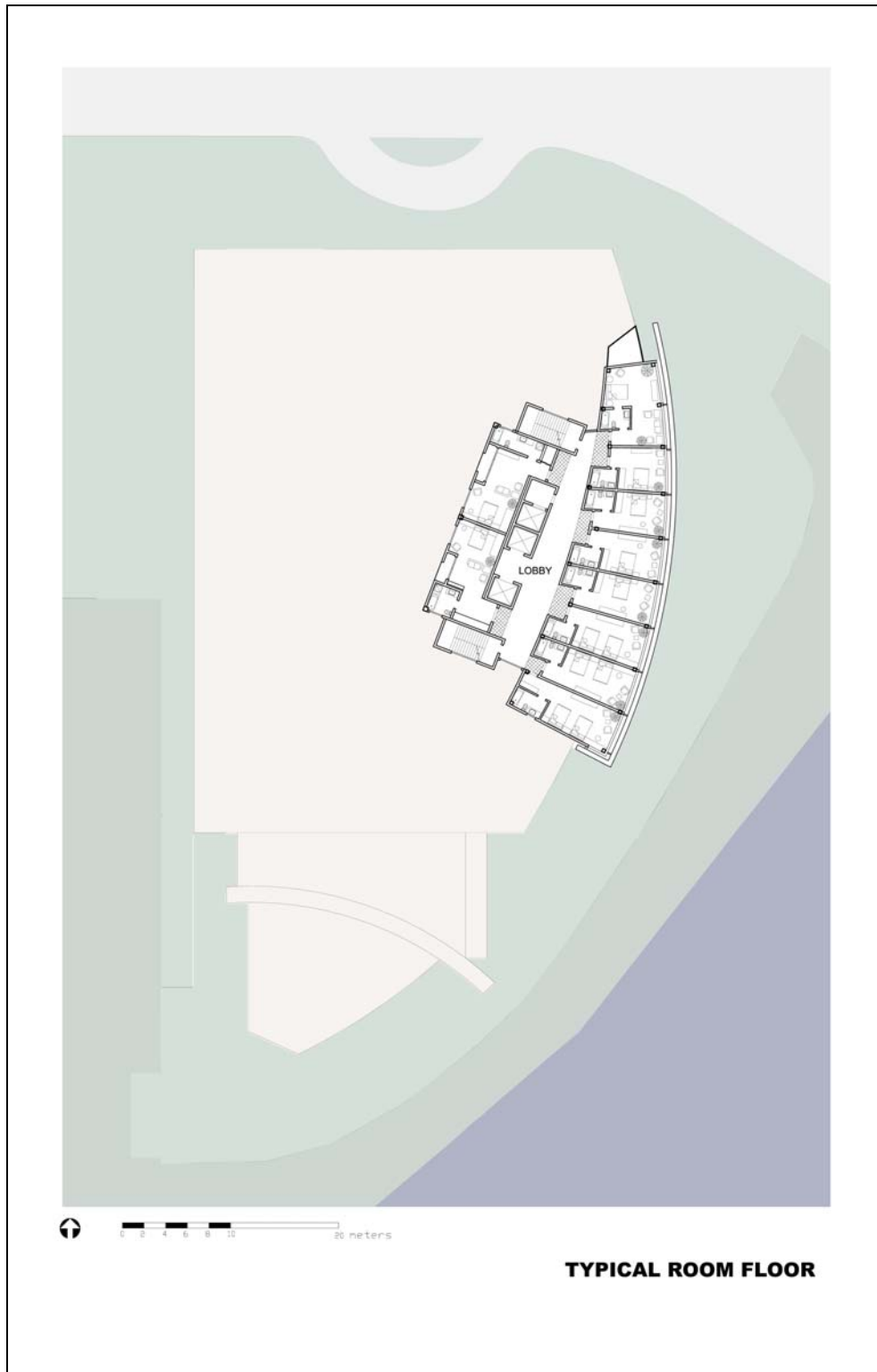


Figure 7-19: Typical guest room floor plan in context

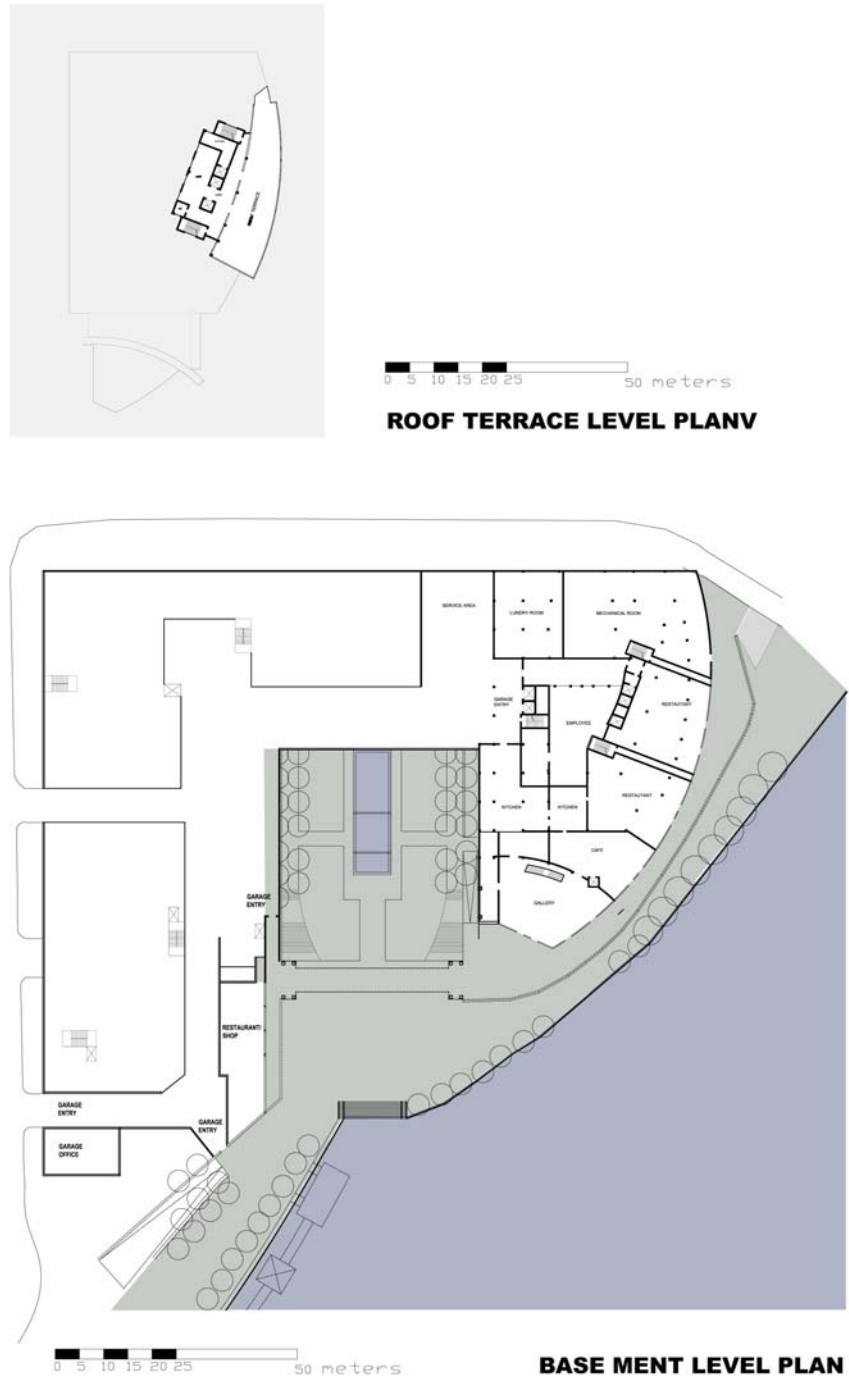


Figure 7-20: Roof terrace and basement floor plan in context

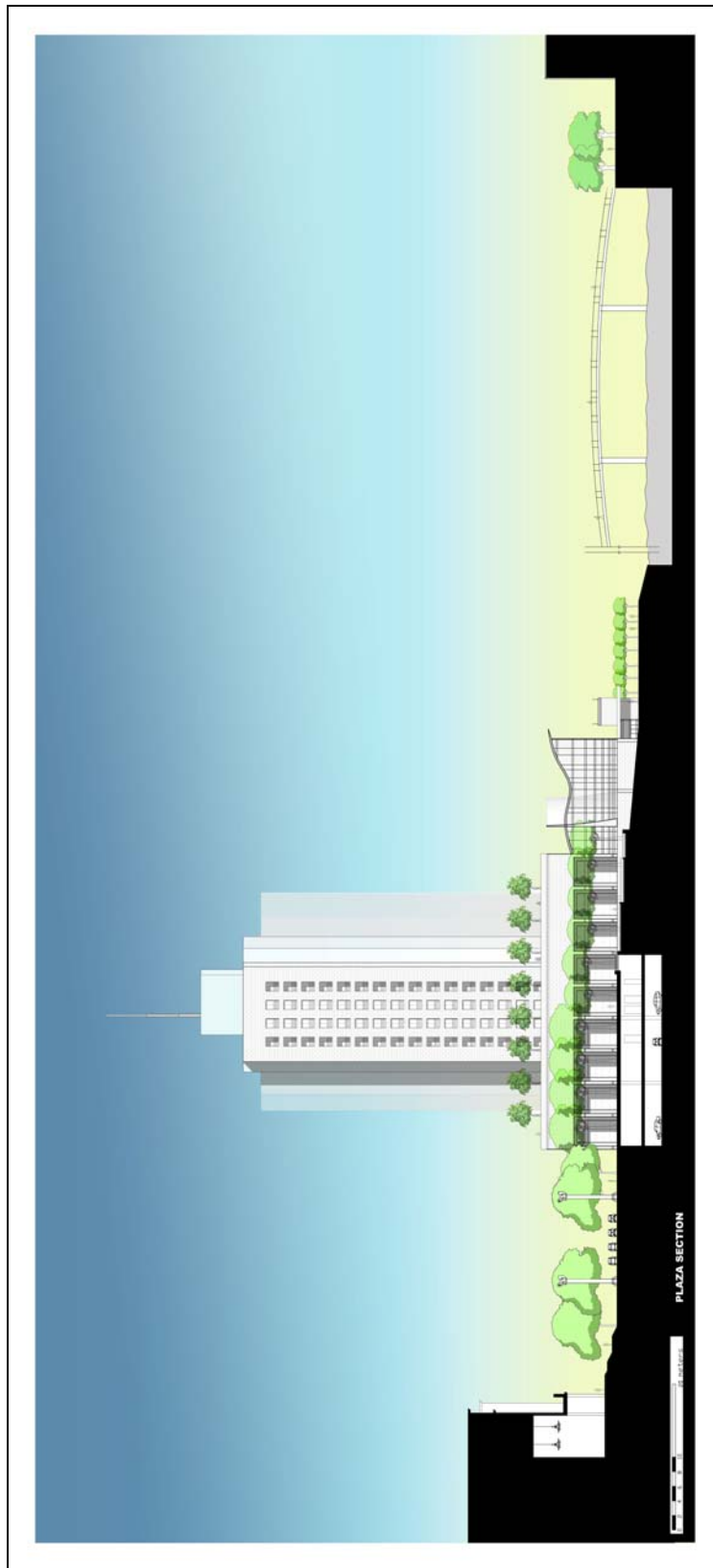


Figure 7-21: Section/elevation through plaza looking toward east

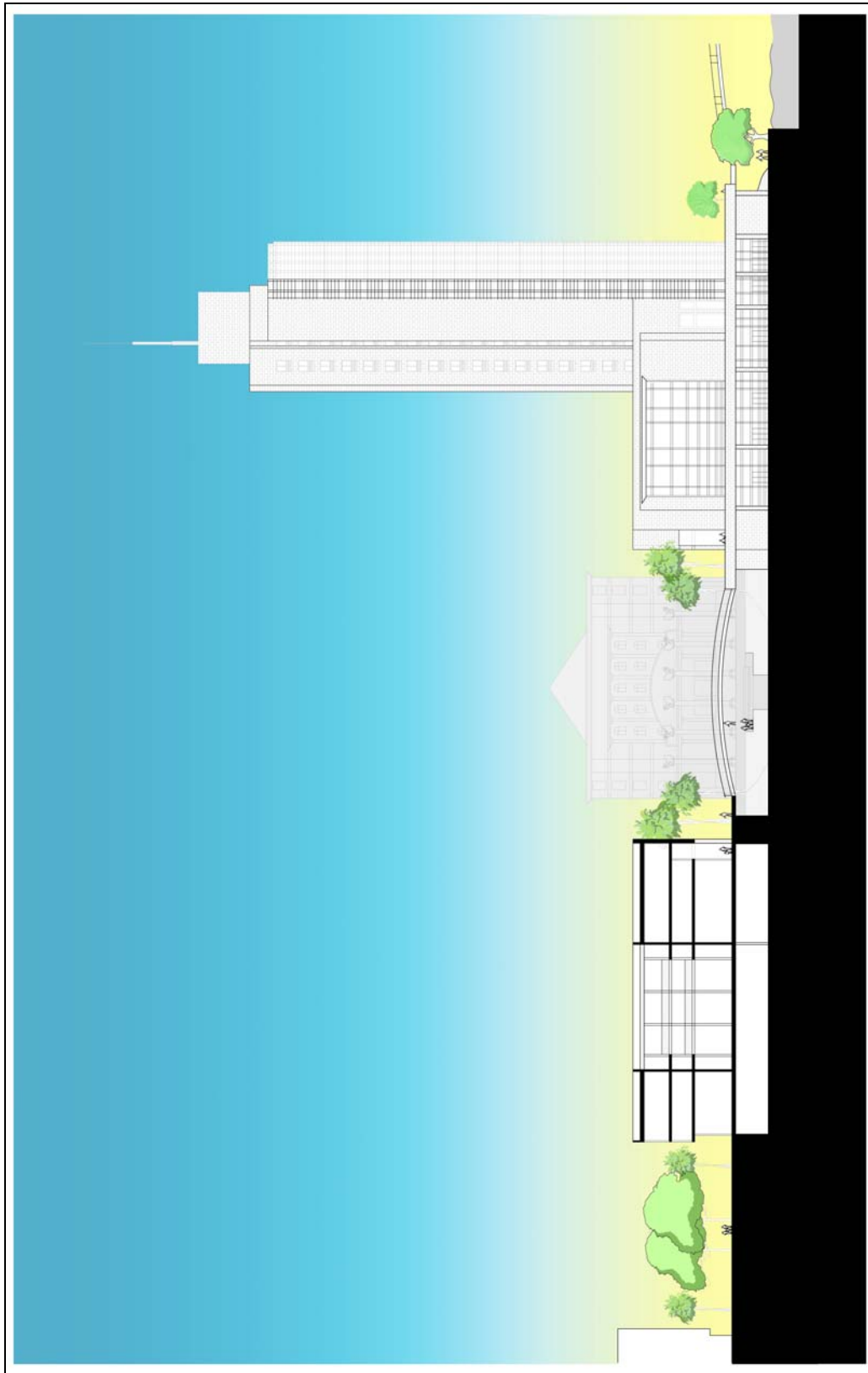


Figure 7-22: Section/elevation view to north

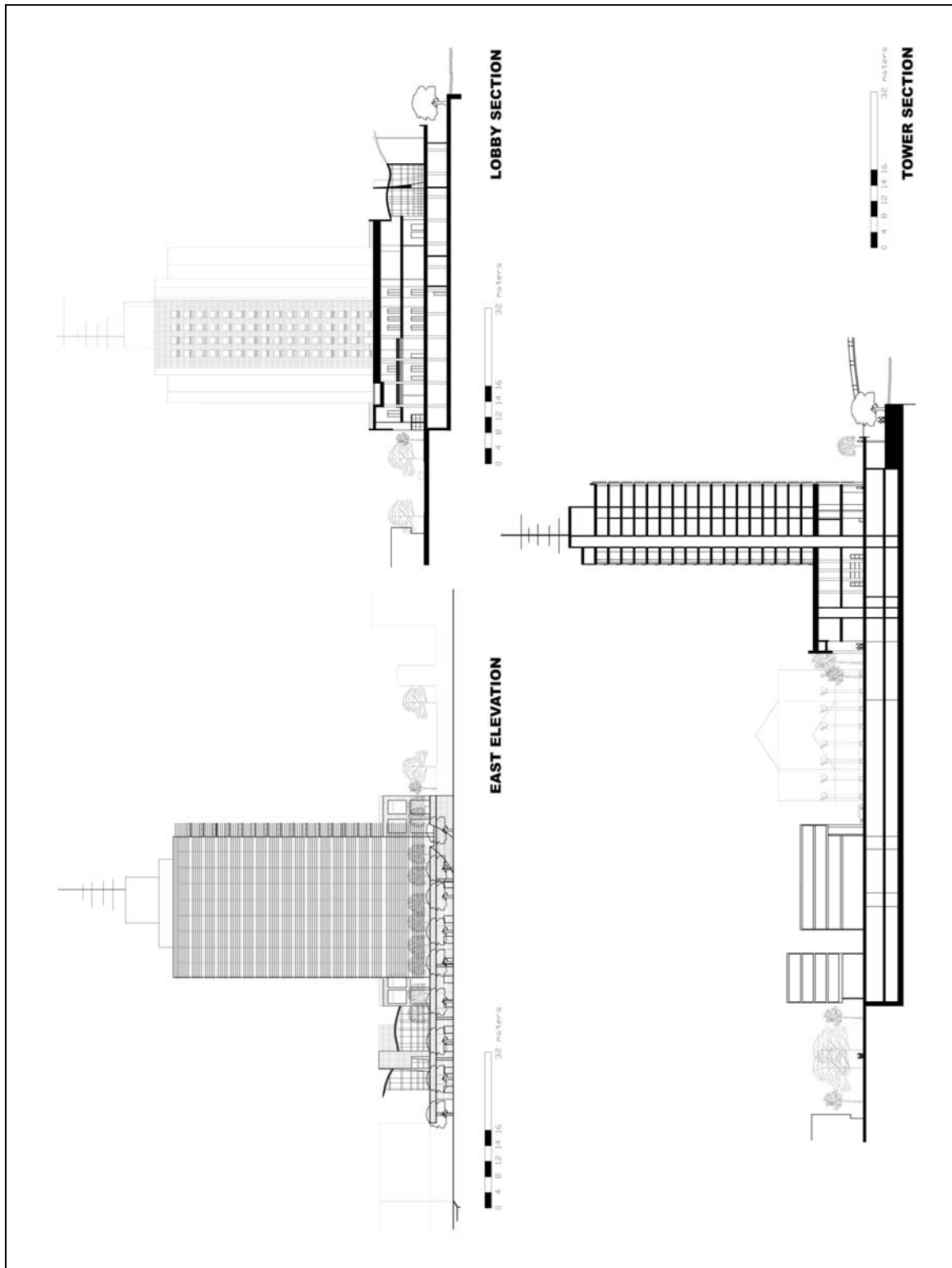


Figure 7-23: Sections in context

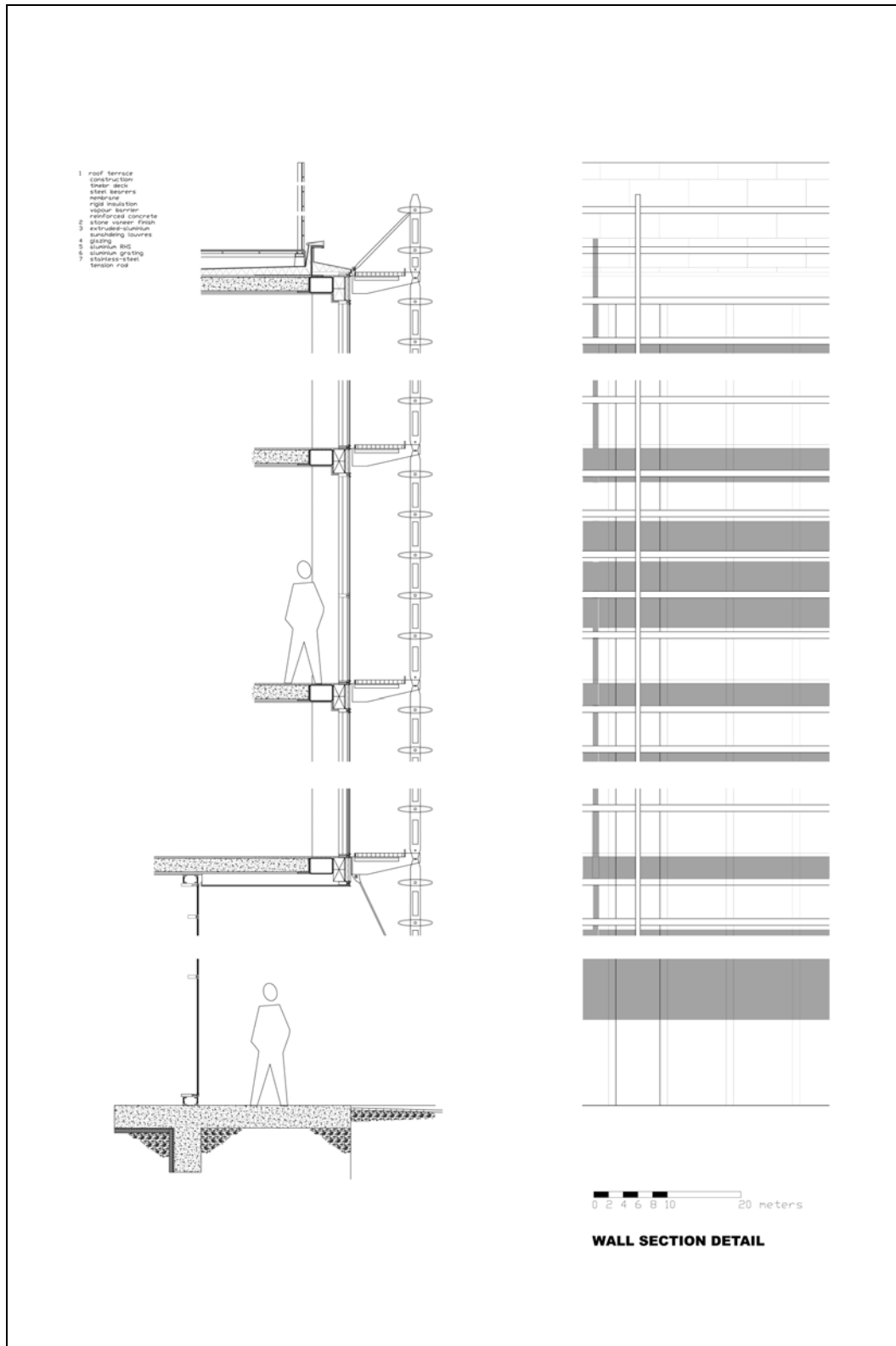


Figure 7-24: Curtain wall section detail



Figure 7-25: View of the main lobby



Figure 7-26: View of pool and terrace (see opera house at left)

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