

Estuaries Biome Eco Resort, Parki Chittagong

Eco - Retreat Center

Submitted by

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DISSERTATION OF

Estuaries Biome Eco Resort, Parki Chittagong

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Seminar II

Course: ARC512

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Abstract

Resort has been considered as an important element of tourism industry. Due to different tropical conditions and travelers need a living space there, Bangladesh government has plan to develop the beach of Gahira, Anwara named Parki beach in Chittagong as tourism spot. This paper is an attempt to understand the context of the area and arrange the tourism facilities. The environment, surroundings and site responsive settlement will be the main concern of this project. To make a balance harmony with the environment, the landscape is the focus when the design will be done. In this project, it will be tried to understand the programs and the need context. Data collection will be through site visit and by interviewing travelers and visitors.

1.0 Project Introduction

1.1 Project Background

1.2 Project Brief

1.3 Attractions

1.4 Objectives of the Project

1.1 Project Background

Bangladesh is a beautiful country and it has lots of natural site, among them beach is the most attractive tourist spot for both the local and foreign tourist. Bangladesh has the longest beach in the world; Parki is the smallest and charming part of it. The distance between Chittagong metropolitan cities to the beach is about 28 km- 30 km. The most amazing thing is, one can get both view of Karnafuli River and Bay of Bengal together from the Parki beach, and it is the meeting point of river and sea.

Parki beach is situated at Gahira, Anwara Thana within the Southern region of Chittagong. It's almost 8 km far from Anwara Thana. Parki beach is about 15 km long and 300 feet to 350 feet wide with almost 20 km Tamarisk forest. Beside the site there is Korean EPZ Karnafuli Shar Karkhana (KEPZ) and Chittagong Urea Shar Karkhana (CUFL).

The main target for this project is local and foreign tourist group. And the other consideration is the local people. It will be an economic source for them. According to Chittagong Zelar Potenga Shomudro Shoikot Alakai Porjoton Kendro Nirman Lokkhe Gothito Shomitir Sorejomin Prodorshon Protibedon, in winter season every weekdays around 1000-1200 people visit Potenga and Parki beach and in vacations and special days there are almost 10000 to 12000 tourist come (Para 04). This resort will serve them for staying and also for celebrating the occasion.

1.2 Project Brief

Project Name: Creation of Tourism Facilities at Parki, Chittagong

Project Site: Parki, Gahira, Anwara, Southern Chittagong region

Site Area: 13.5 Acre

Client: Bangladesh Parjatan Corporation

1.3 Attractions

- **Sea beach:** The main attraction of the site is 15km of Sandy sea beach 15km with 30-350 feet width
- **Jhaw forest:** This jhaw forest was built by the government to protect the seashore
- **View of sunset in sea:** It is the most charming scenario from the site is having both the view of Karnafuli River and Bay of Bengal in the time of sunset. The orange sky makes everyone as philosopher that time.
- **Street Sea food:** Another facility is getting mouthwatering hot street sea food.
- **Picnic spot:** People of that area come to the beach for picnic and make the time memorable.
- **Potenga beach:** Potenga beach is situated just opposite of Parki beach. Who will stay in the resort they can easily visit Potenga beach too.
- **Speed board ride:** Speed board, engine boats are available there for the ride. Anyone can rent a boat and can have a ride to the sea.

- **Barmiz market:** There is a small Barmiz market beside the beach though it is an informal settlement. There is also a market which is under construction.

1.4 Objectives of the Project

According to Bangladesh Parjatan Corporation the main objectives of this project are to create tourism facilities such as accommodation, catering, conference hall, bar, car parking etc to attract local and foreign tourists,

- To create direct and indirect positive impact on other adjacent potential tourism attractions and increase number of domestic and overseas visitors
- To create employment opportunity and income generating activities for local people
- To involve local community in tourism development and reap benefit
- To create formal and informal jobs for local women
- To conserve natural beauty and environment settings
- To improve living standard of local people (p.01).

2.0 Literature Review

2.1 Tourism

2.2 Aim of Tourism in Bangladesh

2.3 Definition of Retreat

2.4 Definition of Resort

2.5 Elements of the Resort

2.6 History of Resort

2.7 Types of Resorts

2.8 Difference between Hotel and Resort

Literature Review

2.1 Tourism

Tourism is considered as one of the world's most rapid developing industry. It influences the economical condition of a country. International Association of Science Experts in Tourism (AIEST) defines, "Tourism is the sum of the phenomena and relationships arising from the travel and stay of non-residents in so far as they do not lead to permanent residence and are not connected with any earning activity (p.34)."

2.2 Aim of Tourism in Bangladesh

Bangladesh tourism is also adding extra value to the country economy. The Bangladesh Tourism Board is taking initiative to enrich the tourism spots all over the country. One of their recent plans is to improve the condition and develop the Parki beach as tourism spot. According to Bangladesh Parjatan Corporation in Chittagong Zelar Potenga Shomudro Shoikot Alakai Porjoton Kendro Nirman Lakkhe Gothito Shomitir Sorejomin Prodorshon Protibedon, the main objectives of this project are to create tourism facilities such as,

- To create employment opportunity and income generating activities for local people
- To involve local community in tourism development and reap benefit
- To create formal and informal jobs for local women
- To conserve natural beauty and environment settings

- To improve living standard of local people
- To develop, preserve and maintain the tourism resources of the country
- To open-up a recognize field of investment for capital
- To create an image of Bangladesh to the world
- To create recreational facilities for both foreign and local tourist

2.3 Definition of Retreat

Retreat stands for escape, withdraw and make a break. In recent days retreat is used for recreational breaks or for relaxation from the regular mechanical life. Now-a-days people take a break from their monotonous life and visit to different resort for relaxation.

2.4 Definition of Resort

Resort is place where people generally go for recreation, relaxation or pleasure. It provides rest and recreational facilities, vacationer's wants - lodging, entertainments, sports, restaurants, shopping etc.

Mill gave the definition of resort, in his book, "*Resorts: Management and Operation*", in there, he said, and resort has expanded to include any facility that provides recreation and entertainment in combination with lodging and meal (p.478).

2.5 Elements of the Resort

Basically resort has two facilities.

- **Housing, food and beverage service:** lodging facilities with food service is the main one
- **Recreational facilities:** with lodging system it also have recreational facilities for retreat service

2.6 History of Resort

Osterer (2005), define the history of resort in three phase, these are

Roman Empire: Bath

The origin of resort traced at the second century B.C. to the public baths of Rome. At first baths were small and separated by genders. Gradually this baths became larger and it permitted for both gender. At the mean time it started to take fees for entry.

Then it includes lodging and food. Eventually add other facilities like snacks, library, gym, lounge, shop, and all the facilities were used as health and social mottoes.

Europe: Mass Follows Class

Resort was first developed in Belgium in 1326 and now this is called Spa. The meaning of spa is fountain. Colin le Loup was an iron master, he was very sick and he cannot bath in the iron-rich water. For this reason he opened a shelter in Belgium. At first this place was introduced as resort but later this is known as Spa.

Spa and resorts were very much popular at the time of King Charles II, for this popularity he visited there in 1600s. English spa center include dancing and

gambling. Another good option of spa is they offer medical treatment. They also supply water which was rich in mineral. These are another cause of its popularity.

In 1800 Swiss resort industry was developed. The aim of this resort to give private facilities to the prosperous people. Now a day's people can visit a resort within a one day but it was not possible at that time. AT that time travel was not simple, people have to spend lots of money, and they stay there in a long period of time. Hotel Baur au Lac, built in Zurich, was first introduced to the viewers to see the scenic view. People went Switzers resorts at the time of summer, in her skiing and gambling both are very famous.

North America: Spas

Like Europe, North American hotels were created around spas in the late 1800s. The primary resort was built first in the east in Virginia, New York and West Virginia. Soon after, sea side resorts become famous. It was not until later that shoreline resorts were implicit the south and mountain-based resorts were created out west. The main luxury resort was implicit 1829 in Boston. It was known as the Tremont House and highlighted bellboys. Gideon Putman built the first big hotel in Saratoga Springs, New York. It was around hot sulfur spa.

2.7 Types of Resorts

According to the *World of Resorts: from Development to Management* Resorts could be different type on basis of

- By seasonality: summer resort, winter resort, year round resort. In Bangladesh year-round resorts are suitable because of the climate of the country.
- By designation: spa resort, theme park resort, beach resort, boot camp resort, fishing resort etc.
- By size: depending on the room a resort could be different
- By Location: urban resort, beach resort, lake resort, riverside resort, island resort, desert resort, mountain resort, rainforest resort, etc.

There are also different types of resort like, floating resort, mix used resort, theme resorts too (p.372).

2.8 Difference between Hotel and Resort

Khoshal (2015) mentioned in his paper that hotel and resort both serves as temporary basis lodging and meal system but both are different in fundamentals.

Hotel is a place which offers lodging and meal. Location of hotels is in busy sites, close to stations, airports, commercial centers. Hotel is meant for short stay but it could be long depending on purpose (Para 6-9)

Resort is a place which provides recreation, relaxation opportunities along with lodging and meals. Resorts are located in or near the nature. There could be some attractions like beach, cave, and mountains. Hotel is a part of resort with entertainment (swimming, fishing, Para sailing), sports, boating, and relaxation (spa, sauna) facilities (para4-5, 8-10)

3.0 Site Appraisal

3.1 Site location

3.2 Site

3.3 Site Area

3.4 Transportation from Site

3.5 Site Surroundings

3.6 Site Features

3.7 Site Zoning

3.8 Swat Analysis

3.8.a Strength

3.8.b Weakness

3.8.c Opportunity

3.8.d Threat

3.9 Photographs of Site:

3.10 Site Surroundings

3.0 Site Appraisal

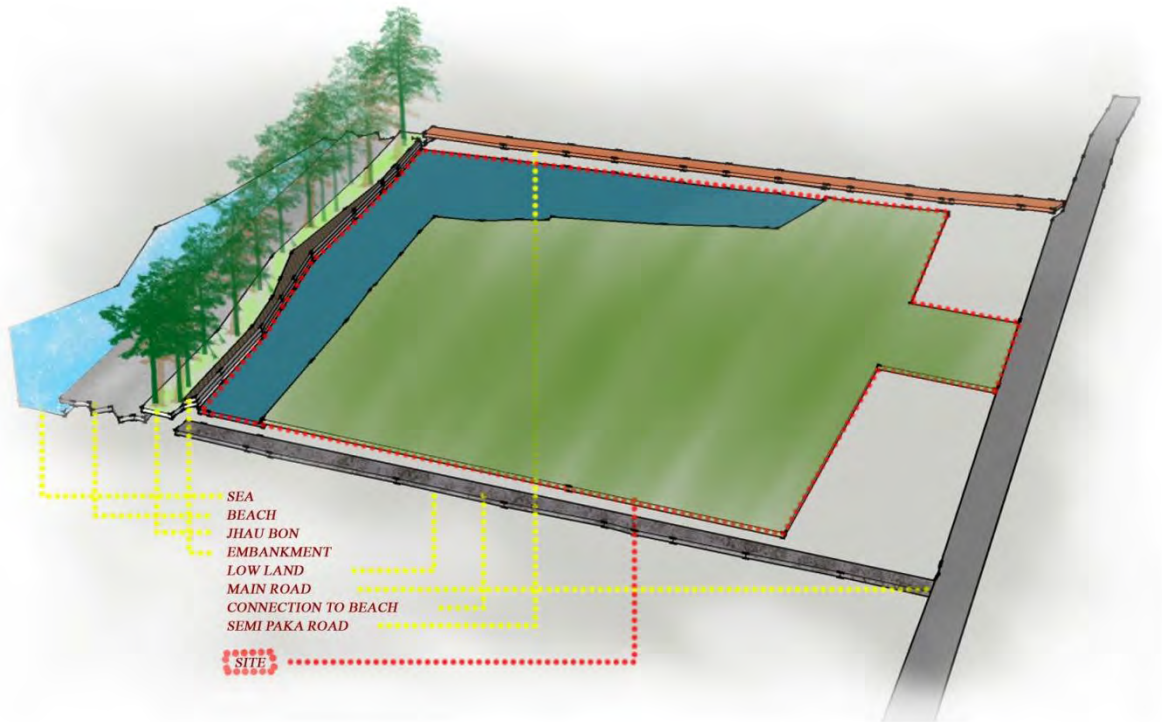
3.1 Site location

Parki beach is situated at Gahira, Anwara Thana within the Southern region of Chittagong. It's almost 8 km far from Anwara Thana.



Source: Google Earth

3.2 Site

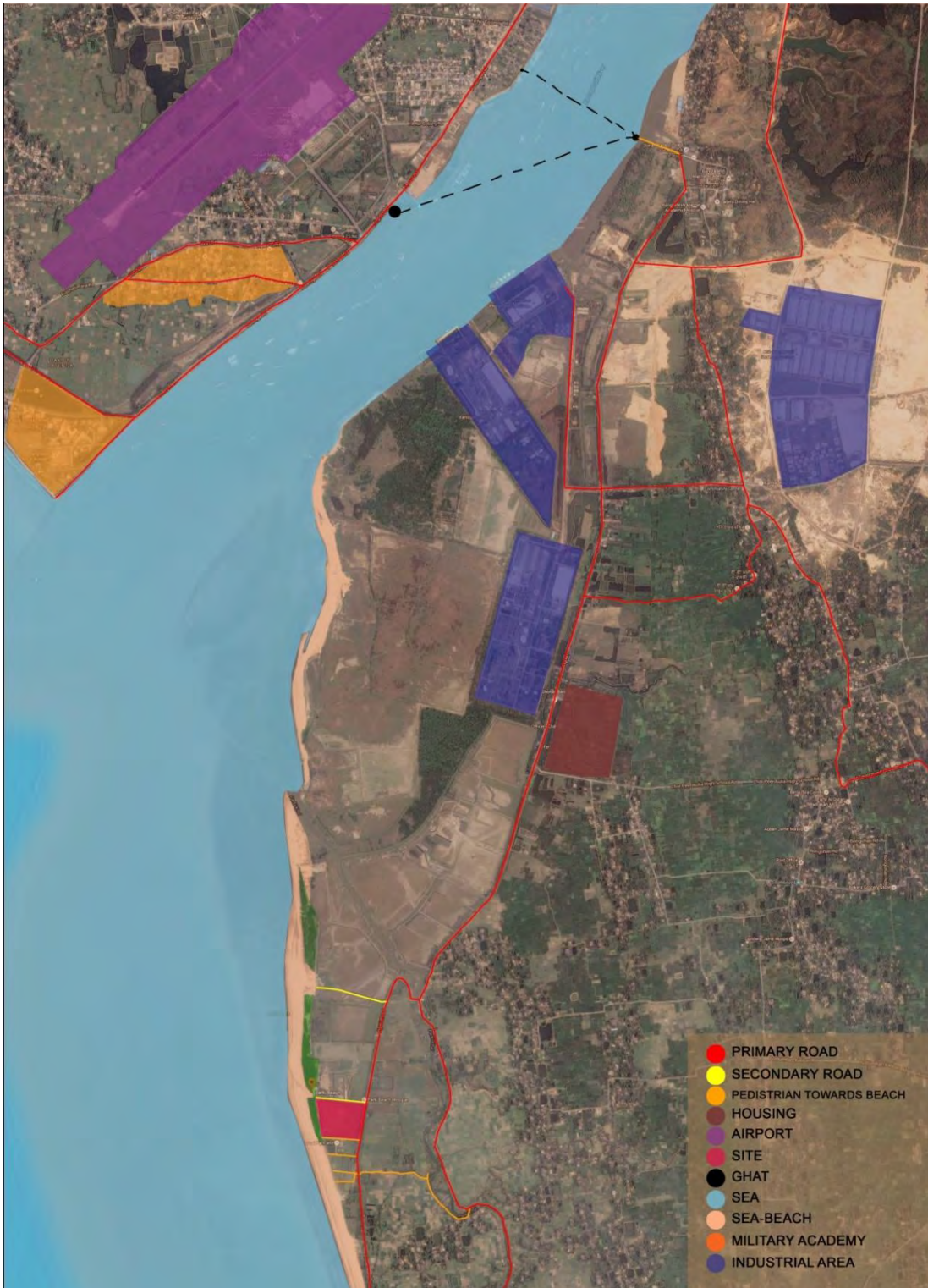


3.3 Site Area: 13.5 Acre

3.4 Transportation from Site

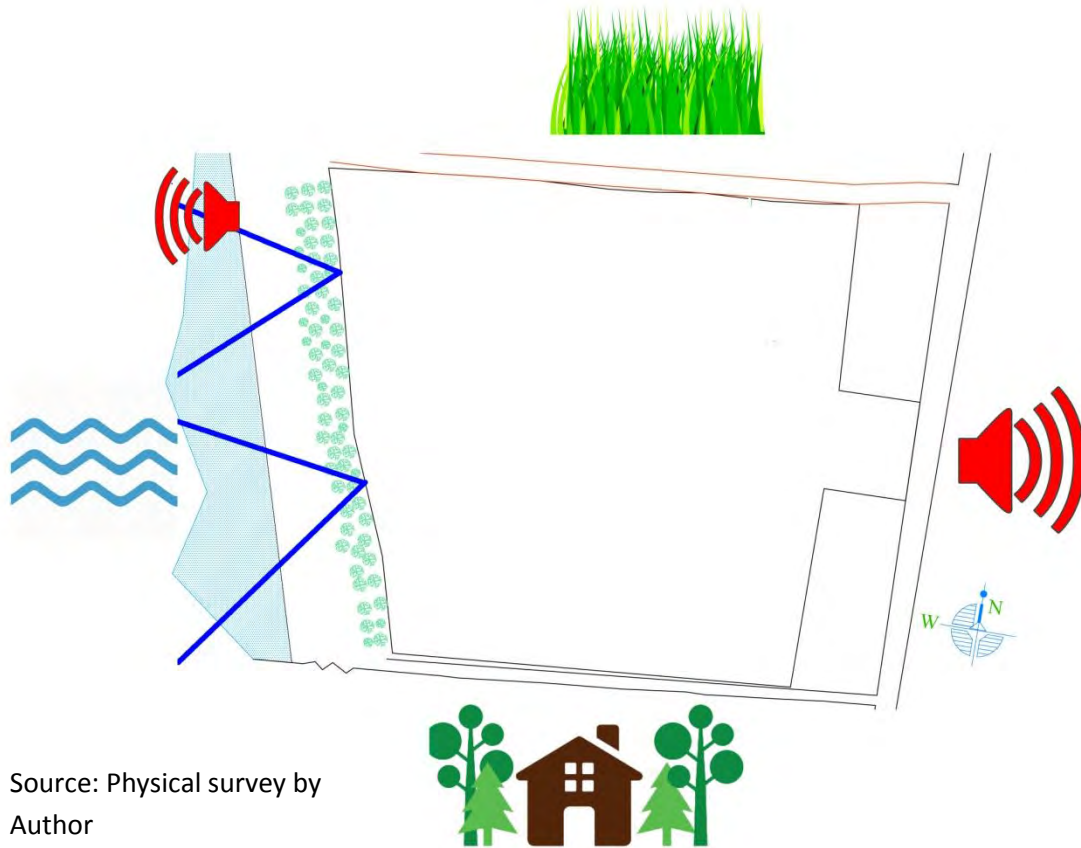
Anwara Thana is connected by road with Chittagong Cox's bazaar highway. One can come by bus directly. Shah Amanat (R) international Airport is situated in the east for this reason it is easy to come here the Parki beach by air and then take a taxi.

3.5 Site Surroundings



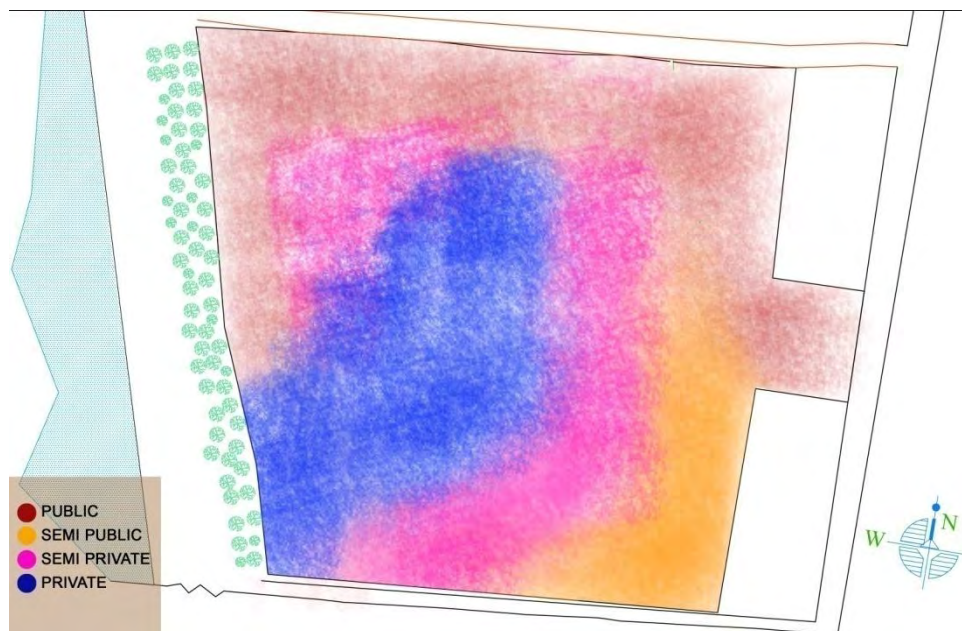
Source: Google Earth

3.6 Site Features



Source: Physical survey by Author

3.7 Site Zoning



3.8 Swat Analysis

3.8. a Strength

- site has sea and Jhaw forest at west which will provide for pleasant views
- Site is directly connected with the primary, secondary and tertiary road
- An international airport is connected with the site by a river which can be easily crossed
- Site is surrounded by open fields by other sides

3.8. b Weakness

- Primary road and secondary road will act as a source of noise
- sea is at west the over-wind flow will be an issue

3.8. c Opportunity

- there is a great scope for creating this beach as tourism hub and it will develop the economic condition.
- it will create employment opportunity for local people
- the site has the potential to develop into a beautiful, eco retreat.

3.8. d Threat

- Over-wind flow could be the main threat.
- Sea-pollution could be increase

3.9 Photographs of Site



3.10 Site Surroundings



4.0 case study

4.1 Local

4.1.i Mermaid Eco Resort

4.1.i.1. Location

4.1.i.2 Programs

4.1.i.2.a Accommodation

4.1.i.2.b Beach Activities

4.1.i.2.c Others

4.1.i.3 Site zoning

4.1.i.4 Material

4.2 International

4.2.i Jean – Michel Cousteau Fiji Island Resort

4.2.i.1 Location

4.2.i.2 Area

4.2.i.3 Functions

4.2.i.4 Attractions

4.2.i.5 Philosophy

4.2.i.6 Material

4.2.i.7 Functional Zoning

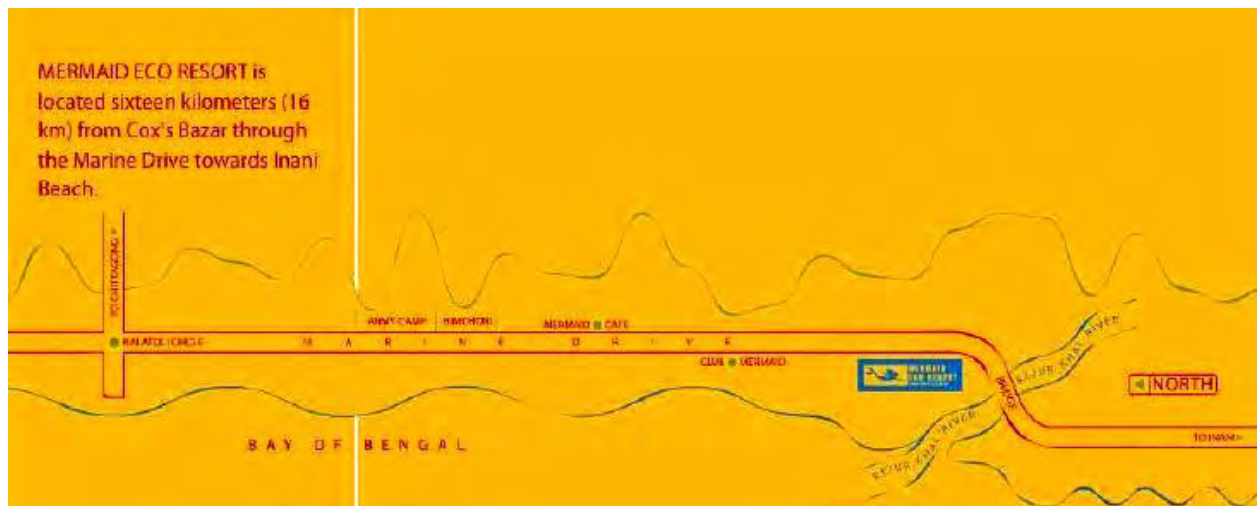
4.0 case study

4.1 Local

4.1. i Mermaid Eco Resort

4.1. i.1. Location

Mermaid Eco Resort is situated in Cox's Bazaar, this resort has wooden bungalows along with herbal spa, restaurant, craft, library, water riders, kid zone, fishing and surfing facilities. Their motto is GREEN LIVING.



Source: <http://www.mermaidbeachresort.net/accommodation/>

4.1. i.2 Programs

4.1. i.2.a Accommodation

Mermaid eco resort has thirty recycled wooden bungalows in different five categories:

Villas

Blue Dreams

Water Bungalows

Tropical Garden

Lagoon Front

4.1. i.2.b Beach Activities

Paragliding

Banana ride

Fishing and surfing arrangement

Speed board riding

4.1. i.2.c Others

Spa

Massage therapy

Restaurant both open and shaded

Yoga Deck

4.1. i.3 Site zoning



Source: Google Earth

4.1.i.4 Material

most of the material used in this resort are recycled wood and eco friendly materials like straw, wood, bamboo, wood plank, bamboo matt, coconut tree, earth.



Source: author

4.2 International

4.2. i Jean – Michel Cousteau Fiji Island Resort

4.2. i.1 Location: Lesiceva Point, Savusavu Bay, Vanua Levu Island, Fiji

4.2. i.2 Area: 17 acres

4.2. i.3 Functions

- Accommodation – 20 rooms and 5 bungalows
- Administration block
- 2 dining hall
- Club house
- Dive shop
- Three pools
- Tennis courts

4.2. i.4 Attractions

- Sea
- Diving site
- Rainforest
- Rural area

4.2. i.5 Philosophy

In *Eco-Resorts Planning And Design For The Tropics*, Bromberek describe the philosophy. The main philosophy was to change a minimal and to make better use of existing facilities. Like a traditional Fijian village JMC resort has the recycling, reuse process. The landscape was done in the thought of coastal impacts. Normal ecosystem of insects and animals helps to grow tree and herbs by themselves (p.146, para 03).

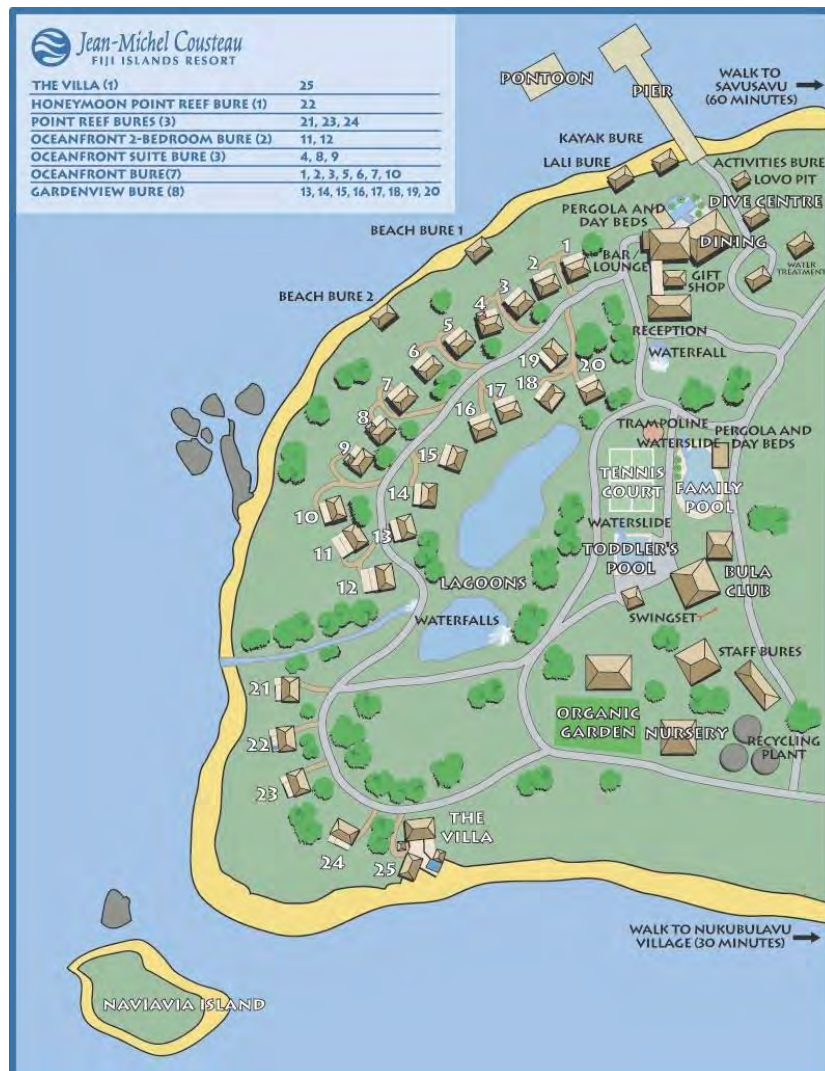
4.2. i.6 Material

Main material is local timber, palm leaf thatch, ceramic tiles, local-stone and concrete. Using local and natural material minimize the wastage of the material and construction waste.



Source: <http://www.fijiresort.com/>

4.2. i.7 Functional Zoning



Source JMC Fiji Island Resort

5.0 Program Development

5.1 Basis of Program Generation

5.2 Given Programs and Functions

5.3 Basic Programs

5.3.a Lobby

5.3.b Administration

5.3.c Accommodation

5.3.d Recreational Amenities

5.3.e Health Club

5.3.f Dinning

5.3.g Multipurpose

5.3.h Others

5.3.i Parking

5.4 List of Functions

5.5 Program Relation

5.6 Connection of the Functions

5.7 Connection of all Amenities

5.0 Program Development

5.1 Basis of Program Generation

The basic understanding of the programs requirements of the resort project is generated from the case studies and slandered requirements. This retreat complex will serve the local and international tourist (client's requirement). In this project there are mainly four types of function.

- Accommodation
- Dinning
- Recreational amenities
- Administration

5.2 Given Programs and Functions

- Cottage/Beach Villa- 30nos
- Food & Beverage outlets-
- Bar outlet/ Drinks corner
- Swimming pool with changing closet
- Health club
- Spa/sauna
- Parking slots
- Open civic space (for using to organize various live events like music, dance show, food festivals, handicraft festival etc)
- Water body

5.3 Basic Programs

5.3. a Lobby

Reception....150sqft

Lobby...100sqft

Lounge...300sqft for 10 people

Toilet....160 sqft for 10 w/c and 4 urinals

Circulation: 30%

5.3. b Administration

Director's office.....80sqft

Manager's office..... 64 sqft x 2 there will be two manager's office in administration block. One will be resort manager and second person will be the food manager. It is the requirement of the client

Account's room.....100sqft room for 6 to 8 person. Every person will get 10sqft to 12.5 sqft each with one 3ft x 2ft table and 2chair.

Toilet64sqft x 2 each have two w/c

Staff room.....60sqft room as a sitting room for staffs.

Conference room.....780sqft x 2 =1560sqft. According to the *Time saver Standards for Building Types* for 35person chair setting requires 780sqft (p.273)

Waiting room.....300sqft for 10 people

Toilet160 sqft for 10 w/c and 4 urinal

Circulation: 30%

5.3. c Accommodation

Room allotment is done by the client.

Cottages.....720 sqft x 10=7200sqft each cottage have 440(2rooms) +
50(master bed toilet) +40 (toilet) + 60(study) +60(common space) +10(pantry)
+60(terrace)

Queen size suit.....620sqft x 12=7440 each suit have 440sqft (2 rooms) +40(toilet)
+40(toilet) +60(common space) +10(pantry) +30(terrace)

King size suit.....610sqft x 12=7320 each suit have 440sqft (2 rooms) +40(toilet)
+40(toilet) +60(common space) + 30(terrace)

Double bed.....295 sqft x 7=1770sqft bedroom with double bed with
attached toilet and balcony

Single bed.....265sqft x 5=1325sqft bedroom with single bed with attached toilet

Director's room.....610sqft this suit have 440sqft (2 rooms) +40(toilet)
+40(toilet) +60(common space) + 30(terrace)

Manager's room.....265sqft x 2 =530sqft

Staff room..... 205 x 4= 820sqft each room accommodate 6person

Housekeeping and general storage 15sqft x 50=750 sqft

Circulation: 30%

5.3. d Recreational Amenities

Swimming pool...4000 sqft

Park

5.3. e Health Club

Jacuzzi.....80sqft

Yoga center.....2078sqft (therapy center 350sqft+washroom128 sqft+1600sqft
for practice)

Gym 1600sqft70sqft per person

Spa.....300sqft for 10 people

Sauna.....679.68sqft(96.8 for 4 to 5 person's seating area+172sqft for 10person
cooling room+172sqft changing room for 10 person+96sqft washing +a42.08 rest
room for 6person)

Circulation: 30%

5.3. f Dinning

Hall.....20.25sqft x 100=2025

Kitchen 19.365sqft x 100= 1936.512

Store.....100sqft

Staff waiting room.....60sqft room as a sitting room for staffs

Staff locker room..... 120sqft for 2 row locker

Wash area...50sqft for 5 basin

Toilet160 sqft for 10 w/c and 4 urinals

Cafeteria.....1000 sqft for 50 people

Bar.... 600sqft

Bar store... 350

Coffee stalls400 sqft for 25 people

Circulation: 30%

5.3. g Multipurpose

Banquet hall....3000sqft x2=6000sqft each hall has 150person capacity

Seminar room....350 sqft x 2=700sqft each room has 15person capacity

Open amphitheater5000sqft for 2000people

Circulation: 30%

5.3. h Others

Laundry400 sqft

Prayer room 520sqft for 25 people

Washroom ... 75 sqft

Ablution space... 90 sqft

Luggage room 150 sqft

Mechanical room....250(2rooms)

Security room..... 80sqft for 4 people

Guard room.. 15sqft

Nurse room...120sqft

Shops...1200sqft (mini market)

Circulation: 30%

5.3.i Parking

For guest room 16 parking slot will need(1:3).... 2048 sqft

For banquet hall mini bus.....80(2)sqft

For banquet hall car.....2560 sqft

Service.....50sqft

Staff car.....896(5)sqft

5.4 List of Functions

Functional Activity		Quantity	Area (sq-ft)
Accommodation			
Queen size suit	620	12	7440
King size suit	610	12	7320
Double bed	295	7	1770
Single bed	265	5	1325
Cottage	720	10	7200

Director's room	610		610
Manager's room	265	2	530
Staff room	205	4	820
Housekeeping and general storage	15	50	750
			27765
Circulation	30%		8329.5
Administration			
Directors room	80	1	80
Manager's room	64	2	128
Account office	100		100
Toilet	64		64
Staff room	60		60
Conference room	780	2	1560
Waiting room	300		300
Toilet	160		160

			2452
Circulation	30%		735.6
Front Desk			
Lobby	100		100
Reception	150		150
Lounge	300		300
Toilet	160		160
			710
Circulation	30%		213
Health Club			
Jaciji	80		80
Yoga center	2078		2078
Gym	1600		1600
Spa	300		300

Sauna	679.68		679.68
			4737.68
Circulation	30%		1421.304
Recreational Amenities			
Swimming pool			4000
Park			
Circulation	30%		1200
Dinning			
Hall			2025
Kitchen			1936.512
Store			100
Staff waiting room			60

Staff locker room			120
Wash area			50
Bar			600
Bar store			350
Coffee shop			400
Cafeteria			1000
toilet			160
			6801.512
Circulation	30%		2040.4536
Multipurpose			
Banquet hall	3000	2	6000
Seminar room	350	2	700
Open amphitheater			5000
			11700
Circulation	30%		3510
Others			

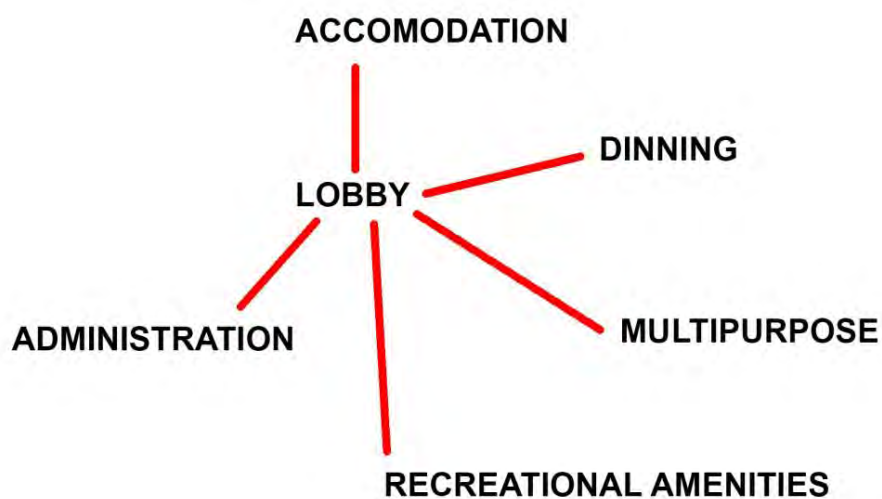
Laundry			400
Prayer room			520
Wash room			75
Ablution space			90
Luggage room			150
Mechanical room			250
Security room			80
Guard room			15
Nurse room			120
Shop			1200
			1820
Circulation	30%		546
Parking			
For Guest room		16	2048
For banquet hall minibus		2	80
For banquet hall car		20	2560
Service		3	50

Staff car		5	896
			5634
Circulation			16902
Total			100517.3696

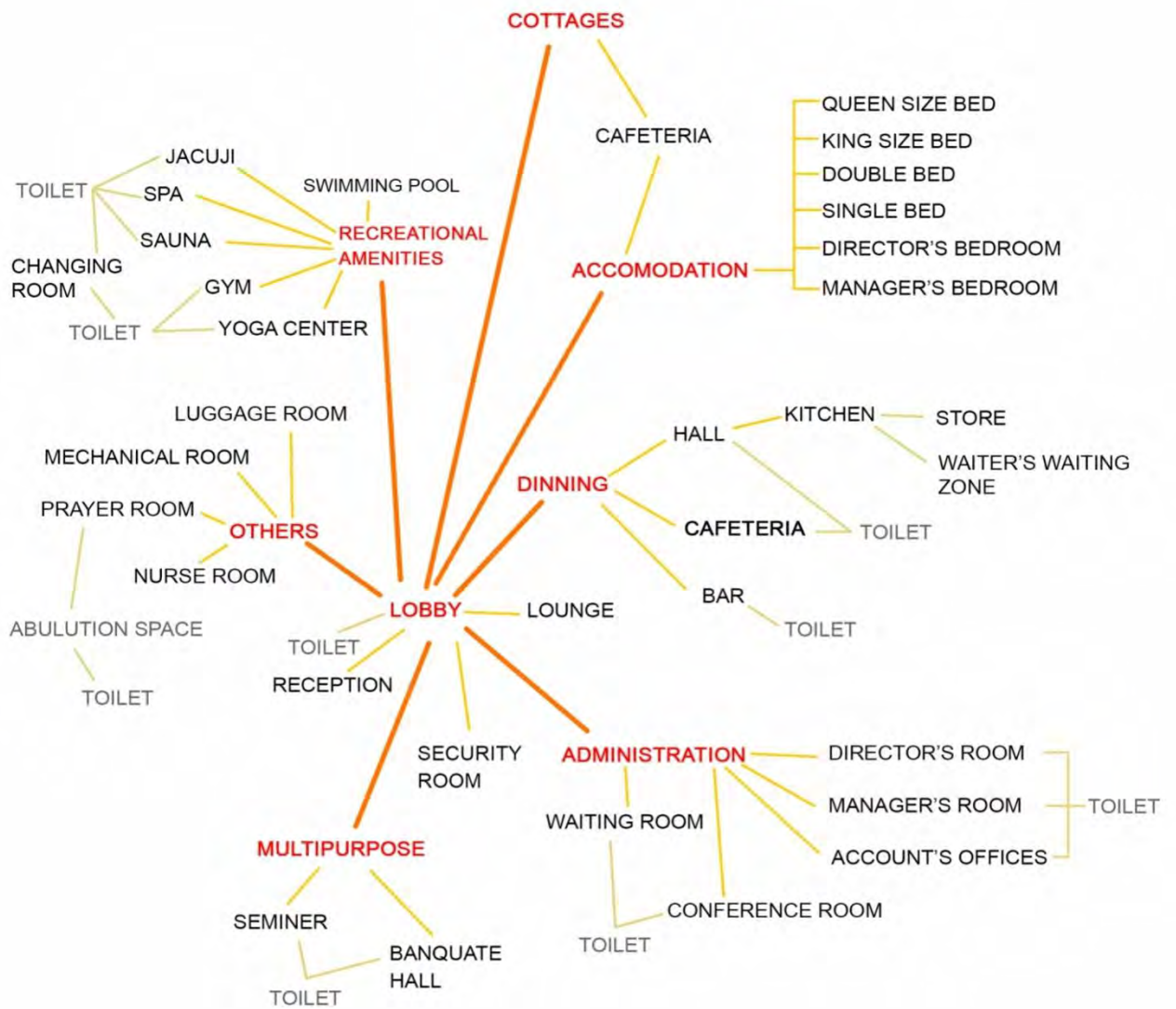
5.5 Program Relation

Public → Semi Public → Semi Private → Private

5.6 Connection of the Functions



5.7 Connection of all Amenities



6.0 Contextual Study

6.1 Architectural Character of the Area

6.2 Climatic Issues

6.3 People

6.4 Availability of the materials and craftsmen

6.5 Possibility for such a hub

6.0 Contextual Study

6.1 Architectural Character of the Area



Image Source: Author Ishaque T.

Architectural character of this area depends on different issues. The Most important and identical character differs for or influence by topological location or local material. Typology may differ by the choice of material depends on the owner's preference and appreciation. In Anwara, there are some colony of KEPZ and KAFCO those are built with brick foundation. On the other hand there is a large area

of lush green agricultural lands and diversity of trees and a small area is occupied by the farmers as to settle their houses. There are some community spaces like school, bazaar, shops, mosque etc. Most of the structures are built by brick foundation.

There are also Kaccha, Pucca, Semi-Pucca houses which are built by wood or tin.

6.2 Climatic Issues

Anwara is a thana which is situated at coastal area. It is near the meeting point of Karnafuli river and Bay of Bengal. This estuary creates wind turbulence and causes a great wind flow which affects the whole area. That's why most of the buildings or architectural structures are surrounded by lots of tree which protects them from wind. this area is also cyclone prone area and as it is a low land near a huge water body there is a great chance of rain flood, flase flood and also monsoon flood.

Otherwise this low land site is itself a water reserve. In monsoon, it almost -3 feet level full of water and in other times of year it's full about -6 feet level to -7.5feet level.

6.3 People

People of the discussed area are very hardworking. They are real survivor. They even know how to fight and deal with nature. Most of the general people of this area are farmers, fishermen, boatman etc.

6.4 Availability of the materials

From the local market survey it was informed that brick, cement, tin, wood are available as local material. There are also industrial material like steel, EPS panel, industrial sheet are also available. Nearby there is some steel industries, shipyards, Chittagong port so it is easy to find steel materials.

6.4.a Primary and Essential material

In this project shipping container is used for structure as material. Chittagong port is situated nearby so it is easy to carry the material.



6.5 Possibility for such a hub

Anwara thana situated besides Parki beach ,which is only about 22.5km far from Chittagong city. According to site surroundings survey, there are also some national and international industries and center besides Parki like KPEZ, KAFCO, CUFP,DAPF. Potenga beach and Shah Amanat International Airport is just opposite of discussed site. There is a huge potential of this site is to become a tourism hub.

7.0 Development phases

7.1. Concept Development

7.1.a Allocation of Rooms

7.1.b To create a walk way

7.1.c Creating a common space

7.2 Water Level in Site

7.3 Considering the Views

7.4 Function Allocations

7.5 Details of Container

7.6 Thermal Control

7.7 Structure Development

7.0 Development phases

7.1 Concept Development



7.1.a Image source: Ishaque T. (2016)

7.1.a Allocation of Rooms:

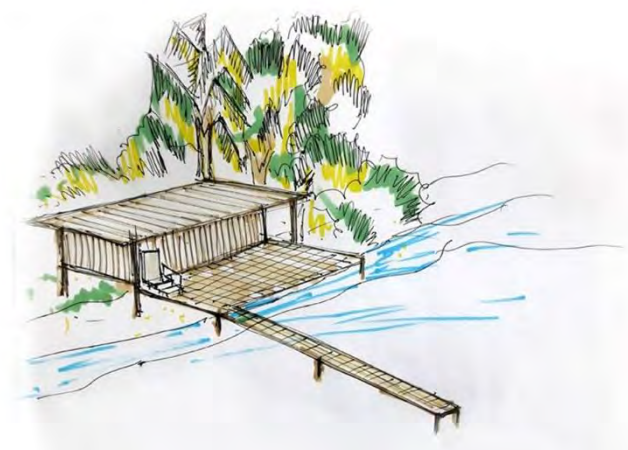
Rooms are allocated as they could get most the water views either the sea view or internal water body's view. Most the cottages have both views. Rooms are surrounded by the green which gives a natural view and also protects from wind. (7.1.1.a Image source: Ishaque T. (2016))



7.1.b Image source: Ishaque T. (2016)

7.1.b To create a walk way:

The site, it self's is a natural water reserver. It is full of some low construer and humurs. So a thorrow walk way can hold the full communication of the site. A resort is not only an accommodation source, it is also a place where people can feel the nature and regain their soul. Walking on walkway and feel the nature could give a feel of walk in the nature. (7.1.1.b Image source: Ishaque T. (2016))



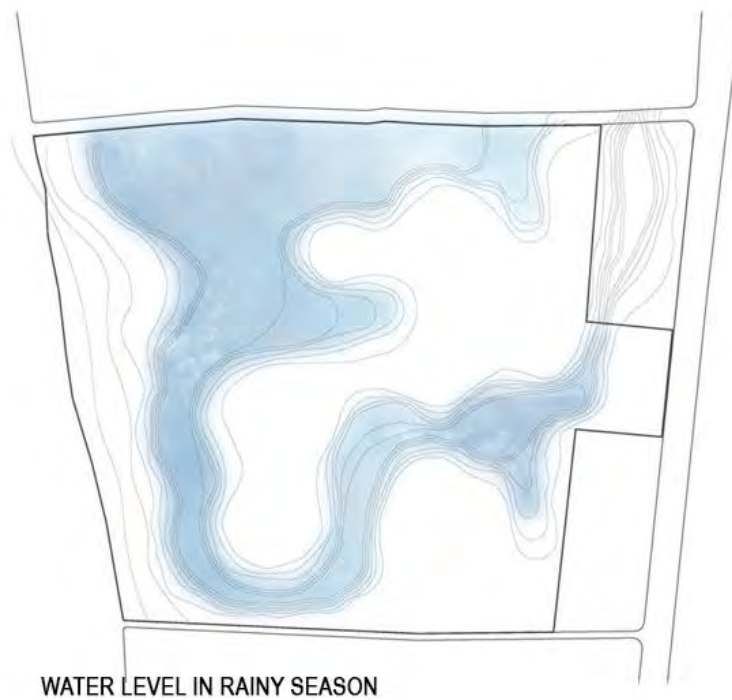
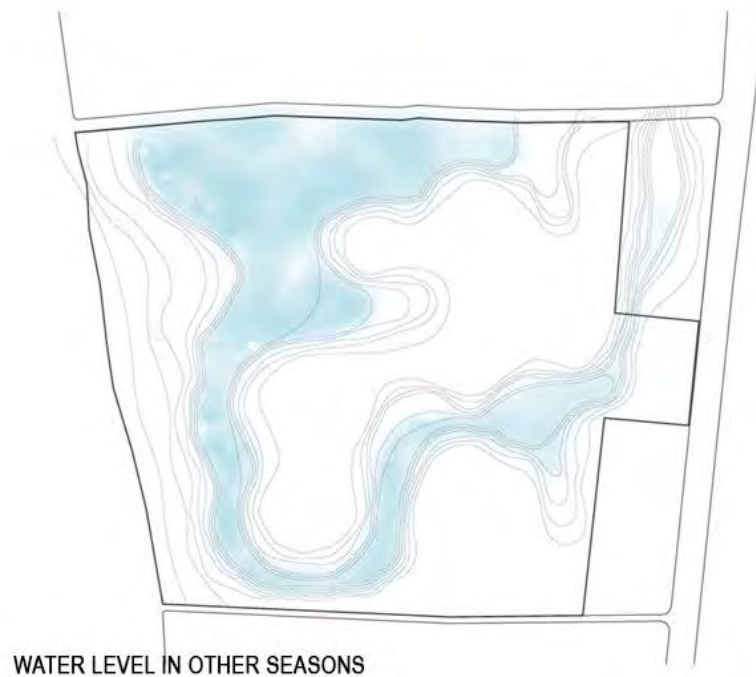
7.1.c Image source: Ishaque T. (2016)

7.1.c Creating a common space:

walk way transits into a common space and it will be a meet up point straight from the rooms and service area. (7.1.1.c Image source: Ishaque T. (2016))

7.2 Water Level in Site

Water level of site increase up to -3 feet to -2 feet during the rainy seasons, when climate is not fortune for people. On other hand water level decrease up to -7.5 feet to -9 feet during dry season. During the design period working with the moving water level was the one of the main concern.



7.3 Considering the Views

Views are the most important in resort projects. People come to spend their valuable time in nature so it is very important to assure the views and facilities. Discussed site's length is greater than the width. To assure the sea view through the Jhaw bon is not possible for every room. Thus only the luxuries cottages get this facility. On the other hand other rooms get the view of internal water view with lots of green aperture.

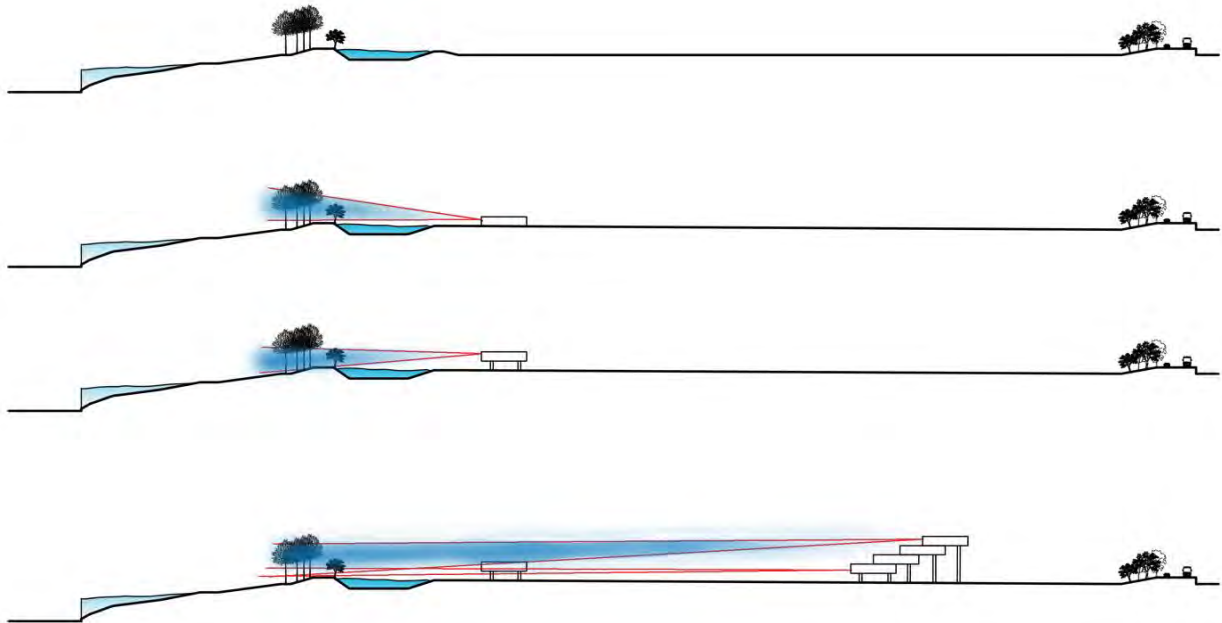


Image: Author

7.4 Function Allocations

Image 7.4.a shows the most public zone of functions like shops

Open restruarent

Image 7.4.b shows the most private zones like rooms

Cottages

Image 7.4.c shows some semi public functions like

in-house restaurant

Admin

Multipurpose hall

Boat club

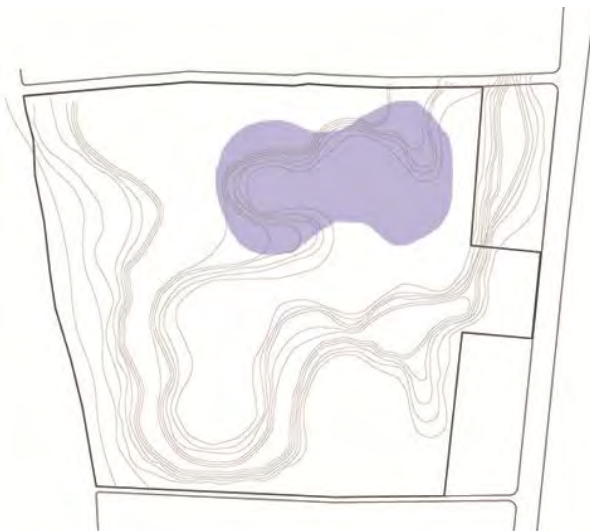


Image: 7.4.a

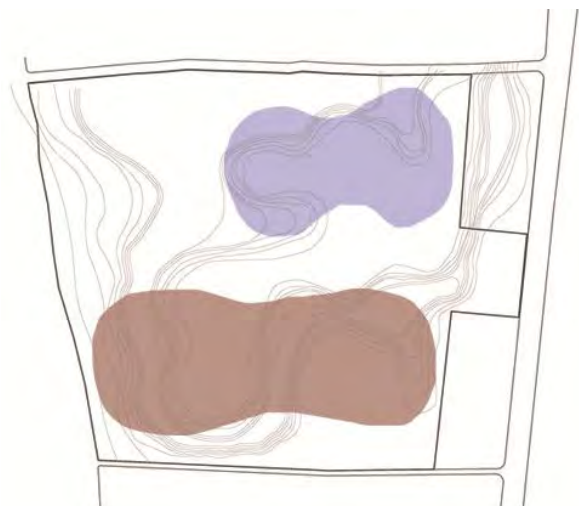


Image : 7.4.b

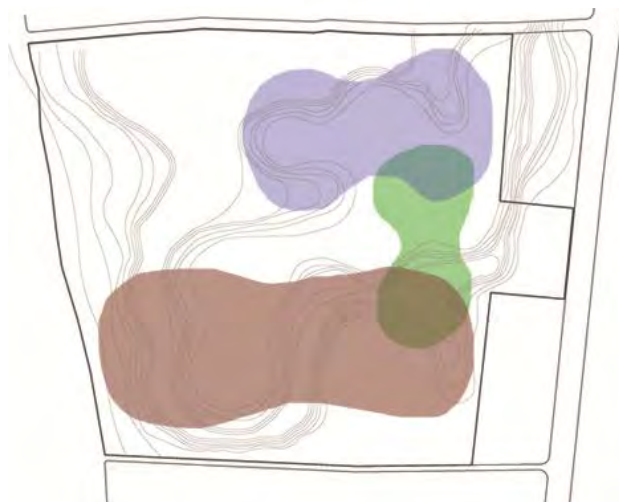


Image: 7.4.c

7.5 Details of Container



Fig: 01

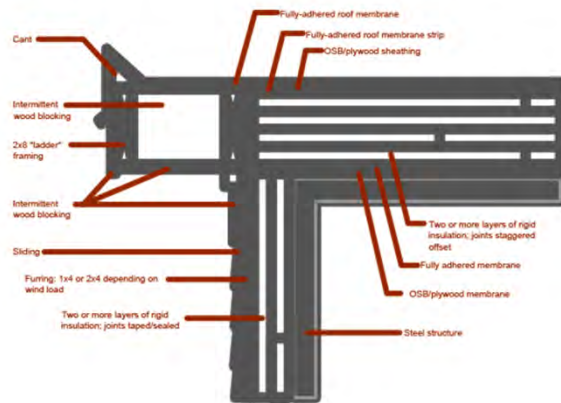


Fig: 02



Fig: 01



Fig: 03



Fig: 01

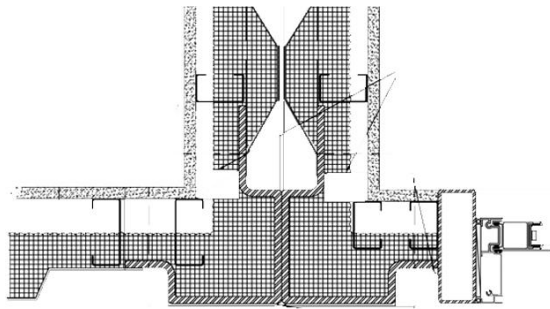


Fig: 01

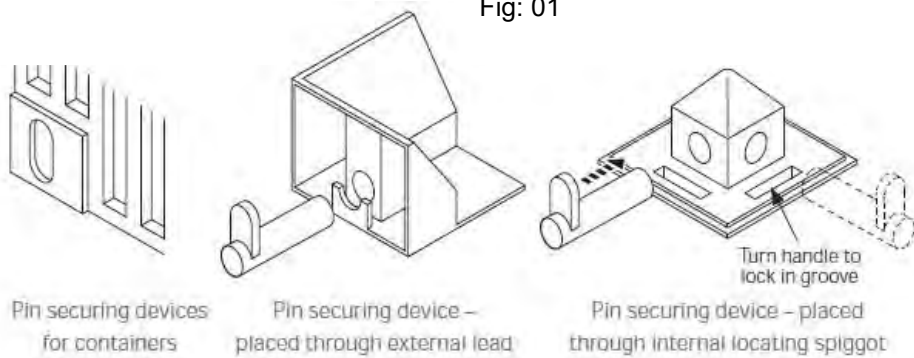
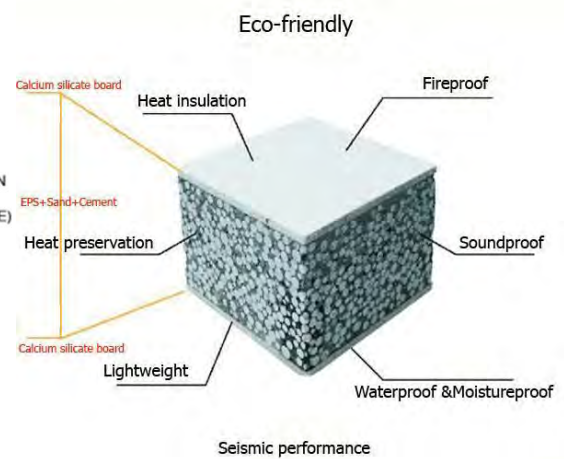
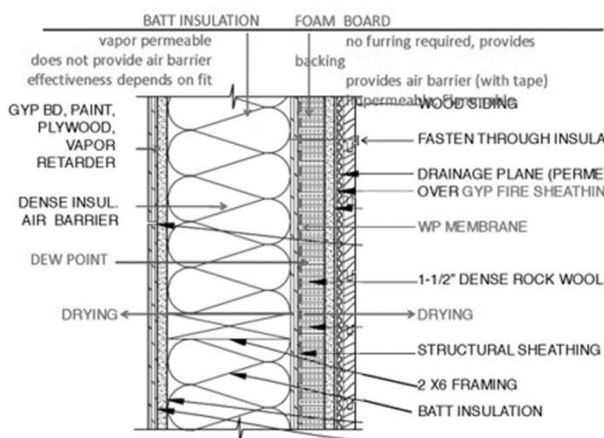
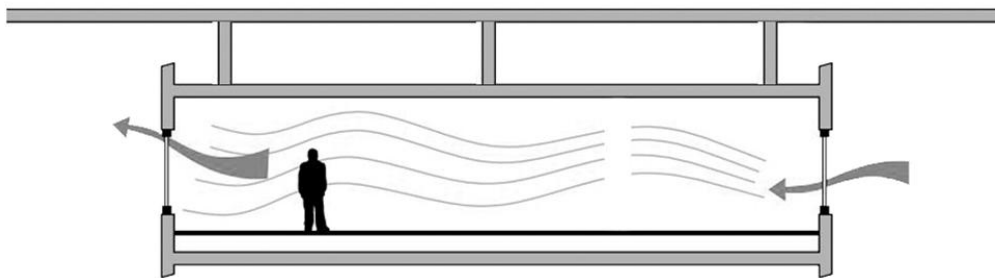
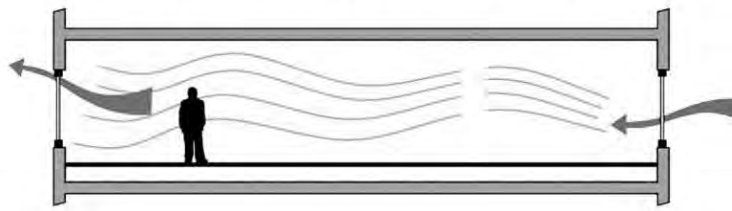


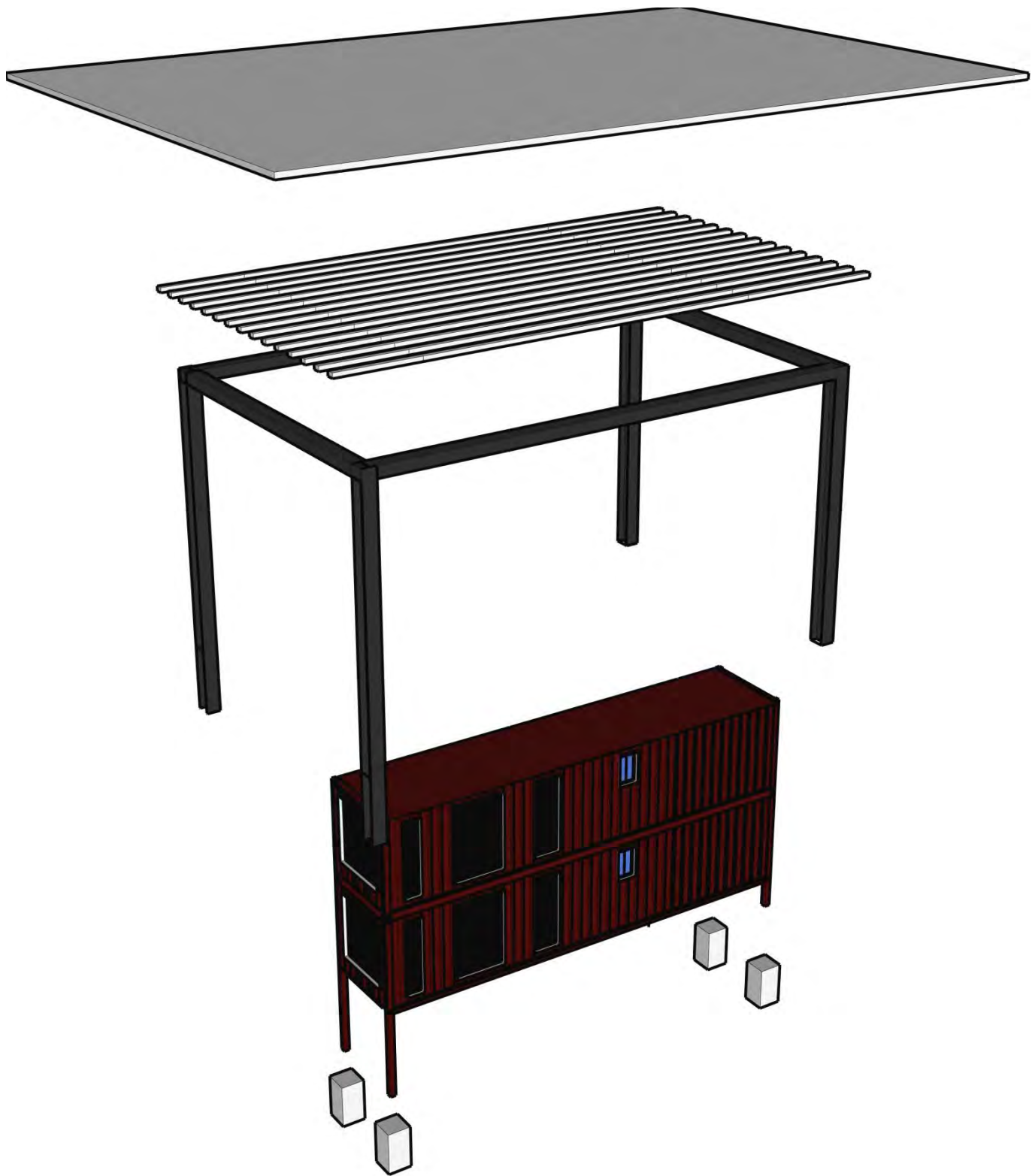
Fig: 01

7.6 Thermal Control

CROSS VENTILATION CONSERVES ELECTRICITY



7.7 Structure Development



8.0 Design phase

8.1 Plans

8.1.1 roof plan

8.1.2 plan @-3feet level

8.1.3 plan @5feet level

8.2 Rooms layouts

8.3 Cottage detail

8.4 Elevation

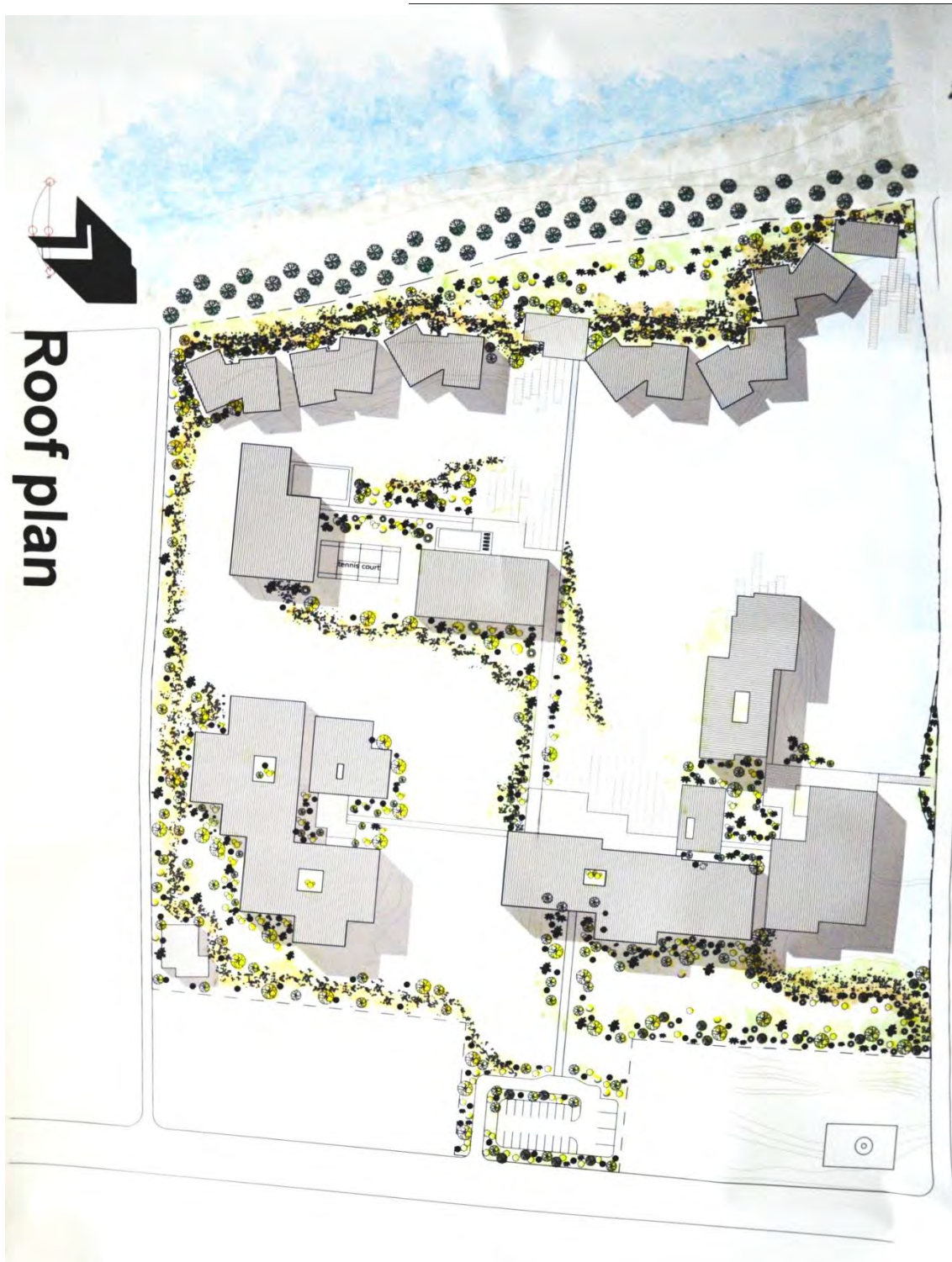
8.5 section

8.6 Render images

8.7 Model images

8.1 Plans

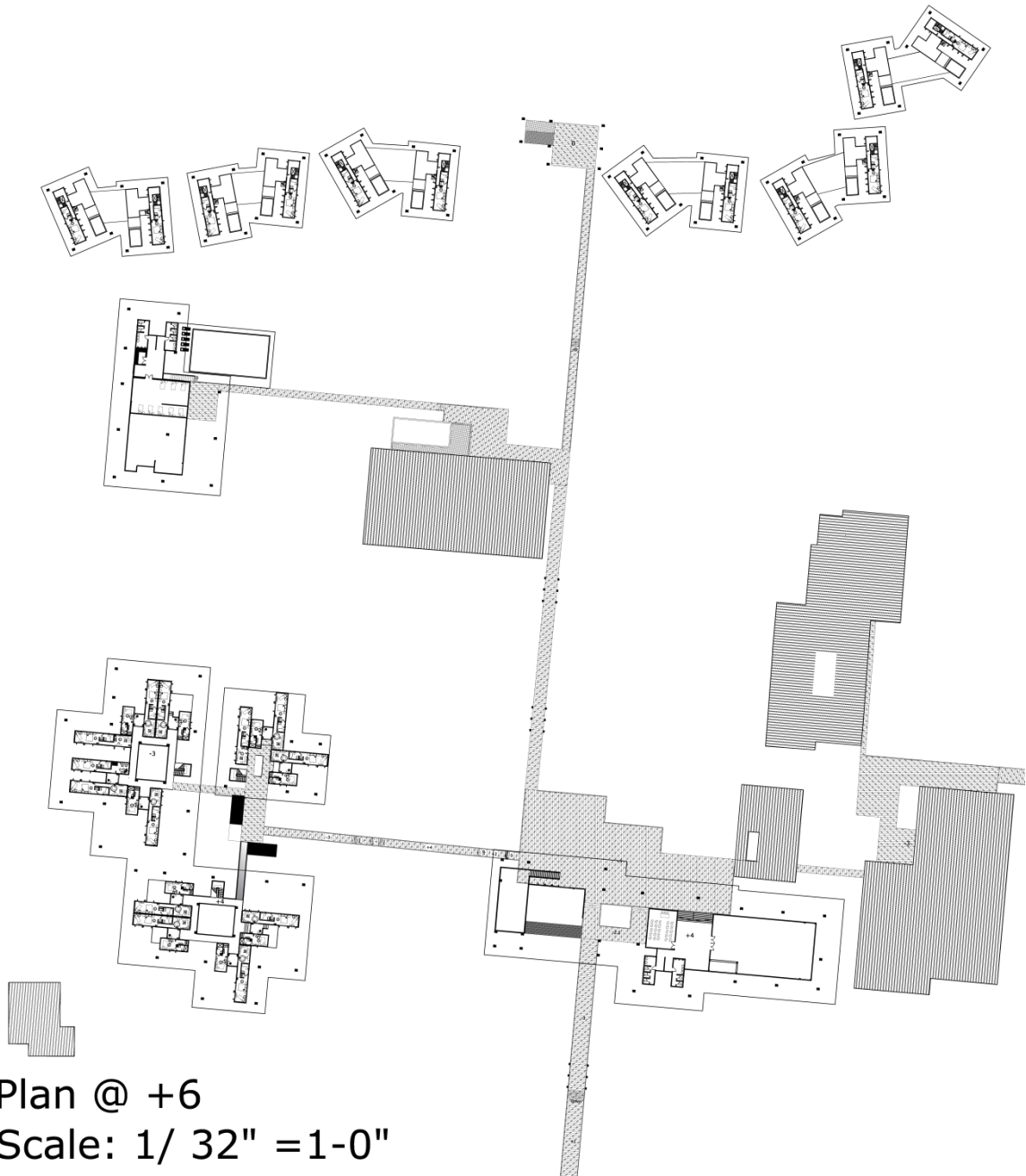
8.1.1 Roof Plan



8.1.2 Plan @ -3feet



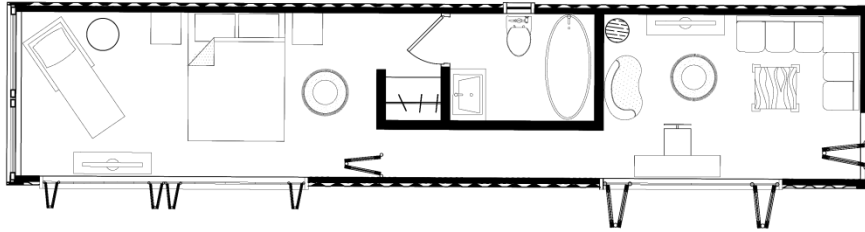
8.1.3 Plan @ 6 feet



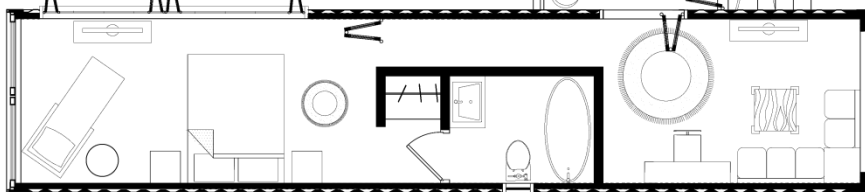
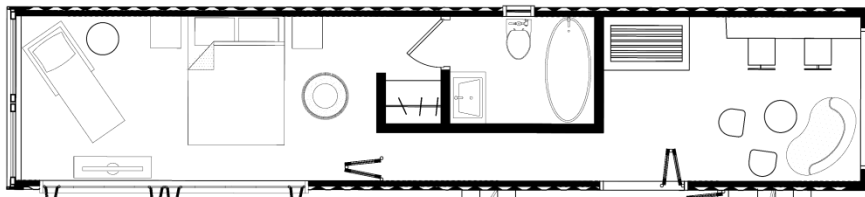
Plan @ +6
Scale: 1/ 32" =1-0"

8.2 Room layouts

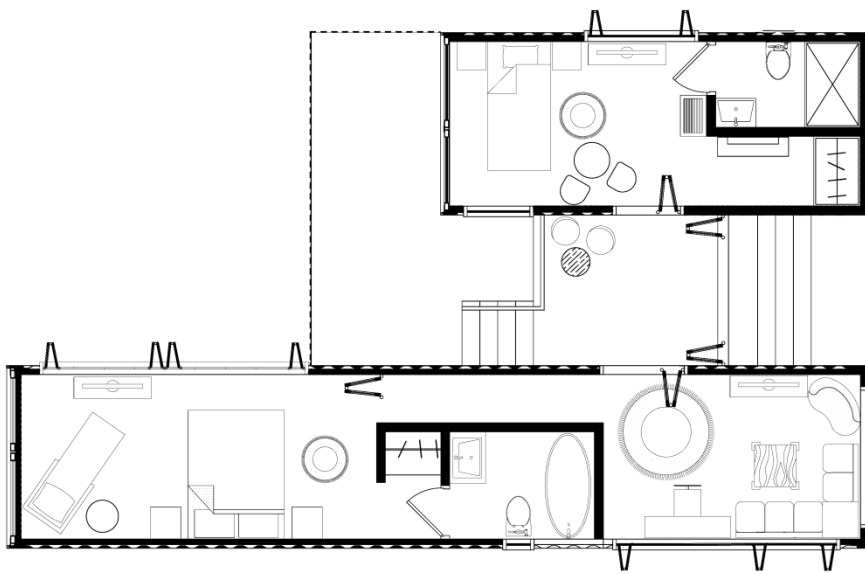
t-1



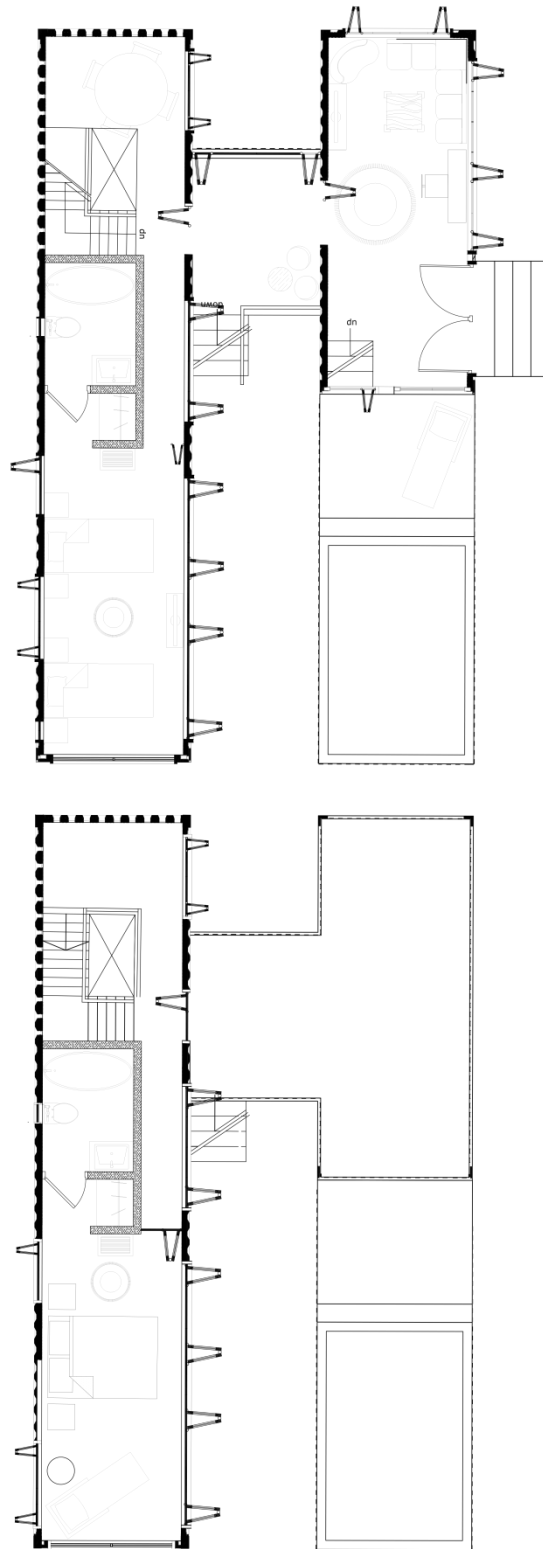
t-2



t-3



8.3 cottage layout



8.4 Section



8.5 Elevation



8.6 Render Images



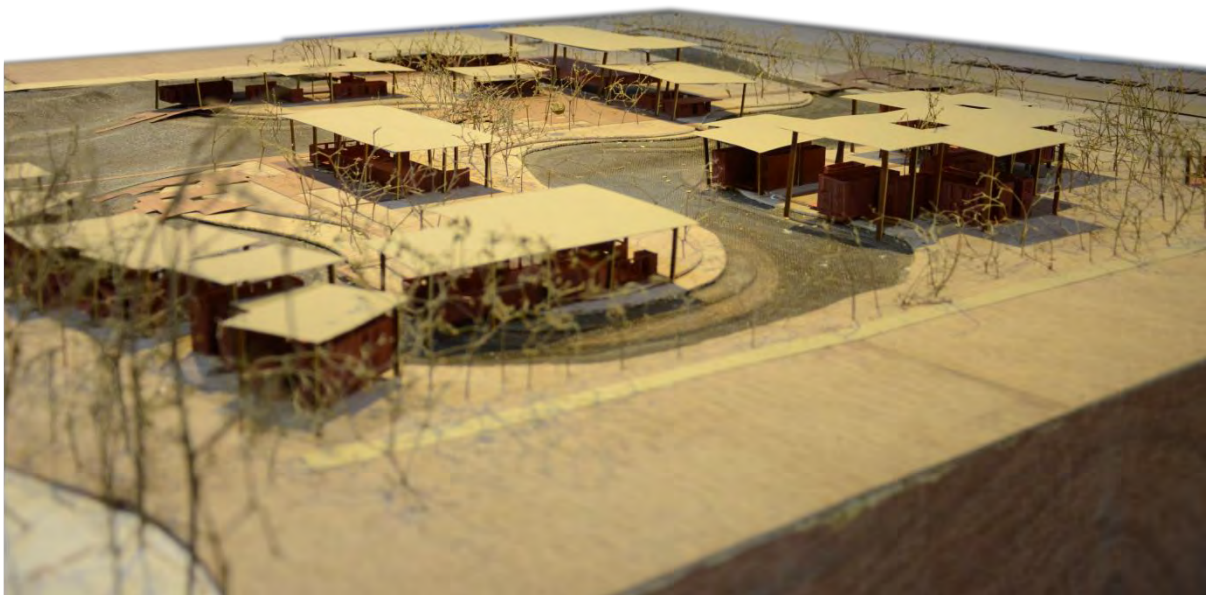
8.6 Render Images



8.6 Render Images



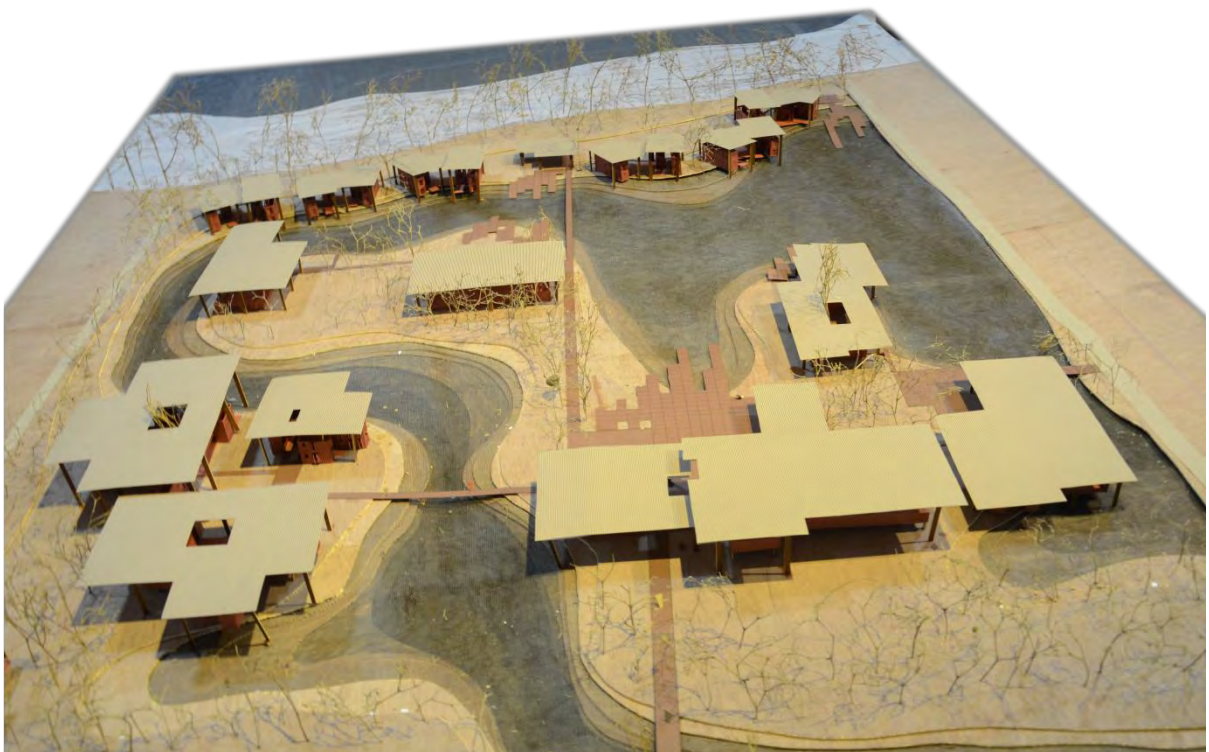
8.7 Model Images



8.7 Model Images



8.7 Model Images



8.7 Model Images



9.0 Conclusion

9.0 Conclusion

The main motive of **Estuaries Biome Eco Resort** is building a tourism hub at Anwara, Parki. The project claims to create a new era in Bangladesh to use container as a building material. It is known that container itself a heater box but if there is enough wind flow ,water body and nature is friendly then it will preferable to use container in our south area. South contains more water which can make a container thermal. On the other hand container is a 3R material ,so it could be easily replaced, reused or re cycled. A modular structure could be introducing a residence for others.

The project ensures a good chance to get exposure and spread wide the possibilities of the general practice as the whole procedure is excess able throughout the world already.

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