

**Mahakarn Fort Project : Historical District
Conservation**

Old Town of Bangkok, Thailand (2005-2006)

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Fig.1 Photo of Mahakarn Fort



Fig.2 Photo of House in Mahakarn Fort Community

EXECUTIVE SUMMARY

This report records the results of design process undertaken by Krit Thedsana from Departments of Public works and Town & Country Planning with the community living behind the old city wall at the Mahakarn Fort. It also presents a rationale for the land sharing design proposal and Historical District Conservation. In reviewing previous studies and proposals that have been made about the historical character of Rattanakosin Island and its importance for tourism, it is argued that the goals of these proposals are best met by the design solution developed from this 3 month-long process of consultation with the community.

The main focus of this report is on community participation in historical conservation and cultural heritage survival in present society. The report looks at the way of sustainable development by community participation. Since this community lives behind one of the last remaining sections of the old wall of the town, the treatment of the wall, the battlement, the old pier building and the old house form an important part of the design of the design development.

There are, finally, implications in the approach that has been taken. Among them are:

- How we view history and historical preservation (is it artifacts alone or people)
- how we view the process of development (how decisions are made and who makes them)
- who benefits from development (are we doing this simply for tourism?)
- how we can resolve the basic conflict between green and brown issues-parks or housing? Must it be that kind of choice?
- How we understand the concept of sustainability?

- How we understand human rights and the right to the city?
- How we can improve the development process to avoid conflict?
- These implications move the report beyond the specifics of Mahakarn community and relate more to broader planning issues affecting all communities in the BMA

There are 5 topics of detail :

1. Content

2. Context

- 2.1 Overall Context
- 2.2 Overall of historical on Rattanakosin Island
- 2.3 Open space on Rattanakosin Island
- 2.4 Pattern Movement

3. Elements

- 3.1 Mahakarn Fort Community
- 3.2 Mahakarn Fort
- 3.3 Open Space

4. Conceptual Conservation

1.Content

1.1 Background

This project is a regular part of Conservation and Management of Historic Buildings : Advanced International Training Program , Lund University, Sweden, September 26-October 14, 2005 and a regional continuation in February/March 2006.

BASIC ISSUES

- Global issues of Conservation Agenda, tenure, Architecture, participation development process, housing, sense of place, the way of life, environment, sustainability, etc.
- The role of architecture in sustainable.

DATA COLLECTION

- Basic observation
- Other sources
- Mapping
- Needs assessment surveys

ANALYSIS

- Developing appropriate responses to data
- Consultants

WORKING WITH COMMUNITIES

- Participatory practices
- Marking presentations

Through this design process should become more aware that design does not happen in isolation and that it must involve collaboration with everyone affected by the change that design brings.



Figure. 3 Aerial photo of the NE corner of Rattanakosin Island with the Mahakan community highlighted

1.2 The Process

- The first meeting was held in the community . The community leader explained some of the history of the community the current problems they faced with the city authorities
- Inventory-building form and conditions, images, approach, infrastructure
- Background information - aerial photos, history, legal restrictions, available social services, tourism.
- Survey of residents-income, education, employment, skills.
- Analysis of data
- Case studies
- Community workshop. Establishing a program for future design, clarifying the regulations that apply.
- Seminar with community on architecture and community work-comparative strategies.
- Presentation of preliminary design concepts prepared based on the program.
- Presentation of preliminary design for comments and changes.
- Preparation of the report.

1.3 Conclusions Reached

As a result of this investigative process there were a number of general conclusions reached about the community and the community and the site. These formed a fundamental part of the design that followed. In general these design parameters were :

- It is possible for the park and the community to co-exist
- Some of the existing old buildings in the community have historical value and should be preserved
- The area along Klong (ditch, moat) Ong-Angh should be developed
- The klong (ditch, moat) is one of the major gateways to Rattanakosin Island
- Framed views of ancient monuments, particularly Wat (temple) Saket : Golden Mountain, are important
- The active life in the community, particularly its handicrafts, are important to the history of the area and therefore important to tourism.
- The large trees on the site are important to preserve.

2. Context

Introduction

While Rattanakosin Island is arguably Thailand's most important historical tourist destination- the existence of Khao San Road being a testament to that - it is important to remember that it is also an integral part of the history and imagination of the residents of Rattanakosin Island itself. People work here and they live here since 1940 (60 years ago). The mahakan fort community is one of many on the Island. As such the context in which this community lives forms a critical part of any future they may have here.

That context concerns a number of elements :

1. Overall historical development - these are important features that represent Thai culture. As such they are important for tourists (who come from around the world to see them), local residents (who use them in their daily lives) and for all the people of Thailand. What are these features?
2. Residents - a fundamental part of the history of the island is the people who live there- what they do in their daily lives, how they use the spaces around them in the rituals of life. These daily the present to the past and help the present form the future. How do people use the spaces around them?
3. Open spaces - In addition to building many of the activities of residents require open space. For tourists, too, a variety of open space are necessary. What open space is there? How are they used? How do they relate to the historical buildings?
4. Tourism - this forms a very important part of the economic base of the Island, the city and the country. What is it that tourists want from the experience of being here?
5. Patterns of movement - there are pathways between all of these places that people want to see. Residents may well use different paths than tourists but it is important to understand how these movements occur. Where are people coming from? What is their pattern of movement through the island? What is the character of these pathways? What changes should be made to improve the movement of people?
6. Plans and policies - Over the years, many plans have been development providing a vision for the island. It is import to understand that overall vision. The needs of the individual residents of mahakarn fort community are important but they can only be seen in the context of what is around them. How do they fit into these plans? How do they fit into

the history of the area and how do they contribute to tourism? Such questions are just as important for their future as they are to the future of the area itself and to the preservation of its history.



Figure.4 Tourist map of Rattanakosin Island presents important historical places. Mahakarn fort is include. (in the circle that is on the right top of map)

2.1 Overall Context

Since Rattanakosin Island was first settled as the seat of government about 220 years ago, many important to the history of the city and of the country. This, too, is what makes it so important for tourism (see Section 3) . In addition to those historical structures it is also important to note other historical features (considered in Section 2.5).

- The klong (ditch, moat) around Rattanakosin Island

- The processional routes.
- The bridge

In addition to these physical elements there are also traditional festivals and other special events that are focused on particular areas (considered in Section 2.3).

-Water focus

-Wat (temple) focus

These elements involve yearly cycles that relate those fixed features to the daily lives of the people living here. In considering the history of a place there are at least 3 elements in that:

1) Built form-historical buildings, the Mahakan battlement, the town wall

2) Natural elements-trees, water, natural boundaries

3) People-culture, crafts, cyclic events

It is these cycles that create the basic premise for dealing with the historical features of the area:



Figure.5 Historical context. (1. Wat Rachanadda 2. Wat Sra Ket 4. Mahakarn Fort 5. Wat Thep Thi Dha 6. King RAMA 7th Musium)

Historical Image

Rattanakosin Island has long history for more than 220 years. So, there are much historical architecture today; where noticed as tourist attractions. But beyond those historical architectures, there are other kinds of construction:

- Moats around Rattanakosin Island which protected town from invader.
- Transportation system by boat.
- Transition from inside and outside town
- Boundary of town

Moreover, we should preserve culture and historical activities as well.



Figure.6 Mahakarm fort outside view from the past until today still the same. Note that the view has not change.

The value of historical building related to life-style of people in the city. Consider to community around Mahakarn Fortress, there are 3 factors which relate to history.

1. Constructions, historical building; Mahakarn Fortress, city wall
2. Natural factors People and culture
3. Constructions, historical building; Mahakarn Fortress, city wall

Recommendation

“History should live through the people using the spaces, buildings and features of the area.”

St.Mark’s Square in Venice, along with its canals, is used in much the same way that it was 500 years ago. That fact alone gives the separated from the life of the city as artifacts.

Similarly, one of the more popular tourist attractions in Bangkok (outside of Rattanakosin) is the floating market. It is here that tourists get some sense of the living history of life on the klong of Bangkok, some sense of continuity, This can be found in daily activities, in crafts (and buying them where they are made), in the ceremonies and rituals.

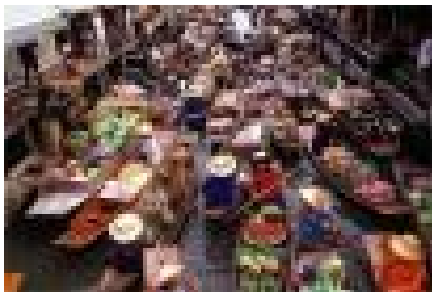


Figure.7 Floating market is Thai culture which peoples relates with water



Figure.8 life-style of people in Mahakarn Fort Community

2.2 Overall of historical on Rattanakosin Island

The important buildings of the area are not only major tourist attractions but important cultural monuments for the city and the country. Of particular concern in the context of the Mahakan fort area are those buildings that are on routes to and from the community and buildings that are on routes to and from the community and buildings that are in or around the community. The former relate directly to Section 2.5 while the latter have bearing on the proposed design alternatives for the park and the community. The Giant Swing and the Democracy Monument are important features on routes to and from the Mahakan community. The battlement at the north end of the site, the remains of the wall, Wat Ratchanadda (Fig 2.17) and Wat Sra ket (Fig 2.18) are important monuments relating more directly to the community itself. (Renumber all these figures as required).

The battlement: At the mouth of Klong (name), this is an important feature at the northeast corner of Rattanakosin Island, protecting the eastern entry point to the island.

The wall-this is the last significant piece of the original city wall

Wat Ratchanadda - this Wat is important not only as a tourist attraction but it is also important to the community in the celebratory events throughtout the year.

Wat Saket - is an important tourist destination. Because of its height, it towers over the area and is visible from several points on the routes towards the community as well as key

places within the community. As such, views and paths to it form an important part of the proposed design scheme for the community. They are as eager to promote this tourist feature as the city officials are



Figure.9 Wat Rachanadda (left) Wat Thep Thi Dha(middle) Wat Sra Ket (right)

2.3 Open space on Rattanakosin Island

There are two distinct kinds of open space that are important here-parks and waterfront

Waterfront

Historically, water transportation has been the main mode of travel in the area. The waterfront, then, takes on considerable importance in our understanding of its history and culture. The speed of activity along the waterfront has increased over the years as has the scale of construction. Historically, that scale was smaller and slower.

(historical image, that I have labeled 2.21 on page 13)

Recalling that sense of scale is one of the important parameters for the design of future open space.

Another important feature is the access to the waterfront. In that regard, the promenade along the Chao Phraya by Suan Sontichaiprakarn park is a design precedent. see figure 2.19 on page 13) in terms of the public access to the waterfront. This is the other key design parameter-public access

Public Plaza and Park

In the present there are space support the activity on Rattanakosin Island 5 parts and total area about 57.000 Sq.m

1. **Suan Suntichaiprakarn** **12,700 Sq.m.**
 In the present this garden can support many activities and user for example exercising, resting, dancing, special festival (Loy Kathon), etc.
2. **Larn Plubpramahachai** **4.350 Sq.m.**
 The plaza for open vies of Lowha Prasart and walk way of tourist But does not have the useful And the activity occur in this area. Because it use for formal activities.
3. **Suan wung Salanrom** **30.850 Sq.m.**
 There are many activities in this area i.e. exercise, relaxation.
4. **Multipurpose Plaze in front of the Bangkok office** **9800 Sq.m.**
 Big plaze for many activities and created the car park in underground. In the present are in construction.
5. **Sanam Luang**
 This garden is the big green plaza and the connection point of the important place. And support the important activity day (Father day, Mother day, Songkarn Day, etc), anniversary festival (Play kite) and many activities. This open space is more like a sports field than a park. It is a connecting point between important historical monuments in the area and it is also an important open space for annual festivals-Father's Day, Mother's Day, Songkran as well as for kite flying. All of these are important for local residents, Bangkok residents, Thai tourists as well as tourists from abroad.

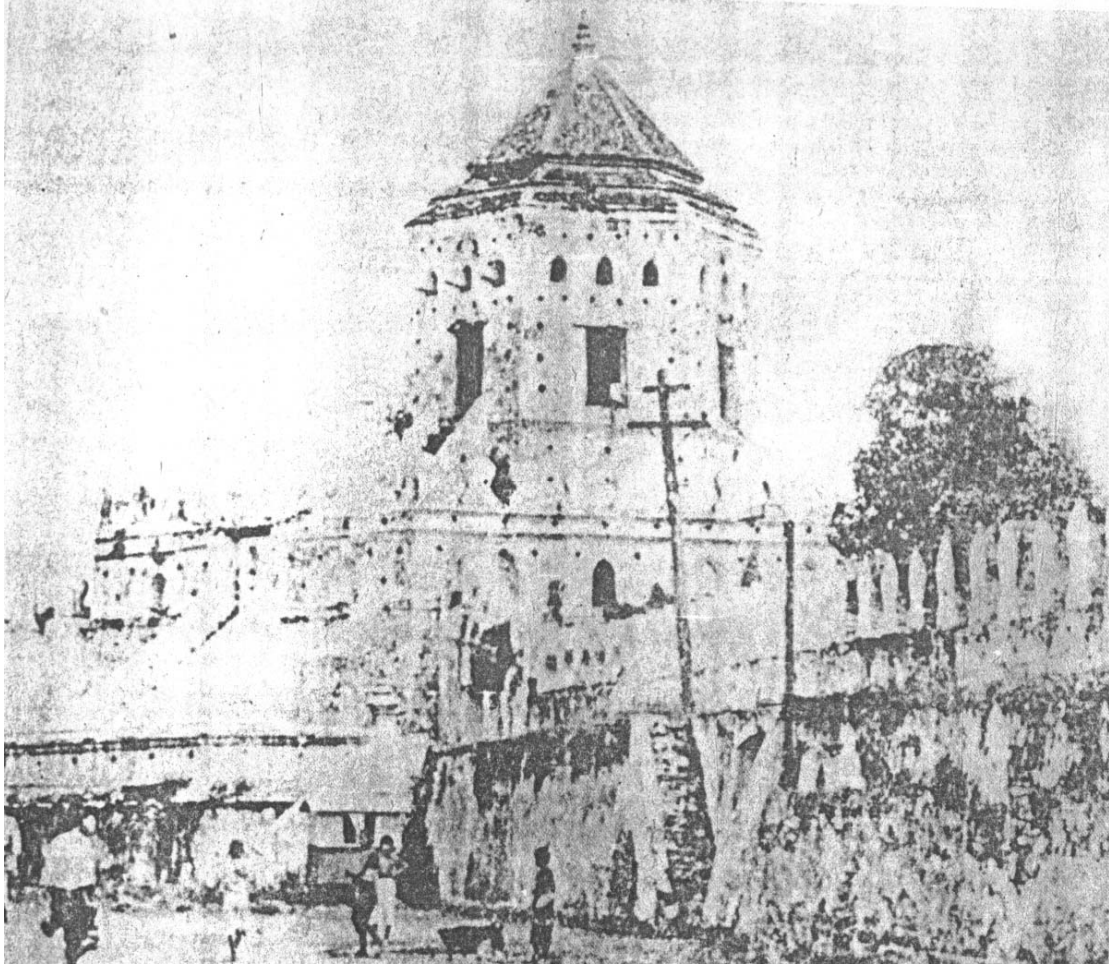


Figure. 10 Pra Su Meru Fort before renovate to Suan Santichaiprakarn

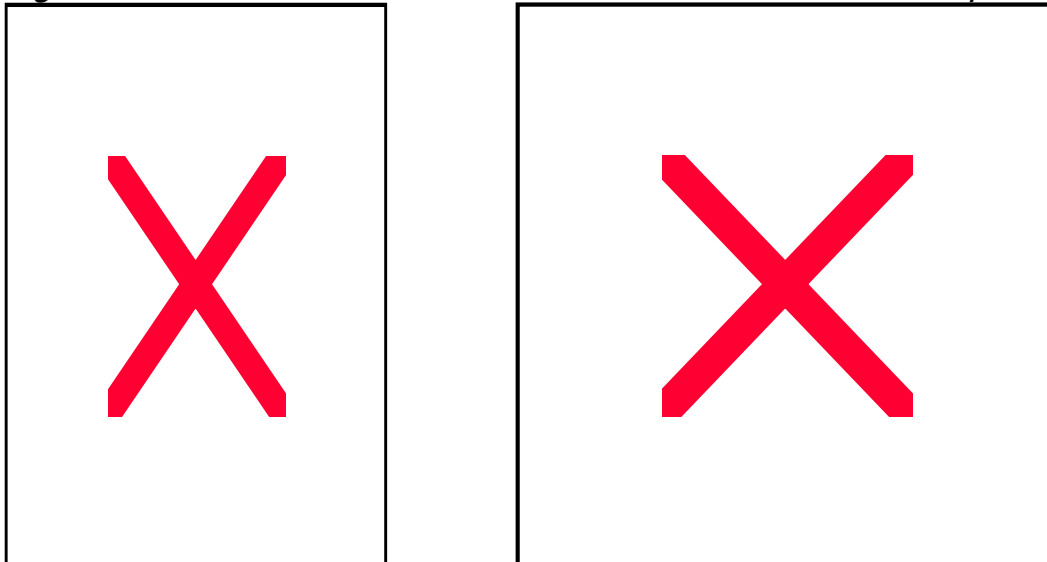


Figure. 11 Suan Santichaiprakarn

Suan Santichaiprakarn

Activities - exercising, resting, dancing and special festivals.

Users - local residents, Bangkok residents and tourists.

Context - close to Khao San road, supported by commercial activity

Activities
- relaxation, group aerobic exercise, taking in the view of activities along the Chao Phraya river

Design concept - open to the waterfront, connected to the promenade and features the historical battlement as a landmark

With the support of the commercial activity and its proximity to the busy Chao Phraya waterfront, this is a successful park. Comparisons have been made in news reports about the similarities in the design of this park and the proposed BMA park at Mahakarn Fort. Both have old battlements as feature landmarks and both are along the waterfront. There are, though, some significant differences. While Suan Suntichaiprakarn is close to the tourist center of Khao San Road, is open, accessible and highly visible, the Mahakarn Fort site is well hidden behind a wall, is not supported by commercial activity and its waterfront is far less active. Further, Mahakarn Fort is surrounded by temples and historical monuments and as such is identified more with Thai culture and architecture. This is supported, at present, by the relationship between the existing community and the buildings they use on a daily, weekly and yearly basis. Suan Suntichaiprakarn park does not have that.

Figure. 12 Lan Plubpramahachai

Lan Plubpramahachai

This park is located on Ratchadamnoern Road, north of Wat Ratchanudda. It was constructed some 15 years ago. when the old Sala Chaluemthai theatre was demolished by the BMA. Although the architectural community in Bangkok at the time protested the destruction of this historical building, the park was built in its place.

With predominately hard landscaping and little shade, the park is poorly used. In addition there is no real protection from the busy Ratchadamnoern Road and the two salas in the park are closed off from any access.

The park provides a view to Wat Sra ket as well as to Low ha pra sart in Wat Ratchanadda.

Users - mainly tourists passing by

Context - Wat Ratchanadda to the south and two busy roads at the north and east sides. No real commercial activity supports it.

Activities - viewing historical monuments from some distance. (are the salas ever used?? There is also the statue in the park of King Rama V

Design concept - hard landscaping, formal Thai tradition style buildings.

2.4 Pattern of movement

1. The relationship between each place

The site area of Mahakarn Fort surround by Wat Rajchanadda, Wat Theptidaram and Wat Sra ket (Golden Mountain) From the planning of Bangkok that wats to promote the tourism by walk though the Mahakarn fort for connect the temple and ancient building together. So the route along to Golden Mountain should have view point and some activity occur. The image of community life style and old housing can

attractive the tourists but they should have to improve and promote their activities more.

Access to Pommahakan Fort Community

The aim to come to this Mahakarn fort

1. to pass to Phan Fa Leelas pier
2. to pass to Golden Mountain (Wat Sra ket)

The entrances to community are

1. From the wall has 4 doors
2. From the little canal at South
3. From Phan Fa Leelas bridge
4. From boat to Phan Fa Leelas pier that is the gate to Rattanakosin from water transportation.

3.Elements

3.1 Mahakarn Fort Community (People)

Mahakarn fort community is an old community established in Rama 5. Its site after old wall and Mahakarn fort and adjacent to Ong Arng canal. They settled around 60 years ago.

Nowadays, there are 72 housing, 92 families and 280 peoples.

Age

Baby-14 years 47 persons

15-18 12 persons
19-30 59 persons
30-50 72 persons
Over 50 years 49 person

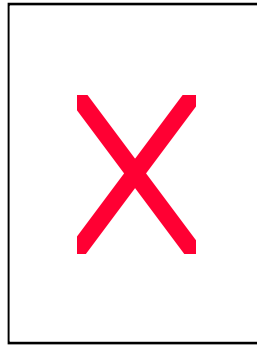
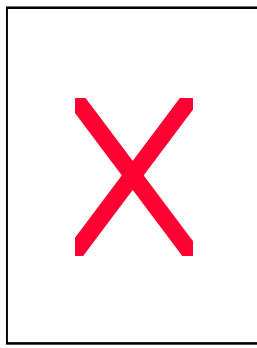
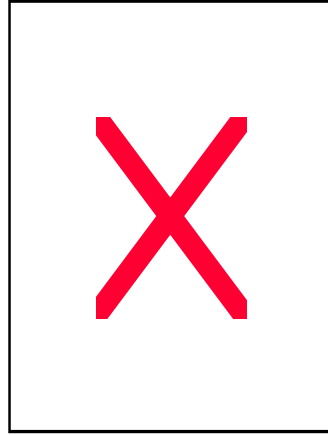
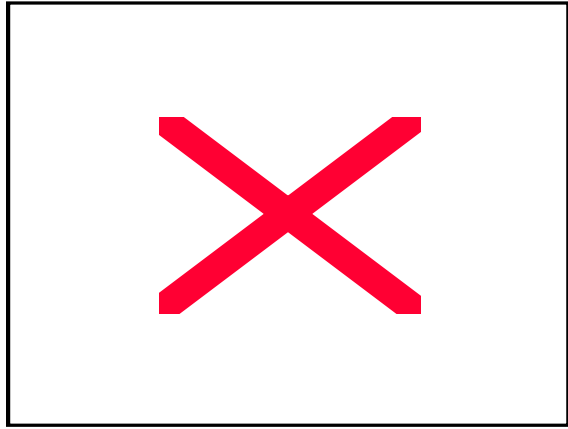


Figure. 13 Mahakarn fort community
3.2 Mahakarn Fort (Built Form)

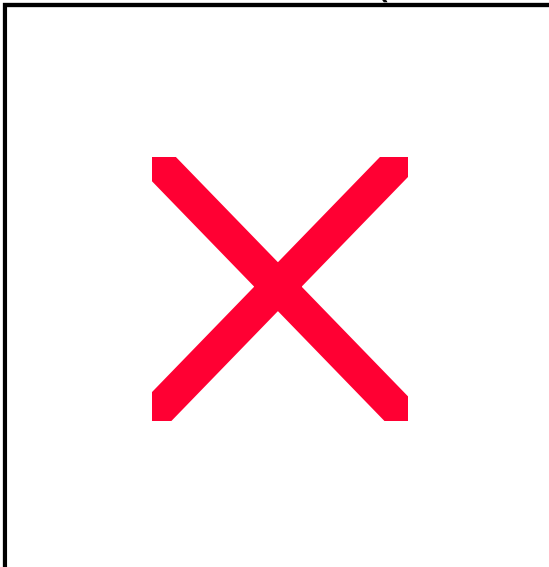


Figure. 14 Plan of Mahakarn Fort

SIZE

- + Area 800 sq.m.
- + Wall Length 126.00 m.
 Height 4.00 m.
- + Fort
 Octagon Wall Length 8.50 m.
 Height 8.00 m.
 Octagon Fort Length 6.00 m.
 Height 12.00 m.

STRUCTURE

- + Wall Bearing by Masonry
- + Timber Foundation

STATUS

- + Legal Protection by Fine Art Department
- + Land property by Bangkok Metropolitan Administration (BMA)
- + Renovated plan to be park behind walls

3.3 Open space (Nature)

The urban planning book “The death and life of the Great American City” by Jane Jacobs said about park.

Planners often see Park as a panacea for practically all urban problems not involving traffic engineers. She says. However. That some park work and others don't What accounts for that difference, she says, is attention to some basic factors.

- Diversity: “Superficial architectural variety may look like diversity, but only a genuine content of economic and social diversity, resulting in people with different schedule, has meaning to the park and the power to confer the boon of life upon It” (Jane jacob, 1961:101)
- Intricacy: cannot be taken in at the glance; changes of levels; the unseen
- Centering: a pausing point, climax
- Enclosure: building may do this, but a clear edge is important

Space of park and community

Public park.....7,705 m2 (80%)
Community.....2,027 m2 (20%)
The ratio of community : park is 1 : 4

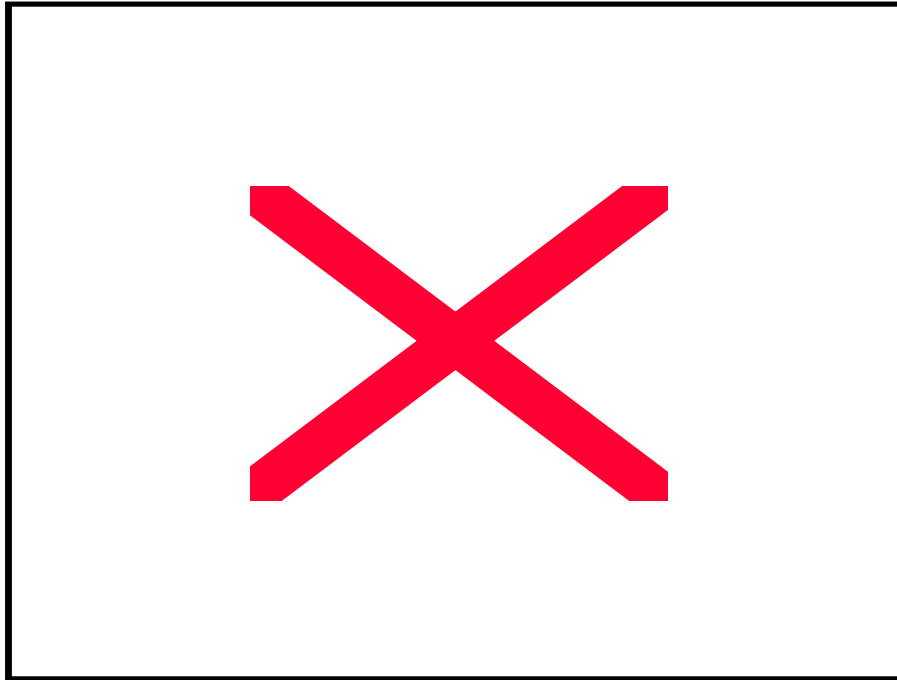
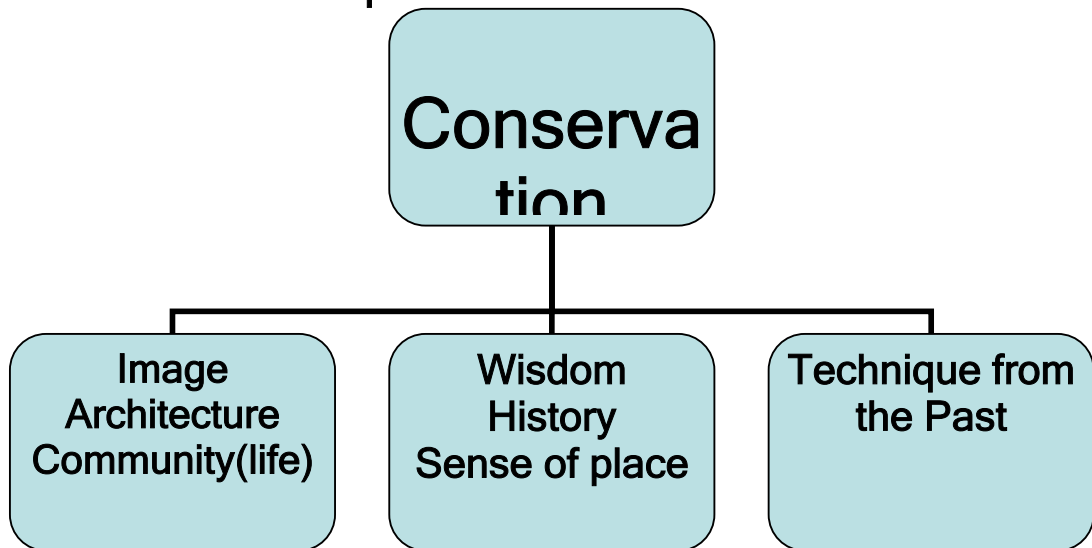


Figure. 15 Open Space for future park

4. Conceptual Conservation and Process

4.1 Conceptual Conservation

Which one are we keep in Conservation?



1. Preserve the history and culture
2. Develop the public spaces
3. Keep the lifestyle of the community
4. Support the image of the community
5. The character of place(sense of place)
6. development must benefit the local residents
7. improve the public access to the water
8. improve the tourist potential of the area

Preservation

- Mahakarm fort and wall
- Historical building adjacent Klong ong Arng that used to be Royal building for water transportation
- Waterfront and trees
- Activities, ceremony, cultural and life style
- Some of old houses

Improvement

- Physical
 - Life Housing Museum
 - Fort and Walls
 - Design of park and community

From the analysis path, Mahakarn community has ability enough to be the historical tourist place. User of park is two group. One is tourist and one is people who use to pass to pier.

- Restore historical building at pier

It is the building that has meaning of water transportation from the past. It used to be Royal building to change vehicle to boat. So it should design to be the gate to Rattanakosin island such as tourist information of water transportation and easy to see from the entrance near fort.

- Facilities
 - Port
 - Tourist Center
 - Cafe
 - W/C

– Lighting

Electricity columns, wire and spotlight on the building

There are many wire on the wall, its make the wall looked bad. So it should move to underground or any that is not destroy image of the wall.

Spotlight use in the night but it installs into the wall. It should move on to the column that separated from the wall.



Figure. 16 Lighting design now

4.2 Process

Mapping

There are many map collected from many source such as city map. Surrounding map and tourist map. The important one is community map that need to be improve before begin to design.

Data needs in community map are

- size of site
- trees location and root radius
- existing houses and preservation building
- open space in community
- drainage pattern

Static

Data that we need are number of families, peoples, age, and occupation radius and school radius All of static use to support design and make some argument.

It comes from

- Questionnaire
- Interview

Analysis and Synthesis

Before go to Co-design with community We prepare data and analyze by the topics below

1. conclude the physical problems in site
2. analysis the context, surrounding
3. analysis visual from inside to outside and from outside to community
4. analyze BMA plan and efficiency of community

All of information, prepare to be the guideline for do a preliminary design with community.

Co-Design

We tell to the head that we need to meet both children and adult as much as we can. Then we divide children to get information by ask them to draw and paint their dream home. After that we collected all painting and analyze their need.

Adult progress

1. Introduction and introduce ourselves. Then tell them what we can do and our goal.
2. Describe the method and progress
3. Ask villager about criteria, if they need to add form 9 topics.
4. Ask them about preservation occupation and space requirement. Some of them need to group with another because the drainage reason.
5. Special activities and ceremony in every year
6. Ask them about use of open space in community, there are meeting space in the middle of community and dry are near canal
7. What they need to add when design new community (show in topic 3.5)
8. Post the empty plans on the board and describes about tourist issue and some of planing knowledge to villager.
9. Begin to put function on plan. Meeting area first and then parking. After that use preservation shop to be a

buffer between park and community. The preservation occupations that they choose are sculpture, Thai dessert and birdcage.

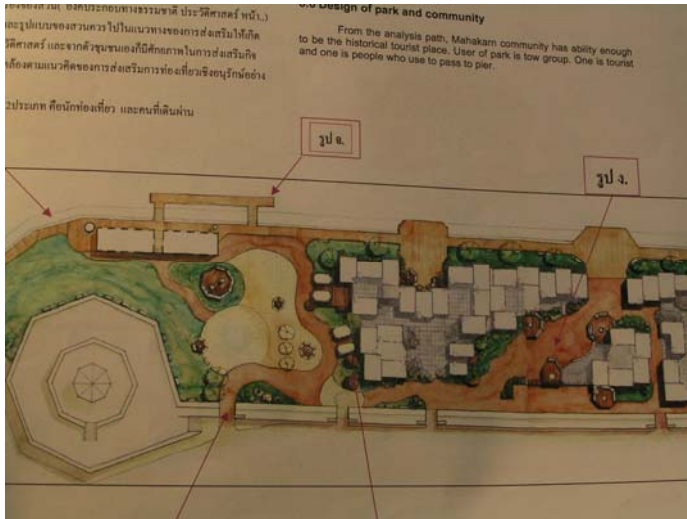


Figure. 17 Design of park and community

5. Implications

There are a number of issues I see here:

- Conflicting views of history (is it artifacts alone or people) - the fact that this conflict between the city administration and the community arose is, in part, a testament to the conflicting views of what we mean by history. For the city administration it would appear to be more focused on buildings or physical infrastructure. For the community it is more focused on the life of the people in the city and its continuity. The building are, in that case. A backdrop or stage set for the living history. As mentioned earlier, it is this sense of history that makes Venice so vibrant. Our approach to the design favors the people over the buildings.
- Conflicting views of the process of development (how decisions are made and who makes them) - one of the reasons this conflict came about stems from development methodology. Similar problems occurred in most Western cities in the late 50s and early 60s with top-down planning. The rise of advocacy planning and

community planning has begun to reduce those conflicts in a longer but more sensitive process of development.

- Conflicting views about the beneficiaries of development (are we doing this simply for tourism?) - one of the difficulties faced by any park proposal in this site is that it is obscured by the wall. How does anyone find it? Jacobs, in her study of parks, pointed out the importance of diversity. There must be more happening than just the open space itself. Certainly the pier is one element, but what we suggest is that the commercial activity (the selling of crafts in this case) improves the use of the park. Because this other activity brings in people, there is a far greater opportunity of the park's success.
- The more basic conflict between green and brown issues - parks or housing? Must it be that kind of choice? -We believe that this conflict is critical. It must be resolved. That is to say, it is not an either/or choice. It must be a both/and choice. More and more we see the untenability of choosing one over the other. This project can provide a vehicle for rethinking how we can resolve this conflict.
- How we understand the concept of sustainability - the resolution of these green/brown conflicts is one of the central issues of sustainability. However, it is not the only one. There is an opportunity here to see the relationship between preservation, economic development, tourism and sustainability.
- How we understand human rights and the right to the city - we believe that the poor have an equal right to access to the services and economic benefits of urban life. How can these rights be honored? This community has offered some useful answers to that question.
- The opportunity to provide an example for appropriate development - all of the above issues, if considered meaningfully, can lead us to a far more appropriate approach to development. In training future planners2developers2designers this can be an important pedagogical tool as well.

There are many issues that this report mentions about. The interesting point that we can conclude that are as following.

1. Mahakarn Community is the historical community. It's a part of Rattanakosin life. Beside that this community also have a potential to support the tourism.
2. The important thing that can create more interesting visual to the golden mountain is the variation of view from community and another open space to the Golden mountain
3. the wall and battlement are very important to the historical element that can tell many stories from the history to the present which we should to keep as it always be.

Law and Regulation

**According to the City planning law and regulation
Clause. 414 (2000)**

About setback from riverside and canal

The area along the canal

Must setback from the canal not less than 6 m.

BMA code 2544

Clause 47 row of house that not attach to the public must have a sharing space between each row not less than 6 m.

Types of building and river intruded structure that can be acceptable (Harbour authority)

1. Port
2. Pier
3. Bridge
4. Pipe or cable
5. Embankment
6. Boat beam
7. Water supply station

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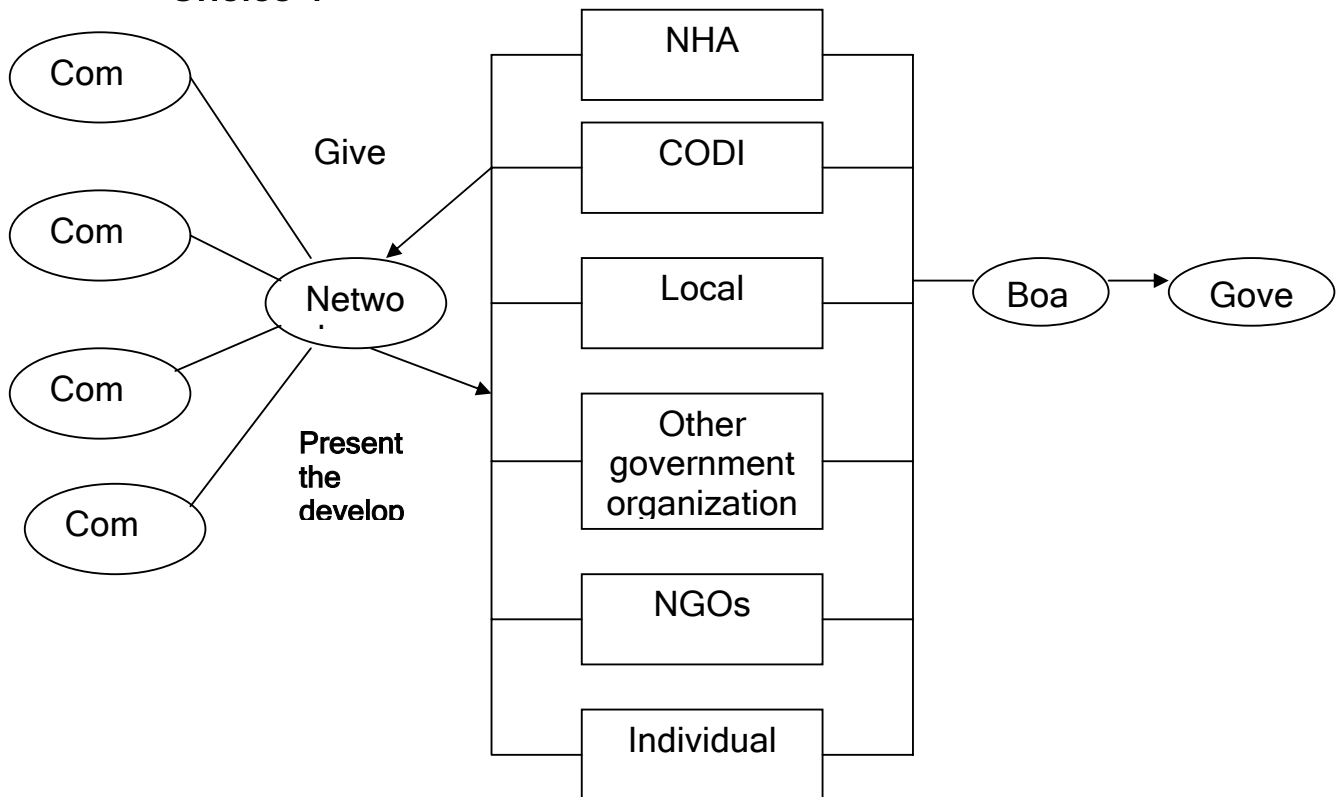
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Index

The way to present the project
(5% to the office)

How to finding fund?
Choice 1



How to finding fund?

Choice 2

