



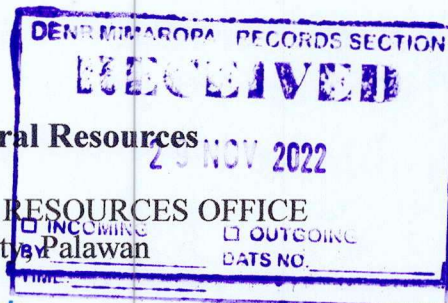
Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region

PROVINCIAL ENVIRONMENT AND NATURAL RESOURCES OFFICE

Bgy. Sta. Monica, Puerto Princesa City, Palawan

Telfax No. (048) 434 - 8791

Email Add: penropalawan@denr.gov.ph



November 22, 2022

7

MEMORANDUM

FOR : The Regional Executive Director
DENR MIMAROPA Region
1515 DENR By the Bay Building, Roxas Boulevard,
Barangay 668, Ermita, Manila

THRU : The OIC, ARD for Technical Services

FROM : The Provincial Environment and
Natural Resources Officer

SUBJECT : SUBMISSION OF COMPREHENSIVE DEVELOPMENT AND
MANAGEMENT PLAN (CDMP) OF BATHING
ESTABLISHMENT OF PALAWAN COVE CORPORATION
(PCC) WITH FLAGT NO. 01-2021 LOCATED IN SITIO
DAPLAC, BARANGAY POBLACION, SAN VICENTE,
PALAWAN

Respectfully forwarded is the memorandum of CENRO Roxas, Palawan dated October 6, 2022 relative the above subject.

As per report, Palawan Cove Corporation submitted their copy of CDMP in compliance to the memorandum of RED Lormelyn E. Claudio, CESO IV dated June 13, 2022.

Further, CENRO Roxas sent a letter via email to Mr. William Espina, Liason Officer of Palawan Cove Corporation to follow-up the submission of their approved CDMP and Tourism Development Plan in compliance to DMO No. 20211-02.

For information and further instruction.

DENR-PALAWAN
PENRO-RECORDS
RELEASED
By 24 NOV 2022 *done*
Date: 22-3158

For the PENRO;

[Signature]
RONIE B. GANDEZA
OIC Chief, Technical Services Division
In Charge, Office of the PENRO



Republic of the Philippines
Department of Environment and Natural Resources
Region IV- MIMAROPA
COMMUNITY ENVIRONMENT AND NATURAL RESOURCES OFFICE
Barangay III (Poblacion), Roxas, Palawan
Contact No. 09171606578 / 09175028647
Email address: cenroroxaspalawan@denr.gov.ph

October 6, 2022

MEMORANDUM


FOR : The Provincial Environment and
Natural Resources Officer
Sta. Monica, Puerto Princesa City, Palawan

THRU : The Chief, Monitoring Enforcement Section

FROM : The Community Environment and
Natural Resources Officer
Roxas, Palawan

SUBJECT : **SUBMISSION OF COMPREHENSIVE DEVELOPMENT AND
MANAGEMENT PLAN (CDMP) OF BATHING
ESTABLISHMENT OF PALAWAN COVE CORPORATION
(PCC) WITH FLAGT NO. 01-2021 LOCATED IN SITIO DAPLAC,
BARANGAY POBLACION, SAN VICENTE, PALAWAN**

DENR PENRO
PALAWAN RECORDS
RECEIVED

BY: 
DATE: 10-24-2022 22-9802

This is in compliance with the memorandum of RED Lormelyn E. Claudio, *CESO IV* dated June 13, 2022 re: compliance monitoring report on Forest Land Use Agreement for Tourism awarded to Palawan Cove Corporation located at Sitio Daplac, Barangay Poblacion, San Vicente, Palawan.

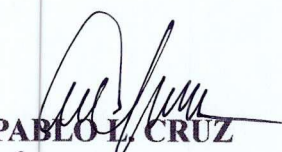
Please be informed that this Office had sent a letter via email to Mr. William Espina, Liason Officer of PCC to follow-up the submission of the copy of their approved CDMP and Tourism Development Plan in compliance to DMO No. 20211-02.

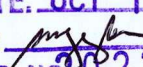
At present, the PCC have already submitted the copy of CDMP, however their Tourism Development Plan was still on progress, accordingly.

They were also reminded of the provisions of Article 51 of Presidential Decree No. 1067, which provides that banks of rivers, streams and shores of the seas and lakes are subject to defined easement zones or no build zones. Thus, the guest house they build within this zone is violative to the above law, hence, they were advised to self-demolish the said structures.

Attached is the copy of their CDMP for further evaluation.

For information and record.

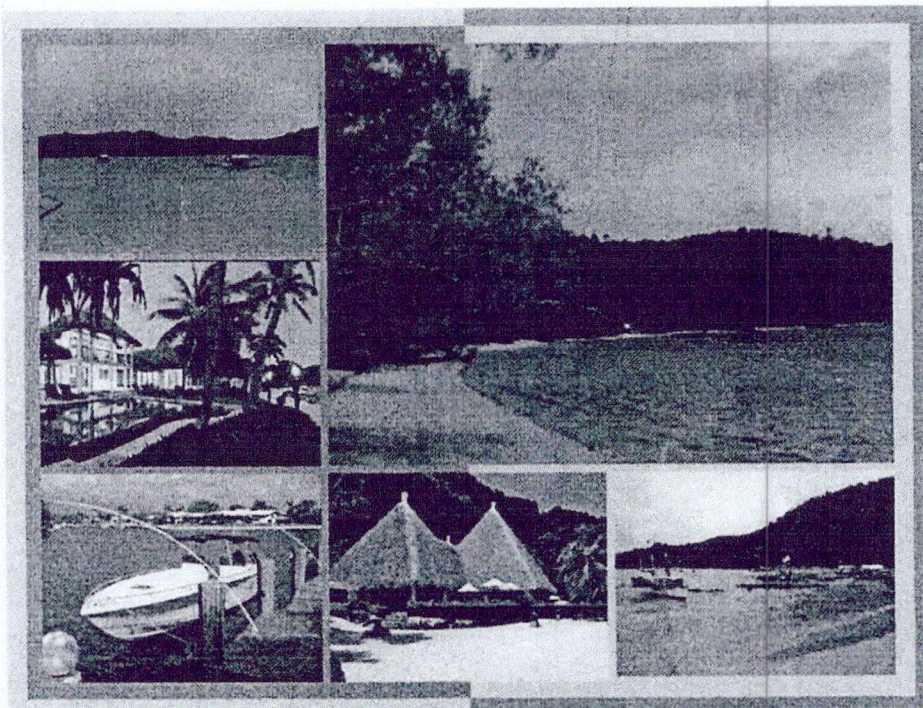

PABLO L. CRUZ

DENR-CENRO ROXAS
RELEASED
DATE: OCT 18 2022
BY: 
NO. 2022-10-1624

PALAWAN COVE CORPORATION
130 Amorsolo corner Herrera St., Legaspi Village, Makati City

COMPREHENSIVE DEVELOPMENT and MANAGEMENT PLAN (CDMP)

for the Proposed Bathing Establishment Project
of Palawan Cove Corporation (PCC)
located at Boayan Island, Sitio Daplac,
Barangay Poblacion, San Vicente, Palawan



FINAL REPORT

Submitted to:



Republic of the Philippines
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
Region IVB – MIMAROPA

L & S Building, 1515 Roxas Boulevard, Ermita, Manila

Prepared by:



GlobalTenets
CONSULTANCY

Unit 3 Northmall, Agapita Commercial Complex, Lopez
Avenue, Brgy. Batong Malake, Los Baños, 4030
Laguna, Philippines
Telefax (049) 536-8802 E-mail: gtconsult@gmail.com

April 2012

*Received
4.20.12*

19 April 2012

Engr. CONCORDIO D. ZUÑIGA, CESO III
Regional Executive Director
DENR Region IV-MIMAROPA
L & S Building, 1515 Roxas Boulevard
Ermita, Manila



Attention: For. JOSE M. DIFUNTORUM
Regional Technical Director for Forestry (RTDf)

Subject: Submission of Final Report to Complete the Evaluation of the Comprehensive Development and Management Plan (CDMP) for the Proposed Bathing Establishment Project located at Boayan Island, Sitio Daplac, Brgy. Poblacion, San Vicente, Palawan

Dear RED Zuñiga:

As a result of the technical review of the CDMP, we are pleased to submit the above quoted subject as proof of the documentation and compliance with the conditionalities and answer to the queries set forth by the Review Committee as discussed during the deliberation of the report.

On behalf of our client, **Palawan Cove Corporation (PCC)**, we trust that you will find this Final Report wherein the committee's questions, comments and suggestions are satisfactorily addressed to merit your kind approval for the Proposed Bathing Establishment Project located at Boayan Island, Sitio Daplac, Brgy. Poblacion, San Vicente, Palawan.

Thank you.

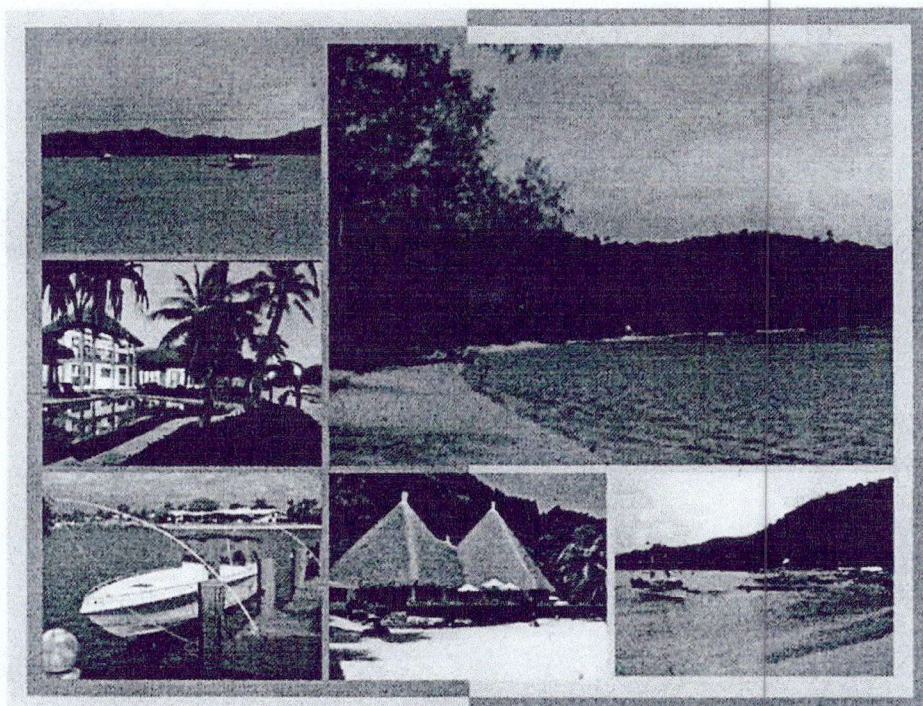
Respectfully submitted,

GREGORIO A. TABUENA
Managing Director

PALAWAN COVE CORPORATION
130 Amorsolo corner Herrera St., Legaspi Village, Makati City

COMPREHENSIVE DEVELOPMENT and MANAGEMENT PLAN (CDMP)

for the Proposed Bathing Establishment Project
of Palawan Cove Corporation (PCC)
located at Boayan Island, Sitio Daplac,
Barangay Poblacion, San Vicente, Palawan



FINAL REPORT

Submitted to:



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DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
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Unit 3 Northmall, Agapita Commercial Complex, Lopez
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Laguna, Philippines
Telefax (049) 536-8802 E-mail: gtconsult@gmail.com

April 2012

SUMMARY OF THE FMS COMMENTS

The following are Global Tenets Consultancy (GTC) response to FMS Review Committee comments regarding the Comprehensive Development and Management Plan (CDMP) of the Palawan Cove Corporation (PCC):

<u>Item</u>	<u>Remarks</u>
1. Insert Cover Sheet.	Page before Table of Contents
2. Identify the type of forest land use agreement applied for.	Mentioned in the whole report
3. Append the approved Forest Land Use Agreement for Tourism Purposes (FLAgT) and Environmental Compliance Certificate (ECC) for the 24.00 hectares.	Included in the Attachments 1 & 2
4. Include the schedule of implementation of the development aspect of the project.	Refer to Chapter 4, Page 38
5. Determine the carrying capacity of the area and management strategies to be introduced.	Refer to Chapter 4, Page 36
6. Excise the 3.3202 hectares from 27.3202 hectares. Since the original area applied for FLAg-T is 24.00 hectares	Mentioned in the whole report
7. Discuss the waste management strategies to be implemented in the project.	Refer to Chapter 5, Page 46
8. Cite the medium to be used in the marketing strategies of bathing establishment project.	Refer to Chapter 6, Page 50
9. Tabulate the results of wildlife survey conducted during the IEE study.	Refer to Chapter 3, Pages 27 to 31
10. Omit the caption topographic map in Figure 1.	Refer to Chapter 1, Page 2
11. Revise the financial proposal and project it to 25 years.	Refer to Chapter 8, Page 53 to 56

COVER SHEET

COMPREHENSIVE DEVELOPMENT AND MANAGEMENT PLAN FOR FOREST LAND USE AGREEMENT FOR TOURISM PURPOSES (FLAGT) (BATHING ESTABLISHMENT PROJECT)

Name of AGREEMENT Holder : Palawan Cove Corporation (PCC)
Approximate Area : 24 hectares

Location:

Region	:	Region IV-B
Province	:	Palawan
Municipality(s)	:	San Vicente
Barangay	:	Poblacion
Island	:	Boayan Island

Boundaries:

Coordinates

North	:	Imuruan Bay
East	:	Bacacol Island
South	:	Public Forest
West	:	Mayuring Point

Physical Description:

The project area is located in Boayan Island which is one of the five (5) officially identified islands within Barangay Poblacion, Municipality of San Vicente, Palawan. Its natural scenic beauty, verdant forest resources, pristine beaches, abundant resources of flora and fauna, outstanding diving sites, majestic mountains and other environmental attractions, make the Island a high potential in the tourism industry. The Island's strategic location and natural beauty both marine and terrestrial is perfect to develop as a tourist hub of the municipality in general and Barangay Poblacion in particular.

Submitted by:


PALAWAN COVE CORPORATION
AGREEMENT Holder

Date: Apr 19 2012

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SUMMARY

Comprehensive Development and Management Plan (CDMP) is one of the requirements in filing Forest Land Use Agreement for Tourism (FLAgT) under Memorandum Order No. 2011-02. This CDMP has been designed to describe the area that will be developed for tourism purposes, including the appropriate plans, strategies and activities which are compatible in the area, protect and conserve the environment and natural resources, generate the necessary development financing and to benefit the host community. The plan also provides an overview of the project, identify and assess the potential impacts, and formulate necessary recommendations for the proposed bathing establishment project.

▪ Overview of the Proposed Project

A number of tourism sites for development have been identified in San Vicente – one of which is the Boayan Island of Barangay Poblacion because of the tourism potentials it can offer, such as, luxuriant forests which hosts a number of flora and fauna, pristine sea water and beautiful beaches, abundant sea grasses, reef fishes, and other natural resources which seem to beckon someone to come. The Island's strategic location and natural beauty both marine and terrestrial is perfect to develop as a tourist hub of the municipality in general and Barangay Poblacion in particular.

This Bathing Establishment Project hopes to make the Boayan Island one of the priority destinations of local and foreign tourists in the region; thereby, boosts the tourism industry in the Municipality a reality, and thus, enhance its socio-economic growth in general, and Boayan Island and Barangay Poblacion in particular. Moreover, the proponent of the proposed projects adheres to the environmental advocacy of the LGU of San Vicente to effectively protect and preserve the marine environment of Boayan Island while pursuing its proposed Project in the area. Thus, the proponent is not only concerned for its own economic interest but also the growth and improvement of the host areas.

▪ Condition of the Project Area

The proposed Bathing Establishment Project of Palawan Cove Corporation (PCC) is specifically located in Boayan Island, Barangay Poblacion, San Vicente, Palawan (**Figure 1**).

Barangay Poblacion is identified in the Municipality's CLUP/WP as one of the barangays considered as Tourism Development Area (TDA). The choice of the area could be attributed to its scenic beauty, pristine beaches, diving sites and the majestic rolling hills, among others. Such features make the place an ecotourism potential. The other TDAs are Barangays Alimanguan, New Canipo, New Villafria, Port Barton, and Sto. Niño.

Agriculture, commerce and trade opportunities are generally in the southern part of the Province of San Vicente, whereas, tourism and other related businesses are the main attractions in the north. In the past few years, the President of the Philippines declared Southern Palawan as the mining district and Northern Palawan as the tourism district.

Like any other island in the Philippines, Boayan Island is a majestic place with pristine beaches. It offers a variety of sporting and leisure activities including swimming, sunbathing, snorkeling, sailing, among others. Barangay Poblacion, Municipality of San Vicente seems to be an ideal place for the project because of its magnificent scenery (**Figure 2**).

The marine attractions of Barangay Poblacion are its diving spots which are frequently visited by domestic and foreign divers and tourist. During the *habagat* (southwestern monsoon winds), the waves along the coastal water of the beaches could be excellent spot for windsurfing and surfboard riding. When the *amihan* (northern winds) come, the coastal waters become calm, thus, it could be excellent for waterskiing activities.

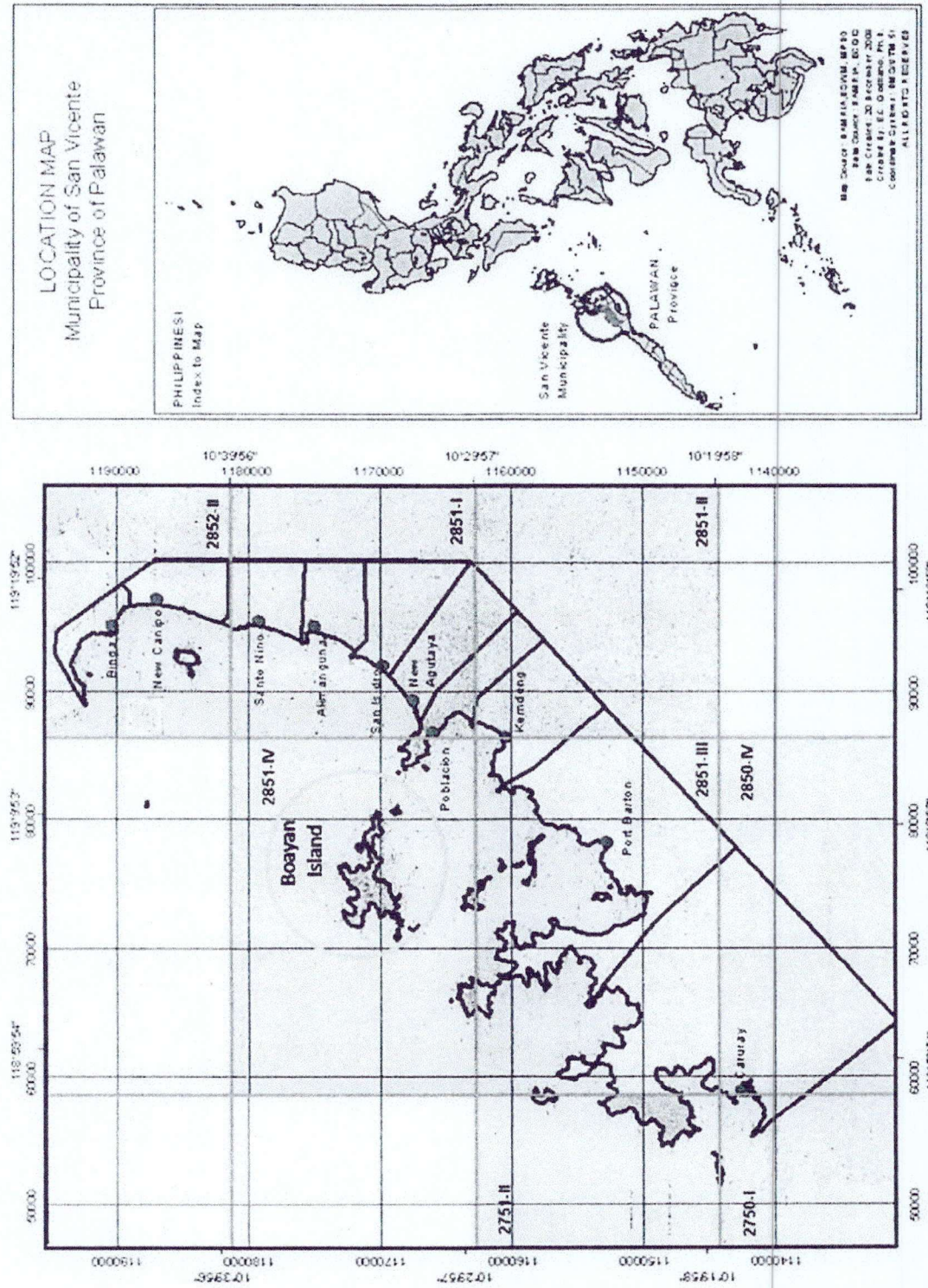


Figure 1. Location map of Boayan Island.

TOURISM ACTIVITIES

PCC Project
Palawan Cove Corporation

TOTAL LAND AREA:
24 hectares

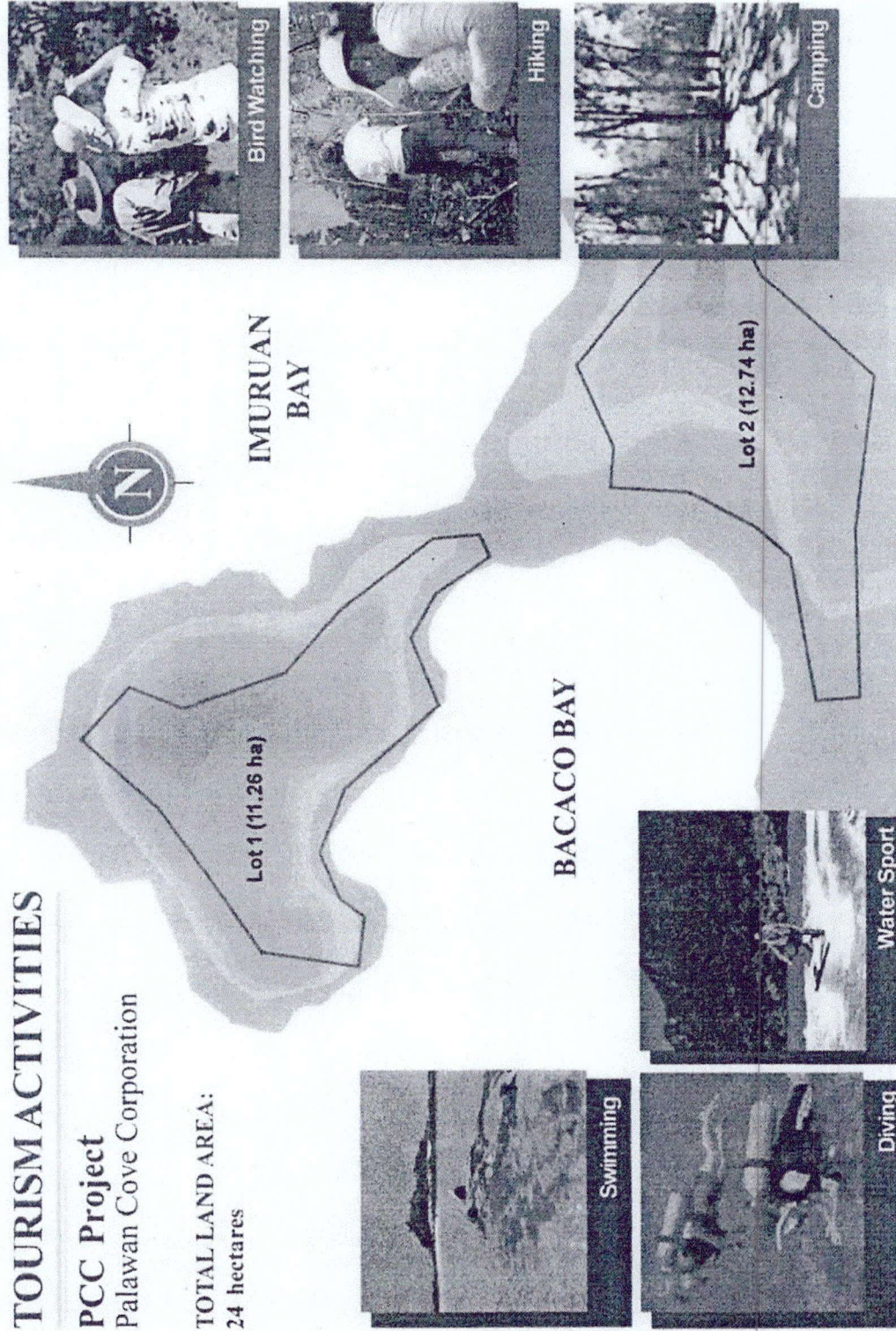


Figure 2. Tourism Activities.

Furthermore, the inland areas of Barangay Poblacion boast of rich forest which serves as a habitat to various species of flora and fauna. With its desire to pursue the development of the tourism industry in the various areas of barangay, such as, the proposed bathing establishment in Boayan Island.

▪ Project Development Plan

The proponent intends to establish and develop a bathing establishment as an island destination for locals and tourist through environmentally-sustainable development without disturbing the natural ecosystems of Boayan Island.

The whole project area is confined within 24 hectares which involve construction of twenty one units of 3-storey hotel, three clubhouses (e.g. multi-purpose hall, bar, office, reception area, gift counter, luggage, billiards hall, library, kids room and entertainment area), mooring and other amenities (Figure 3).

Based on the biophysical and marine qualities for a vibrant tourism industry, Boayan Island can be considered as one of the priority destinations for local and foreign tourist.

This CDMP is for tourism management of Boayan Island. By providing a specific and purposeful intervention to enhance tourism so that benefits are maximized and problems minimized. The limited carrying capacity would require better project management planning. In Boayan Island, this intervention can take the form of managing volumes of visitors; managing tourist arrivals; instituting other built infrastructure guidelines (e.g. signage, etc.); and creating appropriate organizational mechanisms with the power to manage tourism development.

The strategies formulated for sustainable tourism development should follow the important principles given such as: tourism should integrate the natural, cultural and human environments. It must respect the fragile balances that characterize many tourist destinations through analysis of carrying capacity, in particular, for islands and environmentally sensitive areas; government should promote actions for integrating the planning of tourism with environmental NGOs and local communities; measures must be developed to permit a more equitable distribution of the benefits and burdens of tourism; and there is also a need to support and promote tourism demonstration projects within the framework of sustainable tourism development.

The CDMP also involve construction activities such as civil works, installation of various electrical and mechanical appliances, plumbing/sanitary installations, security and management system, support facilities and other ancillary works necessary to complete the work.

Construction activities will be carefully managed to protect the environment. The construction shall conform to standards of construction for ecotourism project and should be environmentally friendly.

The scale of construction of the facilities will be characterized by low to medium structural works and intensive sanitary work activities. The aesthetical value of the project site will also be given high degree of importance. The design is such that remaining natural areas will not be further affected.

The project is expected to be completed within twenty five (25) years.

SITE DEVELOPMENT PLAN

PCC Project
Palawan Cove Corporation

TOTAL LAND AREA
24 hectares

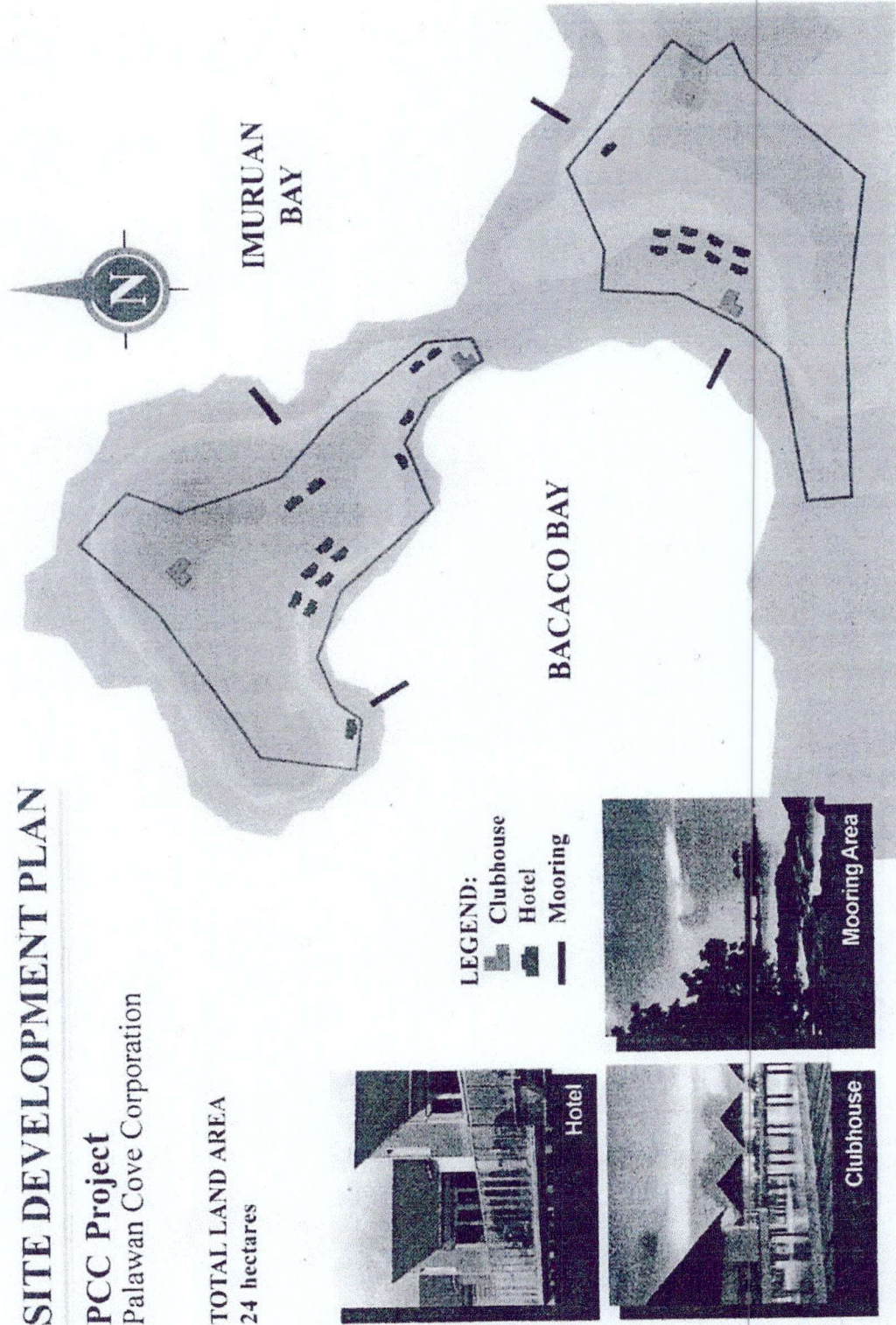


Figure 3. Site Development Plan.

▪ **Monitoring and Evaluation**

Every human activity has an environmental impact. Even in a condition of no development, the forest ecology could still be disturbed by unrestricted activities. Ecological disturbances are inevitable, but the extent, level and effects of development have to be within tolerable limits so that environment degradation will be prevented or mitigated.

The timing of the commencement of construction is important. The construction activities and its critical components, such as earth moving, should be timed during dry season where there is less likelihood of rain that can erode the soil.

The coming in and out of visitors/occupants to and from the bathing establishment may affect the environmental condition (land, water and air), sanitation, and consequently, people's health. There will be an alteration of landscape, displacement of wildlife, solid and liquid wastes generation, increase in noise level, and possible influx of migrants/ settlers into the area, contributing to population increase.

Since the island will be made into bathing establishment, it may be proper to provide protection to the marine life nesting in the island. Strict implementation of rules regarding marine protection must be observed to preserve the pristine greenness of the island. Such moves would also save the cleanliness and clearness of waters surrounding the island. Complete environmental monitoring must be done to check whether policies are strictly implemented and followed.

The mitigating measures should be followed to avoid or minimize untoward environmental consequences particularly on the soil, water, wildlife, and population. Some of the mitigating measures are: regulate entry of migrants into the community; implement effective waste minimization and management practices; construct drainage facilities; monitor the carrying capacity of the bathing establishment so that the noise level is kept at tolerable level; use cleaner fuel or low sulfur content to minimize NO₂ and SO₂ emission from pump boat and watercraft engines; implement existing laws and ordinances; and monitor regularly the water quality to properly ascribe environmental changes to certain conditions or actions.

▪ **Market and Utilization**

The natural environment of Boayan Island will draw more visitors to enjoy both nature and development. In addition, the following programs and strategies will be implemented in this project: a) advertising (services will be made available to guest and visitors either local or foreign tourist. Advertising will be conducted locally and abroad to bring more visitors, guests and tourists); b) used of private and government promotions (promotion of bathing establishment shall be made thru local government for information and networking. Likewise, other prospective visitors shall be contacted through friends, associates and thru web site); and c) pricing structure (the pricing structure shall be evaluated and analyzed later upon completion of the establishments).

Bathing establishment project aims to a sustainable tourism taking into consideration to value the concept of equality and partnership, having unity with nature. Tourism is sustainable when it dignifies and makes people proud of it, satisfies the visitors and promotes well-being.

One of the principles of sustainable tourism is that tourism must consider its effects on cultural heritage and traditional elements, activities and dynamics of each local community. These elements must at all times play a central role in the formulation of tourism strategies. Environmentally and culturally vulnerable spaces, both now and in the future shall be given special priority in the matter of technical cooperation and financial aid for sustainable tourism development.

- **Organization**

The proposed bathing establishment project at Boayan Island of Palawan Cove Corporation covers an area of 24 hectares. The Resort Manager would be the proponent and twenty-seven (27) resort staffs will be hired to cater the needs of guests and visitors. They will be employed as marketing officer, planning officer, accountant, boat crew, kitchen staff, security officer, fire and safety officer, personnel officer, front desk, housekeeping, ground keeping, maintenance staff, senior and junior staff. The specified position will be assigned to a qualified applicant.

- **Financial Requirement**

A total of PhP 147,711,783.96 will be needed to carry out this bathing establishment project.

CHAPTER 1:

INTRODUCTION

The Municipality of San Vicente is one of the municipalities on the northern part of the Province of Palawan which aims for socio-economic growth through the development of its tourism industry. San Vicente, in general, offers a unique tourism destination that attracts thousands of tourists to come, particularly at Poblacion which continue to be a popular destination of tourists. An array of tourist resorts lines within the vicinity of the beaches of the barangay proper.

San Vicente could achieve its visions for the municipality in the years to come with responsible service developers considering an excellent environmental management. San Vicente shall be a municipality of empowered and peaceful citizens living in an atmosphere of justice, freedom and social equity, actively participating in and enjoying the benefits of a balanced agro-industrialized tourism economy within an ecologically stable environment and resilient ecosystems.

At present with what it has strived for and the outcome it has produced, not only at the local level but also to the external communities, there is no doubt that the Municipality of San Vicente may one day become a major center of agricultural and industrial trade not only within the Municipality or within the Province of Palawan but probably at the regional level. This is deemed highly probable "due to its potential production capability of rice, of highly value crops, of livestock and fisheries, and other goods which may be developed/produced/manufactured and/or processed in the area". With the zeal and enthusiastic desire for improvement of its local government units and the communities thereat, such vision could be a reality.

The LGU of San Vicente does not cease looking for new avenues to further enhance its socio-economic growth. Such desire is reflected in its Comprehensive Land and Water Use Plan of the Municipality for 2009-2020. As part of the Northern Ecotourism Circuit in the Northern Part of the Province of Palawan, San Vicente deems it wise to enhance the development of the tourism industry as a "come on" factor of the area. Its natural scenic beauty, its verdant forest resources, pristine beaches, abundant resources of flora and fauna, outstanding diving sites, majestic mountains and other environmental attractions, make the municipality a very high potential in the tourism industry. Moreover, the success of tourism as an industry does not only depend on what its environment and products can offer but also on the attitude of its people who will manage and render its services. It could be further strengthened with the friendly and accommodating people of the place and energetic government leadership for which the Municipality of San Vicente offers.

In view of the development thrust of the Municipality of San Vicente, the proponent, Palawan Cove Corporation (PCC) is putting its stakes to develop a bathing establishment in the north-western part of the Boayan Island, Barangay Poblacion, San Vicente, Palawan.

This Comprehensive Development and Management Plan (CDMP) of PCC will serve as a basis of the over-all framework in the development of the Municipality of San Vicente. It is not only concerned with the development of the physical structure of the municipality, but also the other sectors, namely: the social sector, the economic sector, the infrastructure and public utilities sectors, the institutional sector, the physical/environmental management sector, and the local and fiscal management sector.

The approval of the CDMP will boost the tourism industry and help in the socio-economic development of the area through local employment, improvement of infrastructure facilities, revenue collection and foreign exchange.

CHAPTER 2:

OBJECTIVES

2.1 General Objectives

Pursuant to Memorandum Order No. 2011-02, in order to rationalize the granting of rights over forest land for Tourism purposes, the approval of the Forest Land Use Agreement for Tourism Purposes (FLAg-T) requires the submission of a Comprehensive Development and Management Plan (CDMP).

Generally, the objective of the Comprehensive Development and Management Plan (CDMP) for the proposed bathing establishment project at Boayan Island of Palawan Cove Corporation (PCC) is to conserve and manage an island ecosystem. It is also one of the means to enhance the development of the tourism industry of San Vicente and contribute to the socio-economic growth of the municipality in general and Barangay Poblacion in particular.

2.2 Specific Objectives

Specifically, the CDMP aims to:

- a) Develop and sustain a viable tourism program basically focusing on eco-tourism, environmental conservation and community development within the physical carrying capacity of the area;
- b) Assure well-maintained environment where domestic and foreign tourists can appreciate nature and enjoy outdoor recreation;
- c) Protect the coastal resources and other marine habitats;
- d) Promote earning potentials for local communities, promoting small-scale local business ventures; and
- e) Uplift the socio-economic condition of the Municipality in general and the Island and Barangay Poblacion in particular, through: employment opportunities; improve revenue through taxation; opening up and/or improving livelihood and/or entrepreneurial opportunities; enhance establishment and/or improvement of infrastructure facilities; and enhancing the general well-being of the people of the area.

CHAPTER 3:

DESCRIPTION OF THE PROJECT AREA

3.1 General Information

3.1.1 Background of the Area

The Municipality of San Vicente, Palawan

San Vicente is one of the 23 municipalities in the province of Palawan, with a total land area of 165,797.6525 hectares. San Vicente used to be a sitio of Barangay Kemdeng, then a barangay under Puerto Princesa City. The municipality of Puerto Princesa passed a resolution in May, 1972 defining the areas to be given to San Vicente while the Municipal Council of Taytay also passed a similar resolution in June, 1972 apportioning some of its territories to San Vicente. Thus, then Congressman Ramon Mitra, Jr. sponsored a bill which enacted into law the creation of a separate Municipality of San Vicente. The early settlers were from Manamoc Island of the Municipality of Cuyo, a northern island municipality. Other early settlers were the Agutaynins and Cuyunins.

Agriculture, commerce and trade opportunities are generally in the southern part of the Province of San Vicente, whereas, tourism and other related businesses are the main attractions in the north. In the past few years, the President of the Philippines declared Southern Palawan as the mining district and Northern Palawan as the tourism district.

San Vicente is fast developing into a tourism center in Palawan. There is an airport being constructed in Barangays Poblacion and New Agutaya. Once finished, the airport will be the biggest attraction for tourists going to Northern Palawan as it will spare them from travelling uncomfortably for hours by land from Puerto Princesa to reach the tourist spots and attractions of San Vicente and the other northern towns. A number of other tourism projects are in progress in other parts of the municipality.

The municipality is richly endowed with lush forest growth, translucent seas with 14 kilometers white sand beaches, rivers and falls that are essential water sources, attractive areas for marine development, alluring diving sites, agricultural development potentials, accommodating people and energetic leadership. These are essential factors for the municipality's socio-economic growth and the enhancement of eco-tourism development of the municipality.

With the declaration of the President of the Republic to make Northern Palawan a tourist destination, the local government of the Municipality of San Vicente is exerting much effort to entice local and foreign investors into the area to enhance the development of the Municipality's tourism industry and other potentials for growth.

The Boayan Island

Boayan Island is within the jurisdiction of Barangay Poblacion, in the Municipality of San Vicente. It is the largest island community of San Vicente with an aggregate area of 1,327.31 hectares. It has five sitios, namely: Pulang Bato, Daplac, Bakaw, Kasoyan, and Village.

Principally, fisherfolks and their families inhabit Boayan Island. However, since they engaged in fishing, the area are already overfished and abused. The fisherfolks go into alternative options, such as, seaweed farming and into slash and burn practices ("Kaingin") farther uphill above the sitio or in other parts of Boayan Island to help family sustain through difficult seasons.

Other alternative livelihood sources that people of Boayan deem to help them during difficult times are small-scale poultry and livestock farming, backyard organic vegetable farming; and services for eco-tourism.

3.1.2 Location of the Area

The bathing establishment project is located in Boayan Island, Sitio Daplac, Barangay Poblacion, San Vicente, Palawan and covers an area of 24 hectares.

The Municipality of San Vicente is located on the northwestern side of the main island of Palawan. It is bounded on the northeast by the Municipality of Taytay, on the east by the Municipality of Roxas, on the southwest by Puerto Princesa City, and on the northwest by the South China Sea.

Sustainable development of Boayan Island is the major planned of PCC. The environmental setting which is the main attraction of the Island will be enhanced and preserved. Activities will be consistent with the aspect of tourism paving the way to become the thriving economic sector.

The Lot 1 property of PCC is bounded by the coordinates 10° 34' 43.3120" to 10° 34' 42.7073" north latitude and 119° 10' 14.8003" to 119° 10' 16.4341" east longitude and Lot 2 property is bounded by the coordinates 10° 34' 22.9121" to 10° 34' 22.7987" north latitude and 119° 10' 26.1216" to 119° 10' 30.5479" east longitude.

Figures 4 and 5 show the topographic basemap of Boayan Island and the location of the Bathing Establishment Project.

3.1.3 Accessibility

From Puerto Princesa, San Vicente could be reached via land transport over 194 kilometers of concrete and all-weather gravel paved roads. It would take approximately four (4) hours travel time by shuttle vans or by passenger bus. However, within the Municipality or barangays of San Vicente, the basic means of transportation are the single motorcycle and tricycles. The island communities of San Vicente could be reached by pump boats and medium sized marine vessels. To enhance the promotion of tourism industry in the Municipality, the LGU of San Vicente improves the former airstrip by expanding the existing airstrip from 800 meters length to 1200 meters and from 60 meters width to 120 meters to accommodate a 50 seater aircraft. The project is embodied in the Municipal Comprehensive Land and Water Use Plan.

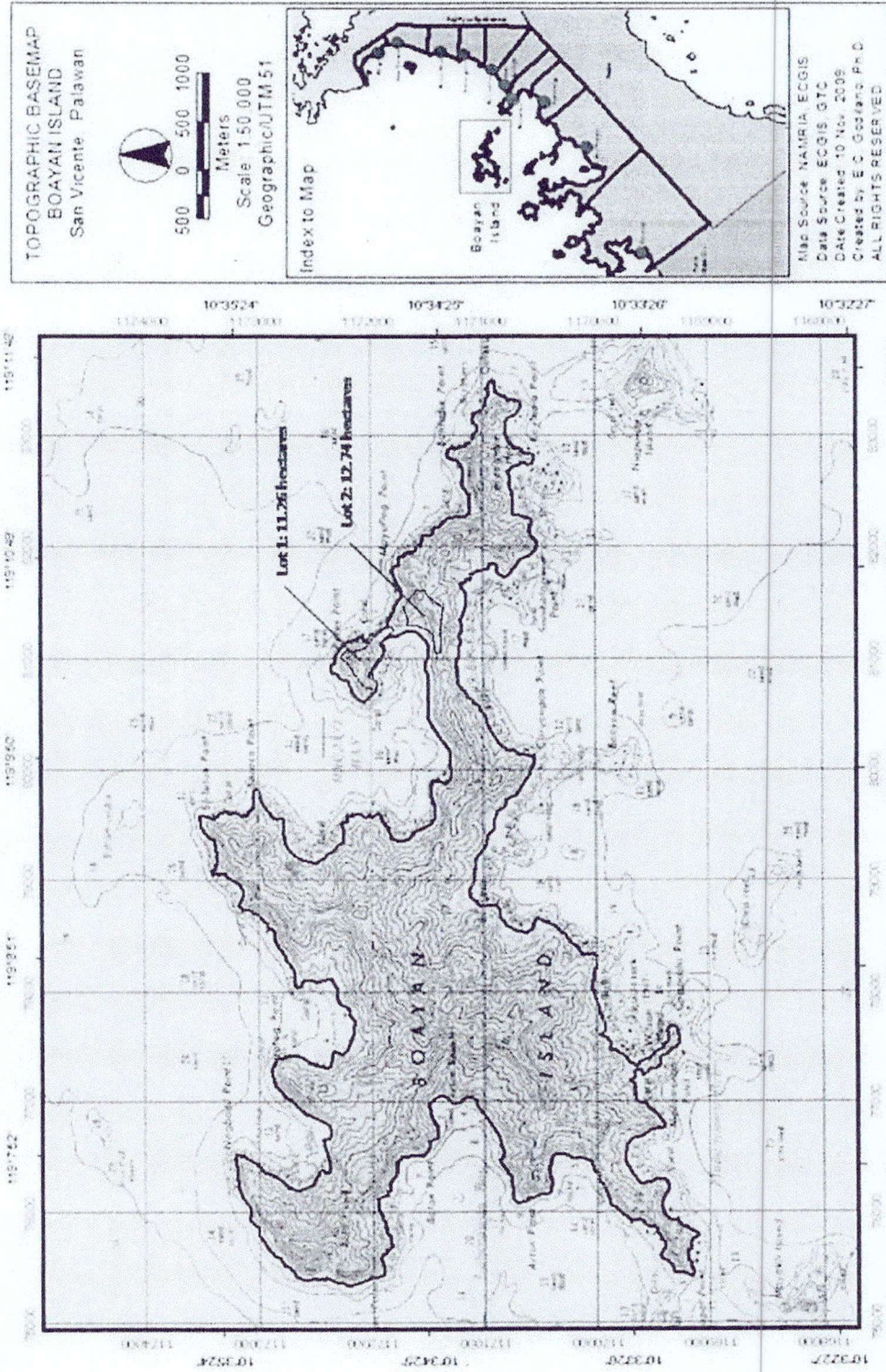


Figure 4. Topographic Basemap of Boayan Island.

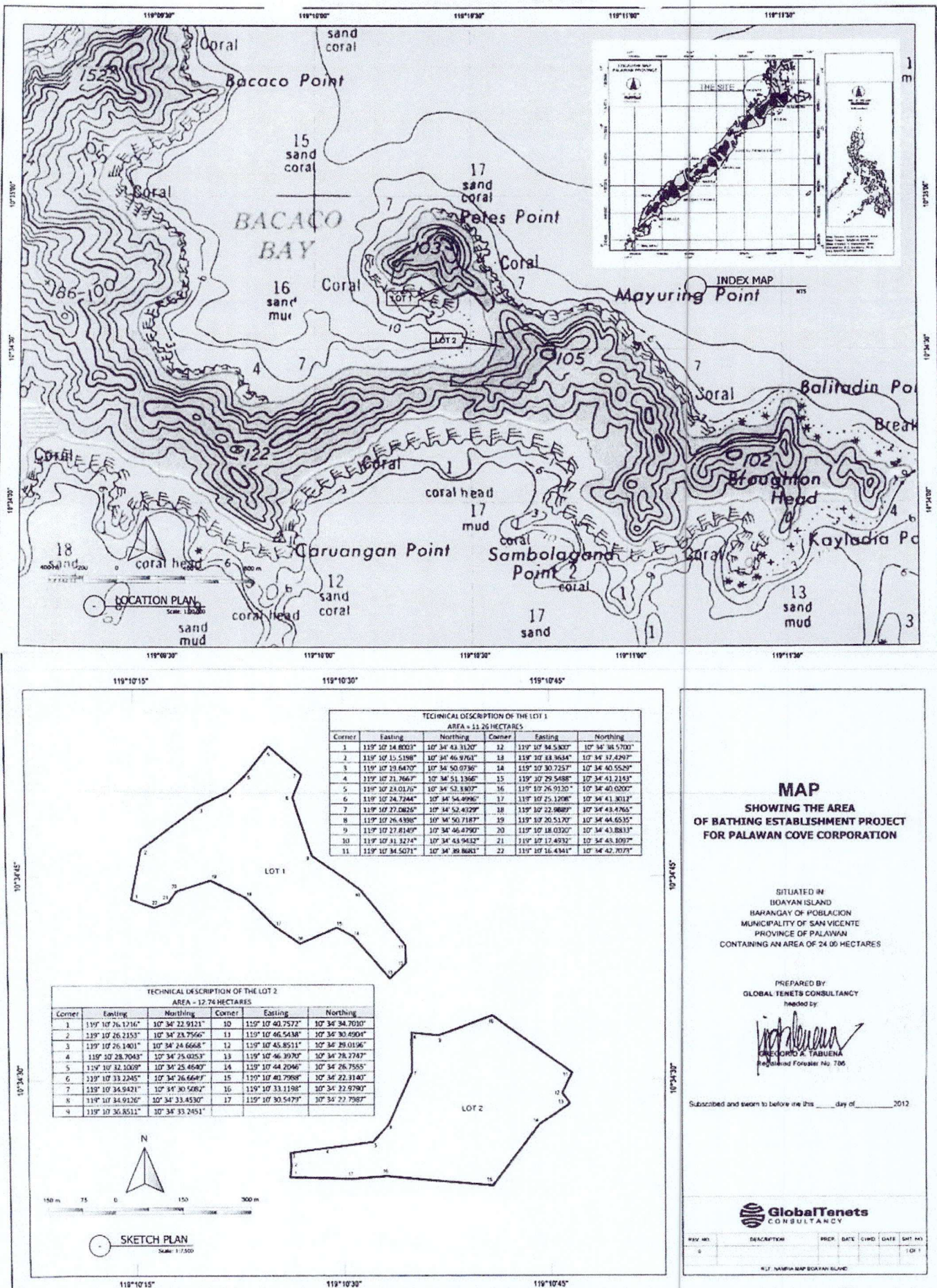


Figure 5. Location Map of the Bathing Establishment Project.

3.2 Physical Environment¹

3.2.1 Land Area

The Municipality of San Vicente has a total land area of 165,797.65 hectares distributed among its ten (10) barangays.

The area under study is within the jurisdiction of Barangay Poblacion which is about 2.63% of the total land area of San Vicente (**Table 3.1**). The mountainous land from northeast to southeastern portion of the municipality serves as its natural boundary from the adjacent municipalities.

Table 3.1. Land Area of San Vicente, Palawan.

Barangay	Area (ha)	% of Municipal Land Area
Alimanguan	4,295.73	2.59
Binga	1,355.45	0.82
Caruray	127,496.04	76.90
New Agutaya	6,078.26	3.67
New Canipo	2,708.45	1.63
Kemdeng	5,027.81	3.03
Poblacion	4,361.01	2.63
Port Barton	14,474.90	8.73
San Isidro*	(4,552.96)	
Sto. Niño*	(3,599.88)	
TOTAL	165,797.6525	100.00

*Barangays San Isidro and Sto. Niño were still parts of Barangays Alimanguan and New Agutaya respectively, during the Cadastral Survey of 1988.
Source: CBMS, 2008

It is said that aside from these inland areas, twenty-two (22) islets scattered along South China Sea coastal waters are also within the jurisdiction of San Vicente. The mountainous land from northeast to southeastern portion of the municipality serves as its natural boundary from the adjacent municipalities.

3.2.2 Topography and Slope

The terrain of San Vicente is generally characterized as undulating to rolling with elevation ranging from zero to 703 meters above sea level. Except for some isolated areas, the terrain is generally rugged due to the vast Pagdanan ranges which traverse the entire municipality. Pinagmangalucan, New Agutaya is the lowest part and a portion of Pagdanan range between Poblacion is the highest point.

Figure 6 shows the relief and bathymetric map of Boayan Island.

3.2.3 Soils

There are four major types of soil in the Municipality of San Vicente, namely: the Sibuyan Silty Clay, found in land over 5 - 18° slopes and in around 6% of total land area (5,042 ha); the Silty Clay Loam, found in 5 - 18° slopes; Coron Clay Loam, found in areas with 18 - 30° slopes and in around 7% of the total area (6,012 ha); and the Mountain Soil which is found in almost 85% of total land area (140,930 ha) (**Table 3.2**).

¹ Based on the Comprehensive Municipal Land and Water Use Plan for 2001 -2010, Socio-Economic Profile Report of San Vicente, Palawan dated 2005 and ECAN Zones Management Framework and Guidelines: Municipality of San Vicente. May 2006.

Initial Environmental Examination (IEE) Report prepared by Global Tenets Consultancy. September 2009.

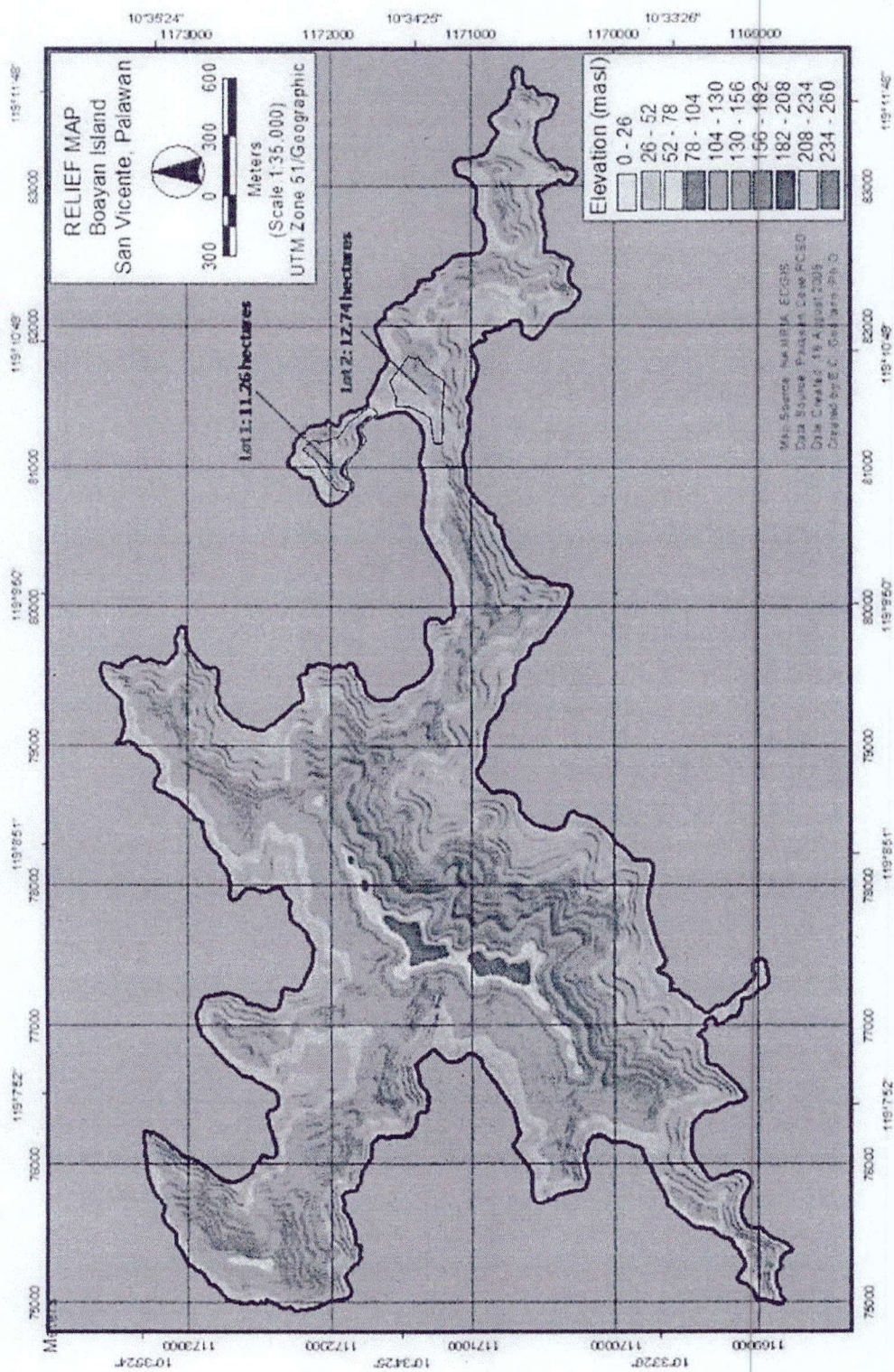


Figure 6. Relief and bathymetric basemap of Boayan Island.

Table 3.2. Types of soil of the Municipality of San Vicente, Palawan.

Soil Classification	General Location	Suitability	Limitations
Sibuyan Silty Clay	Coastal plains/ Lowland areas. Found in lands generally with 5 – 18% slope; and around 6% (5042 hectares) of the total area of the municipality.	Suitable for rice cultivation because it retains water good for rice.	Poor drainage capability, thus drainage should be provided in addition to good farm management practices.
Silty Clay Loam	Upland areas. Found in lands generally with 5 – 18% slope; and around 6% (5042 hectares) of the total area of the municipality.	Moderately good for upland crops but can be cultivated safely if a carefully planned combination of farm management practices are applied.	Prone to erosion when improperly cultivated.
Coron Clay Loam	Found in 18 to 30% slope and in around 7% (6,114.54 hectares) of the total land area of the municipality.	Land good enough for occasional cultivation if handled with care. Best suited for pasture.	Susceptible to erosion.
Mountain Soil	Found above 30% slope and in almost 85% of the total land area (140,929.98 hectares). It dominates the soil type of the municipality.	Can be used for grazing and forestry if handled with care. Also best suited for wildlife or recreations.	Not subjected to intense cultivation due to its shallow nature and tendency to erode easily.

3.2.4 Land Use and Classification

Of the 165,797.6525 hectares of San Vicente, the unclassified public forest land has the largest portion occupying 94,504.6619 hectares followed by timberland areas with 51,397.2723 hectares. Alienable and Disposable Lands (A & D) comprise only of 19,895.7183 hectares (Table 3.3).

Table 3.3. General land classification.

Land Classification	Area (ha)	% of Total Area
Alienable or Disposable Land (A & D)	19,895.72	12.00
Forest Land/Timberland	51,397.27	31.00
Unclassified Public Forest Land	94,504.66	57.00
Total	165,797.65	100.00

Source: ECAN Report, 2006

The general land uses of San Vicente are classified into Core Zones, Restricted Use Zone, Controlled Use Zone, Traditional Use Zone and Multiple Use Zone. The Multiple Use Zone are classified into Network of Protected Area covering 9,454.74 hectares, Agricultural land having 2,391.72 hectares covered area and Built-up Area that covers 572.26 hectares which are subdivided into Airstrip and Swamps/Mangroves areas (Figure 7).

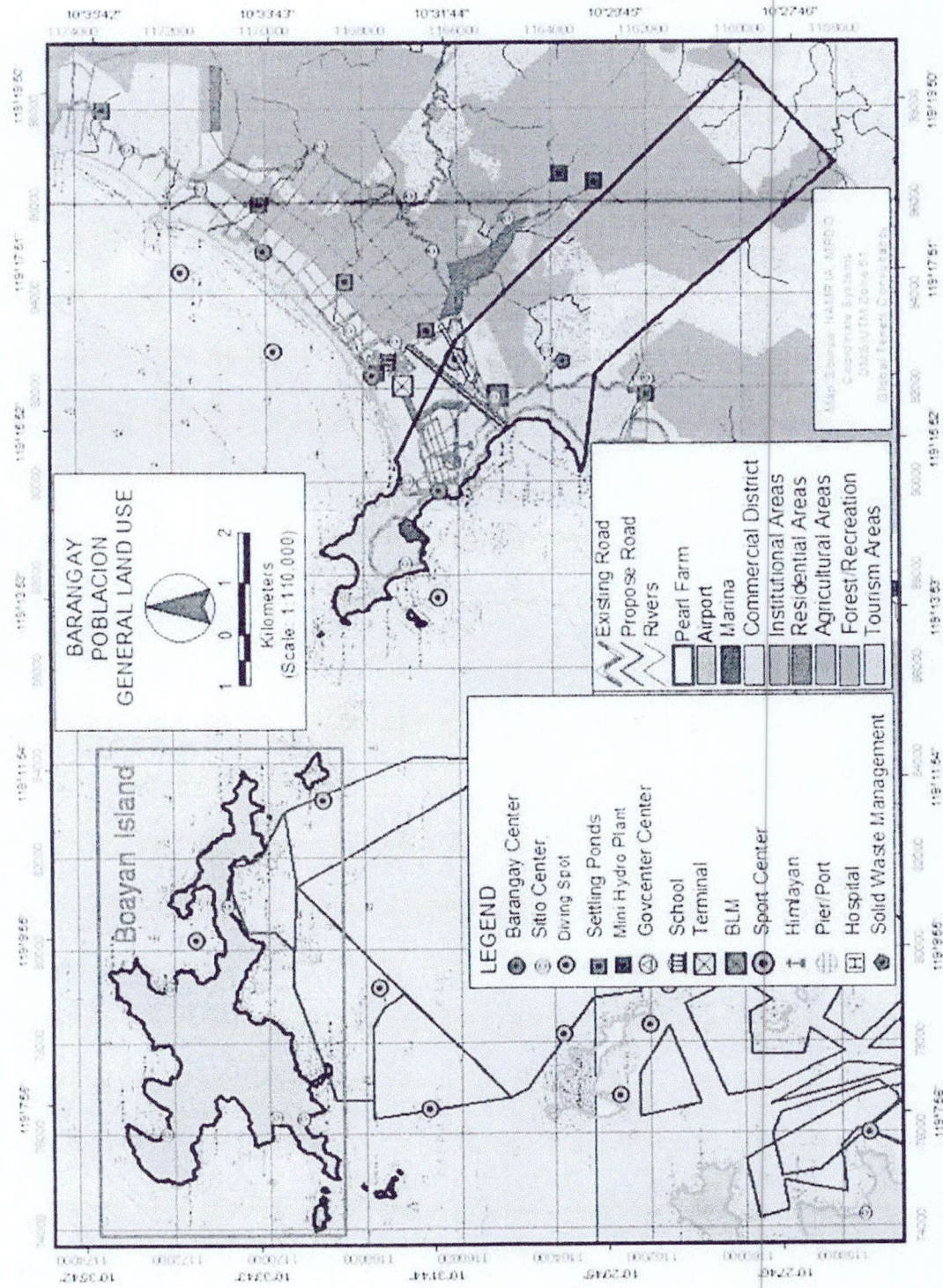


Figure 7. Land use map of Barangay Poblacion.

3.2.5 Land Capability

Areas with slopes below 18% and presently occupied by brush land and grassland should be evaluated for their suitability for reclassifications into A & D lands to support the expansion of agriculture and urban development in the municipality of San Vicente.

3.2.6 Climate and Rainfall

The climate of the municipality falls under Type I. It is dry for six (6) months that is December to May; while rainy season from June to November. March has been observed to be the driest month, while August has been the wettest.

Northeast winds prevail in November to May, while the southwest winds prevail during June to December.

The least recorded rainfall of the municipality was 0.3mm during the month of February and the maximum was 605.10mm during the month of November.

During the *habagat* (southwestern monsoon winds), the waves along the coastal water of the beaches of Poblacion could be excellent spot for windsurfing and surfboard riding. When the *amihan* (northern winds) come, the coastal waters become calm, thus, it could be excellent for waterskiing activities.

3.2.7 Water Resources

San Vicente has a total of 29 rivers, 7 of which are navigable by bancas. Of the navigable rivers, four (4) are perennial, namely: Caruray River (2.5 kilometers), Decala River (0.4 kilometers), Binga River (0.7 kilometers), and New Agutaya River (0.6 kilometers) with an aggregate length of 4.2 kilometers. The other three (3) rivers are intermittent in nature or are sometimes drying up. Three important rivers could also be noted at Port Barton, namely the Itaytay River and Cashew River in the southern and northern part of sitio proper of Port Barton, respectively, and the Pamuyan River at Sitio Pamuyan.

The Municipality of San Vicente has also important bays which are considered very rich fishing grounds. These are the Imuruan Bay, Kemdeng Bay, Pagdanan Bay, Mayday Bay, Jibbon Bay, and Caydoras Bay.

The other important water resources of the municipality are the Pamuyan and Port Barton Falls in Port Barton and the Little Baguio Falls at Kemdeng.

3.3 Biological Environment²

Plants and animals as elements of ecosystem are indicators of environmental quality and richness or productivity. Large scale disturbances or destruction on habitats would reduce the ecosystems ability to perform their environmental functions and their services to human communities. This component of the bio-physical aspect was conducted with the aim to determine biodiversity profile and existing vegetation types and thus serve as benchmark data for species richness/poorness of the area based on population indices.

² Based on the Comprehensive Municipal Land and Water Use Plan for 2001 -2010, Socio-Economic Profile Report of San Vicente, Palawan dated 2005 and ECAN Zones Management Framework and Guidelines: Municipality of San Vicente. May 2006.

Initial Environmental Examination (IEE) Report prepared by Global Tenets Consultancy. September 2009.

San Vicente is a well-developed, mixed lowland rain forest where the rolling hills around the Pagdanan Range serve as a domicile of high density forest covers like the *Dipterocarpus gracilis* (Panau) and the *Dipterocarpus hasseltii*. As far as the flora is concerned, a rich liana is also found in the thick forest of the municipality. The shrub and herb layer is dense only along the river banks. Within the forest, curcilio species, the tree fern, *Pyrosia longifolia* and *Tactaria irregularites* are common in the area.

The minor forest products of the municipality come from Sahing, Balao, Nipa leaves, Bamboo (i.e. Kawayan, Pating, Buho, Tiring (poles), Rattan, Anibong Pandan and Almaciga.

The inland areas of Barangay Poblacion boast of rich forest which serves as a habitat to various species of flora and fauna. With its desire to pursue the development of the tourism industry in the various areas of barangay, such as, the proposed bathing establishment in Boayan Island.

3.3.1 Timber Stand Inventory

An inventory of timber species in the proposed bathing establishment project was done using sampling method. Five (5) sample plots of 250 m² or 10% of the total land area of the proposed project were established at random locations (Figure 8). These sample plots were distributed with the intension that the different types of forest within the area are represented. Forest types therein included residual and enrichment forests.

The sample plots were also delineated on the ground and their elevations using a Global Positioning System (GPS) instrument were taken (Table 3.4). Hence, the sample procedure strip sampling was adopted within the sample plots in order to establish statistical data on the timber stand of the whole area at the vicinities of the project site. All trees 5 cm and bigger in diameter were identified as to species and their corresponding heights were recorded. The volume was then computed based on the Regional Volume Equation for Dipterocarp and Non-dipterocarp Species.

Table 3.4. Coordinates of timber inventory sampling plots within the proposed Bathing Establishment Project (Lot 1 & Lot 2), Boayan Island, Sitio Daplac, Brgy. Poblacion, San Vicente, Palawan.

Sampling Plot No.	Longitude	Latitude
Lot 1		
1	119° 10' 26.8"	10° 34' 41.3"
2	119° 10' 25.4"	10° 34' 44.6"
3	119° 10' 23.4"	10° 34' 47.5"
4	119° 10' 24.2"	10° 34' 49.1"
5	119° 10' 21.5"	10° 34' 47.5"
Lot 2		
1	119° 10' 27.8"	10° 34' 23.7"
2	119° 10' 28.8"	10° 34' 23.5"
3	119° 10' 30.0"	10° 34' 23.6"
4	119° 10' 32.2"	10° 34' 23.8"
5	119° 10' 34.3"	10° 34' 24.0"

Timber Stand Composition in the Area

The three parameters used in the determination of timber stand density are: 1) number of trees per hectare; 2) volume per hectare, and 3) species percentage distribution.

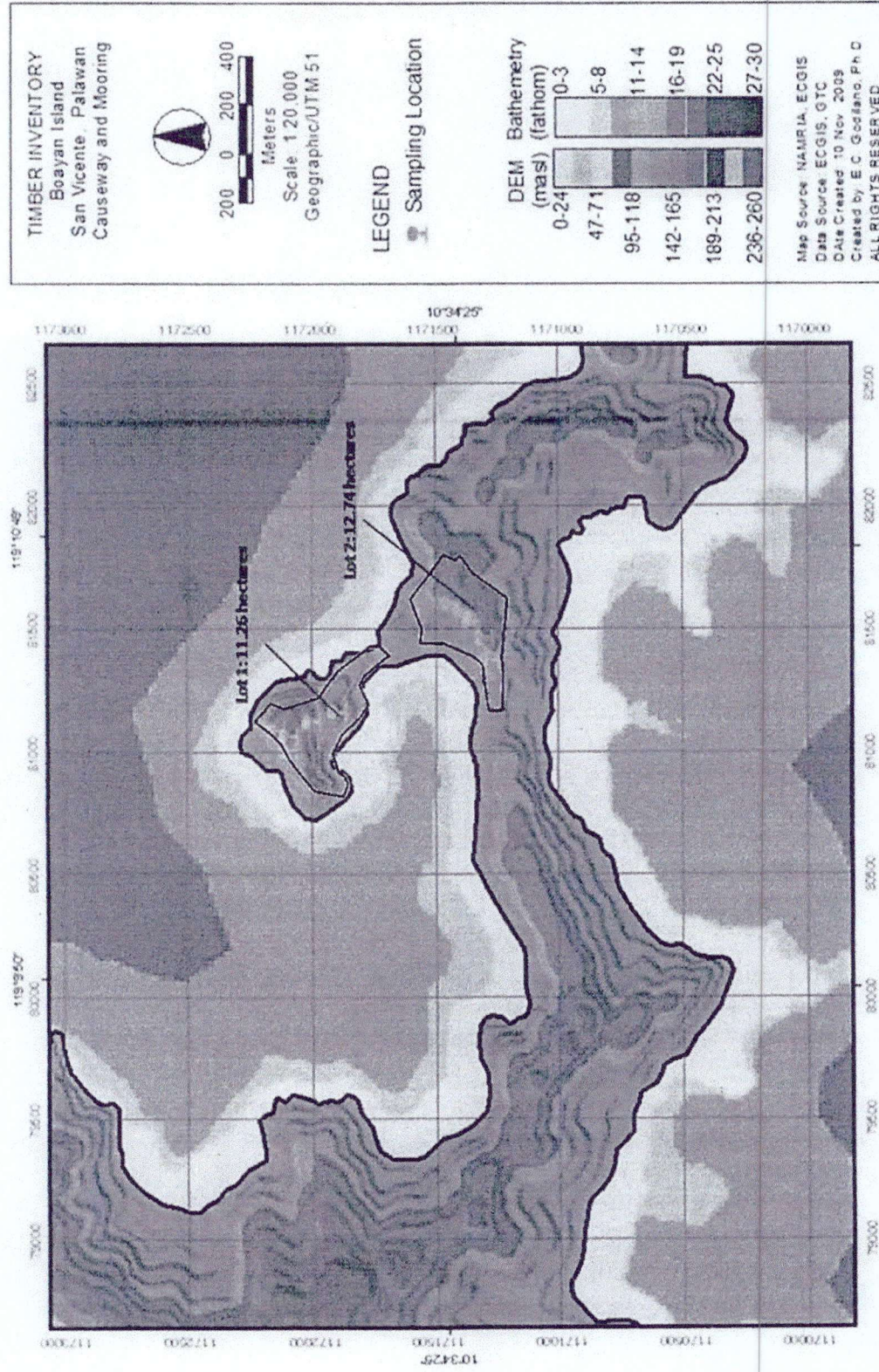


Figure 8. Location of timber inventory sampling plot.

As per inventory, there were 25 forest tree species found in Lot 1 area. A total of 398 trees with diameter at breast height (dbh) 5 cm and bigger were inventoried. However, they differed in number or population per unit area. Myrtaceae, Sapotaceae and Anacardiaceae species are the most dominant species in the area.

Three hundred ninety eight (398) trees with 5-50 cm diameter that were inventoried had a total volume of 22.293 m³. Trees with diameter class of 5 cm consisted of 154 trees/ha with 1.411 m³/ha. As the diameter class increased from 10 to 50 cm, average tree density and volume correspondingly decreased from 72 trees/ha to 1 tree/ha and 2.597 m³/ha to 0.395 m³/ha.

Moreover, there were 22 forest tree species found in Lot II. A total of 337 trees with diameter at breast height (dbh) 5 cm and bigger were inventoried. However, they differed in number or population per unit area. The most dominant species found there in are Myrtaceae, Sapotaceae and Alangiaceae.

About three hundred thirty-seven (337) trees with 5-65 cm diameter that were inventoried had a total volume of 19.101 m³. Trees with diameter class of 5 cm consisted of 175 trees/ha with 1.350 m³/ha. The average tree density and volume correspondingly decreased from 57 trees/ha to 1 tree/ha and 2.792 m³/ha to 0.374 m³/ha, as the diameter class increased from 10 to 65 cm.

The number and volume of trees per hectare and the distribution by species are presented in Table 3.5 while Table 3.6 shows the size class and volume distribution of trees.

Table 3.5. Stand composition of Barangay Poblacion, San Vicente, Palawan.

Common Name	Scientific Name	Family Name	Total		% Distribution	
			N	V	N	V
Lot 1						
Malabayabas	<i>Tristnopsis decorticata</i>	Myrtaceae	111	3.209	27.889	14.395
Bansalagin	<i>Mimusops parvifolia</i>	Sapotaceae	48	3.873	12.060	17.374
Kasui/Cashew	<i>Anacardium occidentale</i>	Anacardiaceae	32	2.234	8.040	10.020
Milipili	<i>Canarium hirsutum</i> ssp. <i>hirsutum</i> var. <i>hirsutum</i>	Burseraceae	24	1.268	6.030	5.689
Salngan	<i>Blumeodendron philippinense</i>	Euphorbiaceae	22	1.670	5.528	7.493
Balihud	<i>Buchanania insignis</i>	Anacardiaceae	21	1.242	5.276	5.570
Taipo	<i>Polyosma apoensis</i>	Saxifragaceae	20	0.835	5.025	3.747
Kalmon	<i>Dillenia philippinensis</i>	Dilleniaceae	15	0.220	3.769	0.986
Nato	<i>Palaquium luzoniense</i>	Sapotaceae	13	0.740	3.266	3.317
Malapapaya	<i>Polyscias nodosa</i>	Araliaceae	12	0.814	3.015	3.651
Bago	<i>Gnetum gnemon</i>	Gnetaceae	10	0.264	2.513	1.186
Karnagong	<i>Diospyros discolor</i>	Ebenaceae	7	0.214	1.759	0.960
Paitan	<i>Syzygium costulatum</i>	Myrtaceae	4	0.044	1.005	0.199
Dapdap	<i>Erythrina orientalis</i>	Fabaceae	3	0.069	0.754	0.310
Madbad	<i>Zanthoxylum myriacanthum</i>	Rutaceae	3	0.023	0.754	0.104
Saling-saling	<i>Canarium odontophyllum</i>	Burseraceae	3	0.022	0.754	0.098
Balete	<i>Ficus balete</i>	Moraceae	2	0.368	0.503	1.651
Narra	<i>Pterocarpus indicus</i> forma <i>indicus</i>	Fabaceae	2	0.079	0.503	0.355
Taluto	<i>Pterocymbium tinctorium</i>	Sterculiaceae	2	0.140	0.503	0.628
Apitong babui/ Lomarau	<i>Swintonia foxyworthyi</i>	Anacardiaceae	1	0.152	0.251	0.683
Batino	<i>Alstonia macrophylla</i>	Apocynaceae	1	0.004	0.251	0.016
Duguan	<i>Myristica philippinensis</i>	Myristicaceae	1	0.119	0.251	0.536
Galasan	<i>Garcinia venolusa</i>	Guttiferae	1	0.156	0.251	0.700
Ipil	<i>Intsia bijuga</i>	Fabaceae	1	0.219	0.251	0.984
Lapnisan	<i>Polyalthia oblongifolia</i>	Annonaceae	1	1.219	0.251	5.466
Unidentified			38	3.095	9.548	13.883
Total			398	22.293	100.000	100.000
Average per ha			318.400	17.835		

Table 3.5. Con't...

Common Name			Scientific Name		Family Name		Total		% Distribution	
			N		V		N		V	
Lot 2										
Malabayabas		<i>Tristaniopsis decorticata</i>		Myrtaceae	68	1.927		20.178		10.090
Putian		<i>Alangium javanicum</i>		Alangiaceae	51	1.960		15.134		10.263
Nato		<i>Palaquium luzoniense</i>		Sapotaceae	36	2.471		10.682		12.934
Katmon		<i>Dillena philippinensis</i>		Dilleniaceae	25	0.381		7.418		1.996
Bansalagin		<i>Mimusops parvifolia</i>		Sapotaceae	20	2.005		5.935		10.496
Kalingag		<i>Cinnamomum mercadoi</i>		Lauraceae	17	1.623		5.045		8.496
Binunga		<i>Macaranga tanarius</i>		Euphorbiaceae	7	0.166		2.077		0.870
Kasui/Cashew		<i>Anacardium occidentale</i>		Anacardiaceae	6	0.310		1.780		1.621
Apitong babui		<i>Swintonia foxworthyi</i>		Anacardiaceae	4	0.544		1.187		2.847
Salngan		<i>Blumeodendron philippinense</i>		Euphorbiaceae	3	0.323		0.890		1.690
Kalantas		<i>Toona calantas</i>		Meliaceae	3	0.081		0.890		0.422
Tukod langit		<i>Neonauclea calycina</i>		Rubiaceae	2	0.040		0.593		0.209
Malapapaya		<i>Polyscias nodosa</i>		Araliaceae	2	0.205		0.593		1.075
Ulayan		<i>Myrica nagi</i>		Myricaceae	1	0.097		0.297		0.510
Narra		<i>Pterocarpus indicus forma indicus</i>		Fabaceae	1	1.755		0.297		9.186
Milipili		<i>Canarium hirsutum</i>		Burseraceae	1	0.005		0.297		0.028
Mangga		<i>Mangifera indica</i>		Anacardiaceae	1	0.117		0.297		0.612
Magabuyo		<i>Celtis luzonica</i>		Ulmaceae	1	0.024		0.297		0.128
Kamagong		<i>Diospyrus discolor</i>		Ebenaceae	1	0.250		0.297		1.306
Ipil		<i>Instia bijuga</i>		Caesalpinianeaceae	1	1.030		0.297		5.390
Hauli		<i>Ficus septica var. septica</i>		Moraceae	1	0.009		0.297		0.046
Baan		<i>Pangium edule</i>		Flacourtiaceae	1	0.165		0.297		0.864
Unidentified					84	3.614		24.926		18.920
Total					337	19.101	100.000		100.000	
Average per ha					269.600	15.281				

Table 3.6. Size class and volume distribution of trees in Lot 1 & Lot 2.

Diameter Class (cm)		Average No. of Trees/ha	Volume (m ³ /ha)
Lot 1			
5		154	1.411
10		72	1.709
15		35	2.023
20		22	2.585
25		12	2.315
30		10	2.597
35		6	1.340
40		4	1.996
45		1	0.395
50		2	1.462
Total		318	17.835
Lot 2			
5		140	1.080
10		57	1.848
15		32	2.154
20		22	2.792
25		4	0.701
30		10	2.495
35		2	0.908
40		1	0.374
60		2	2.106
65		1	0.824
Total		270	15.281

3.3.2 Flora Inventory

Sampling Method

The line transect method was applied to assess the grassland flora within the project site. Seven (7) ten meter transects were laid at random in the area to represent flora of the cove area. All the plants that were covered by line transect were identified and/or sampled and recorded in the tally sheets.

The data were tabulated and organized for the computation of indices for frequency (F), density (D), dominance (Do), from which the relative values (RF, RD and RDo) were calculated. Final results of the computation of the field inventory data are the Importance Value (IV), which reflects the dominant and co-dominant species and other plant species associations.

Flora composition in the area

Grassland flora was not inventoried in the proposed Bathing Establishment Project (Lot 1) due to the absent of grass growths. The area was quite steeper and forested with secondary trees and shrubby trees. Most of the canopy of trees was thick and overlapping. Regrowths grow together with cashew plants at 30-meter elevation while coconuts and tree saplings were present at sea level. Moreover, saplings dominate most of the undergrowths of the shrub lands due to modes of seed dispersal- animals, humans, and environmental influences. Grasses were very insignificant in the area.

But in the Lot 2 of the proposed project, most of the floras present were of forest species and their saplings and few shrubs and sparse grasses though thick growths in open to slightly open areas. Some were regrowths from previous cuttings as shown by old tree stumps among the small saplings. Illustrated in **Figure 9** is the location of the flora inventory in the project site.

A total of 12 species, consisted of 201 individuals, belonging to eight (8) families were encountered during the sampling activity (**Table 3.7**). The most dense species were *Imperata cylindrica* and *Cenotheca lapacea* with RD=20.9435% and 17.6390%, respectively. Dominant species based on importance values (IV) were also *Imperata cylindrica* (IV=28.2575); while co-dominant ones were *Cenotheca lapacea* (IV=26.4856) and *Paspalum notatum* (IV=18.2629); the other plant species had high importance values, ranging from 7.4911 to 16.0362.

Almost all transects showed some grass species, *Cenotheca*, *Imperata*, and *Paspalum* in the forest area and *Cynodon* in the coconut plantation. Some herbs (shrubs), rattan and nito climbers grow in between trees in the ecosystem. These species thrive underneath the canopies of gap tree species where plenty of sunlight penetrates the forest floor. Saplings of Malabayabas dominate most of the undergrowths of the shrub lands. Cashew species only dominate cultivated areas since they were planted for livelihood purposes by the locals or the owners of the land. Ranked importance values showed that grasses still dominated the area as they grew (compete) and spread well underneath plant canopies. *Desmodium*, *Cenotheca* and *Paspalum* being very low and creeping grass species adapted well in the system. It was observed that small and large leaved *Cenotheca* and *Paspalum* were among crevices of gap species competing well with other saplings so with rattan, nito and ginger. However, *Imperata* and *Cynodon* could only grow well in slightly to widely open areas and succumb whenever less light penetrate the canopies. *Cyperus* and *Desmodium* also were able to compete but not as efficient as *Imperata* and *Cynodon*. This may be attributed to the nature of their root structures when it comes to competitiveness. As the inventory was done during the wet months, grasses and herbs may thrive well among forest species due to plenty of moisture for rapid growth. However, it may be possible that during the dry season most of these grasses and herbs would cease in the area and tree saplings would dominate the ecosystem. The high diversity index for species of the cove system was due to many species present within the forest system.

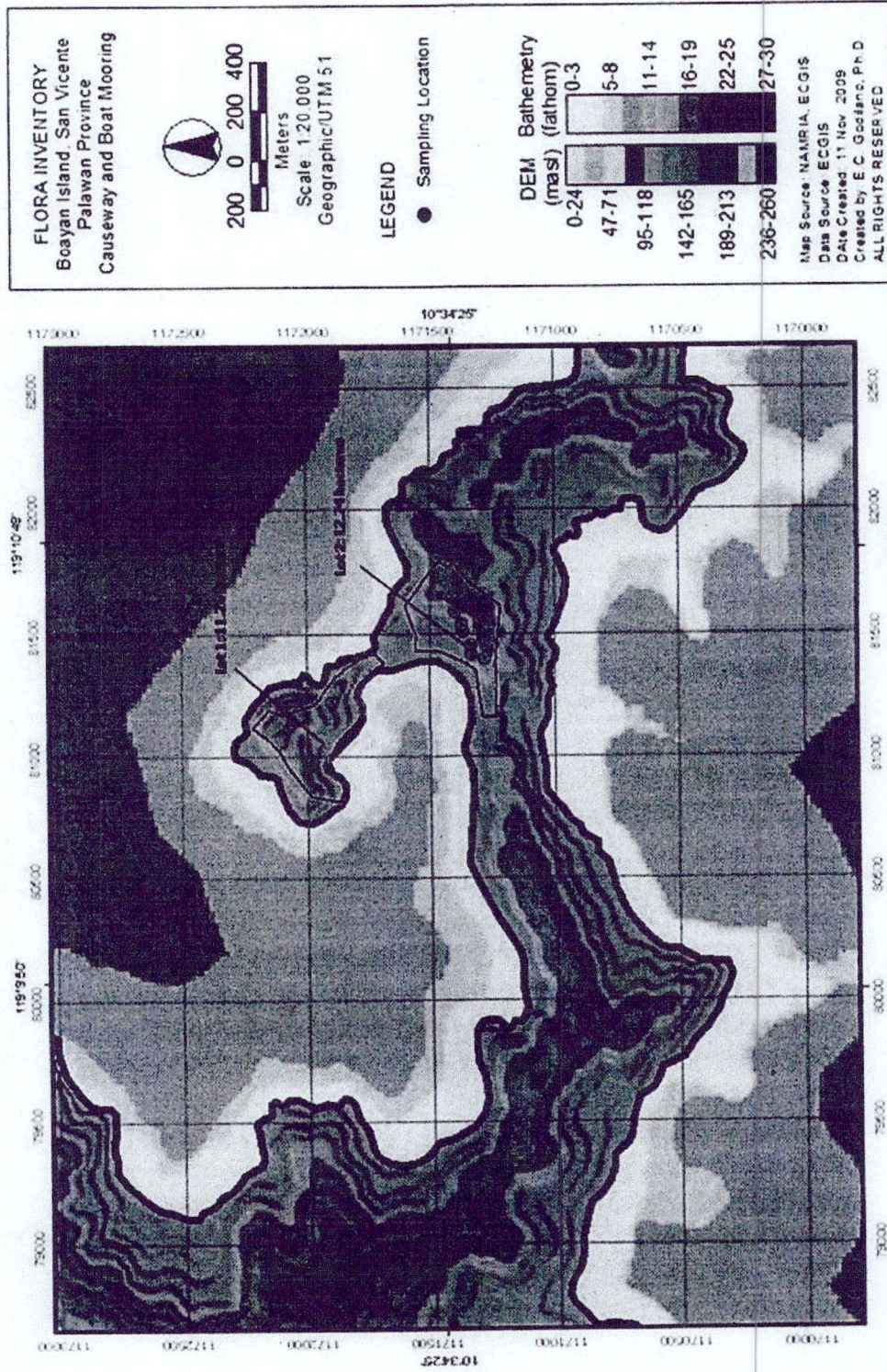


Figure 9. Sampling plot of flora inventory.

Table 3.7. Floristic composition within the proposed Bathing Establishment Project in Boayan Island, Sitio Daplac, Brgy. Poblacion, San Vicente, Palawan.

No.	Family	Scientific Name	Common Name	Total Density	Total Frequency	Total Cover	Relative Density	Relative Frequency	Relative Cover	Importance Value	(ni/Ni)	Ln	Ln(ni/Ni)	Rank
1	Poaceae	Imperata cylindrica	Cogon	1838	7	30	20.9435	3.4826	3.8314	28.2575	0.0383	-3.2619	-0.1250	1
2	Myrtaceae	Tristanopsis decorticata	Malabayabas	193	6	43	2.1992	2.9851	5.4917	10.6760	0.0549	-2.9019	-0.1594	6
3	Poaceae	Paspalum notatum	Carabao grass	860	7	39	9.7995	3.4826	4.9808	18.2629	0.0498	-2.9996	-0.1494	3
4	Poaceae	Centotheca lapacea	Centotheca	1548	7	42	17.6390	3.4826	5.3640	26.4856	0.0536	-2.9255	-0.1569	2
5	Poaceae	Cynodon dactylon	Bermuda grass	600	1	10	6.8368	0.4975	1.2771	8.6115	0.0128	-4.3605	-0.0557	9
6	Cyperaceae	Cyperus sp.	Cyperus sp.	405	7	40	4.6149	3.4826	5.1086	13.2060	0.0511	-2.9743	-0.1519	
7	Leguminosae	Desmodium triflorum	Desmodium	687	7	37	7.8282	3.4826	4.7254	16.0362	0.0473	-3.0522	-0.1442	
8	Schizaeaceae	Lygodium circinatum	Itito	224	6	31	2.5524	2.9851	3.9591	9.4966	0.0396	-3.2291	-0.1278	7
9	Flagellariaceae	Flagellaria indica	Baling unway	160	6	25	1.8232	2.9851	3.1928	8.0011	0.0319	-3.4443	-0.1100	11
10	Poaceae	Phyllostachys sp.	Usiw	301	5	21	3.4298	2.4876	2.6820	8.5994	0.0268	-3.6186	-0.0971	10
11	Melastomataceae	Melastoma malabarica	Hantutungaw	134	7	30	1.5269	3.4826	3.8314	8.8409	0.0383	-3.2619	-0.1250	8
12	Euphorbiaceae	Macaranga tanarius	Binunga	94	7	23	1.0711	3.4826	2.9374	7.4911	0.0294	-3.5276	-0.1036	12
TOTAL				8776	201	783	100	100	100	300	1	-172.4569	-3.4915	

This is due to the regrowth or recovery of other species removed from the system, or from seeds dispersed by various means. It also means that residents now exert lesser disturbance to the system as there are very few large trees to extract from the island. In other words the island ecosystem is towards "ecological recovery" meaning the process of forest species invasion is in progress. Interview with the chairman of the sitio also revealed that residents were now aware of concepts of conservation for their forest and wildlife. Hunting and forest extractions were now prohibited and guarded by their "bantay kalikasan".

Based on a dozen importance values of the present species, grasses and vines still dominate the system due to their faster life cycle and ability to adapt faster to harsh environmental factors compared to slow growing tree species. Malabayabas showed high importance value due to the present of plenteous saplings in the area, maybe due to better modes of seed dispersal - animals, humans, and environmental influences.

3.3.3 Wildlife

Faunal survey was done in different habitats: Forest and Shorelines. Species identified were mammals, birds, reptiles, and insects. The survey was conducted in the area with the use of transect walks done in the morning (5:30-7:30) and evening (3:30-5:30), for 30 minutes each post (Figure 10). Species observed were identified on sightings. Bird species were identified through sightings and with the help of local aides. Counts of species encountered were recorded for each post. Data were organized, consolidated and computed for diversity parameters, i.e., mean counts (MC), relative density (RD), relative frequency (RF), and diversity index (Shannon index = H').

From the different classes observed in Lot 1, fourteen (14) species with a total of three hundred twenty one (321) individuals were identified and faunal species observed consisted of 1 species of mammals, 6 species of birds, 1 species of reptiles and 6 species of insects. Moreover in Lot 2, a total of sixteen (16) species consisted of six hundred twenty nine (629) individuals were recognized and faunal species observed consisted of 1 mammalian species, 7 avian species, 1 reptiles species and 7 species of insects. The most number of species observed inside the Lot 1 in relation to habitat type was in the forest having a total of two hundred and sixty-nine (269) species, while in Lot 2 was in the grass/shrublands having a total of two hundred and ninety-five (295) individuals. The habitat with the least species was observed in the shoreline with a total of fifty-two (52) in Lot 1 and a total of seventy-four (74) individuals within the Lot 2. Birds and Insects were the species that were frequently observed in both lots (Tables 3.8 and 3.9).

Tables 3.10 and 3.11 show the species observed in Lot 1 and Lot 2, respectively. The Yellow Small Honeybee was the most frequent followed by Yellow Vented Bulbul, which were both observed in both habitat types in Lot 1. The least observed species was a species of bird, White egret otherwise known as Cattle egret (*Bubulcus ibis*). The habitat with the highest diversity was in the forest ($H'=2.19$) while the shoreline habitat had the lowest ($H'=1.56$).

However, among the species observed in Lot 2, the Black Swiftlet was the most frequent followed by Yellow/Red/Orange Dragon Fly, which were both observed in all types of habitats. The least observed species was a species of bird, Sand piper otherwise known as spotted light brown (*Tringa sp.*). The habitat with the highest diversity was in the forest ($H'=2.12$) followed by the shoreline while grass/shrublands habitats had the lowest ($H'=1.82$).

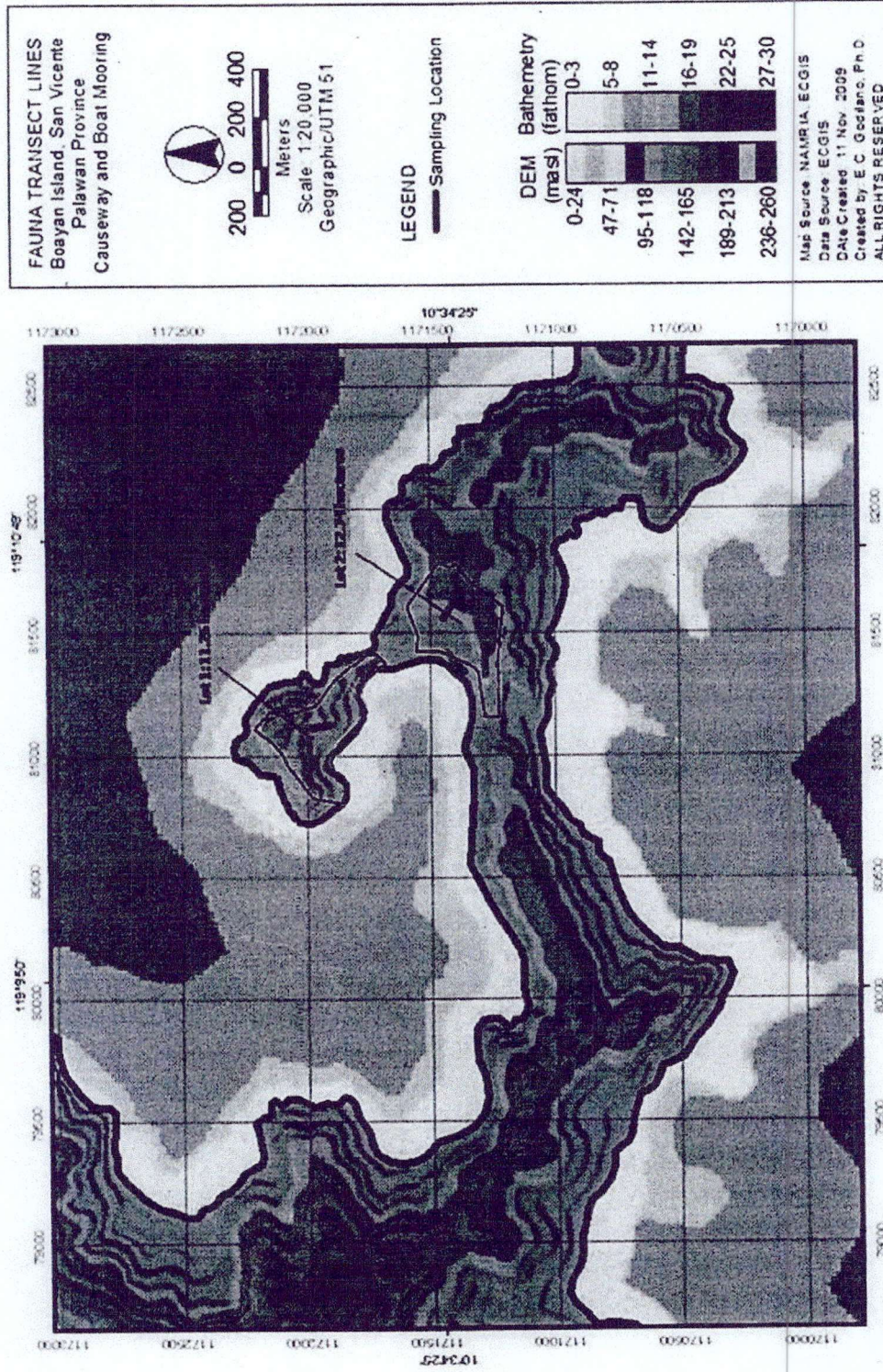


Figure 10. Transect walk of fauna inventory.

Table 3.8. List of wildlife species observed in LOT 1 of Boayan Island, Sitio Daplac, San Vicente, Palawan.

Common Name	Species Scientific Name	Family/Order	Forest				Shoreline				Freq	Total				Counts				Shannon Index			
			Day 1		Day 2		Day 1		Day 2			Forest		Shoreline		Forest		Shoreline		Forest		Shoreline	
			am	pm	am	pm	am	pm	am	pm		am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
1 Slender-billed Crow	<i>Corvus enca</i>	Corvidae	3	4	4	2	13					7	6	0	0	2	2	0	0	-0.1234	-0.1899	0.0000	0.0000
2 White Egret (cattle egret)	<i>Bubulcus ibis</i>	Ardeidae	1		1	1	3			2		2	2	1	1	2	1	1	1	-0.0487	-0.0532	-0.1037	-0
3 Black Egret (Pacific Reef Egret)	<i>Egretta sacra</i>	Ardeidae	1		1																		
4 Yellow Vented Bulbul	<i>Pycnonotus goiavier</i>	Pycnonotidae	15	8	26	4	53	2	2	1	1	5	2	0	3	2	2	0	2	-0.0487	0.0000	-0.2142	-0.2441
5 Lawin (Brahminy kite)	<i>Haliastur indus</i>	Accipitridae	3	2	2	1	6			1		5	1	0	1	2	1	0	1	-0.0972	-0.0532	0.0000	-0.1606
6 Black Swiftlet		Apodidae	4	2	4	2	12	11	4	6	4	25	8	4	17	8	2	2	2	-0.1353	-0.1461	-0.3466	-0.3604
7 Brown Squirrel		Sciuridae	2		3	3	8					5	3	0	0	0	2	1	0	-0.0972	-0.1200	0.0000	0.0000
8 Yellow Small Honey bee		Hymenoptera	20	14	22	10	66					42	24	0	0	2	2	0	0	-0.3350	-0.3588	0.0000	0.0000
9 Hornet		Hymenoptera	6	2	8	8	24					14	10	0	0	2	2	0	0	-0.1947	-0.2550	0.0000	0.0000
10 Large Green Dragon Fly		Odonata	2	1	1	1	5					3	2	0	0	2	2	0	0	-0.0666	-0.0898	0.0000	0.0000
11 Yellow/Red/Orange Dragon Fly		Odonata																					
12 Black Butterfly		Lepidoptera	17	6	12	3	38	2	1	4	2	9	29	9	6	3	2	2	2	-0.2898	-0.2409	-0.3061	-0.2986
13 Green Cicada		Hemiptera	7	2	12	3	24	2				2	19	5	2	0	2	1	0	-0.2330	-0.1692	-0.1667	0.0000
14 Flying Lizard		Agamidae	2	1	1	1	5					3	2	0	0	2	2	0	0	-0.0666	-0.0898	0.0000	0.0000
			4	2	2	2	10			1	1	3	6	4	1	2	2	1	2	-0.1108	-0.1461	-0.1037	-0.2441
Total			87	42	99	41	269	19	9	15	9	52	186	83	34	18	28	23	11	2.1814	2.1917	1.4928	1.6290

Table 3.9. List of wildlife species observed in LOT 2 of Boayuan Island, Sitio Daplac Bato, San Vicente, Palawan.

Species			Counts												Shannon Index					
Common Name	Scientific Name	Family/Order	Grass/Shrubland		Forest		Shoreline		Grass/Shrubland		Forest		Shoreline		Grass/Shrubland		Forest		Shoreline	
			am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
1. Sand piper (spotted light brown)	<i>Tringa sp.</i>	Scolopacidae	0	0	0	0	3	2	0	0	0	0	2	1	0.0000	0.0000	0.0000	0.0000	-0.1710	-0.2021
2. Slender-billed Crow	<i>Corvus enca</i>	Corvidae	0	0	7	6	0	0	0	0	2	2	0	0	0.0000	0.0000	-0.1234	-0.2037	0.0000	0
3. White Egret (cattle egret)	<i>Bubulcus ibis</i>	Ardeidae	0	0	2	0	1	3	0	0	2	0	1	2	0.0000	0.0000	-0.0467	0.0000	-0.0794	-0.2544
4. Black Egret (Pacific Reef Egret)	<i>Egretta sacra</i>	Ardeidae	0	0	2	0	3	3	0	0	2	0	2	2	0.0000	0.0000	-0.0467	0.0000	-0.1710	-0.2544
5. Yellow Ventred Bulbul	<i>Pycnonotus goiavier</i>	Pycnonotidae	34	7	41	11	4	1	2	2	2	2	2	1	-0.3086	-0.1795	-0.3333	-0.2833	-0.2045	-0.1288
6. Lavin (Brahminy kite)	<i>Haliastur indus</i>	Accipitridae	2	4	5	0	0	1	1	2	2	0	0	1	-0.0481	-0.1237	-0.0972	0.0000	0.0000	-0.1288
7. Black Swiftlet		Apodidae	42	22	8	6	17	6	2	2	2	2	2	2	-0.3342	-0.3263	-0.1353	-0.2037	-0.3573	-0.3425
8. Brown Squirrel		Sciuridae	0	0	5	2	0	0	0	0	2	1	0	0	0.0000	0.0000	-0.0972	-0.0976	0.0000	0.0000
9. Sand Wasp		Hymenoptera	2	0	0	0	12	5	1	0	0	0	2	2	-0.0481	0.0000	0.0000	0.0000	-0.3446	-0.3219
10. Yellow Small Honey bee		Hymenoptera	10	0	42	24	0	0	2	0	2	2	0	0	-0.1555	0.0000	-0.3360	-0.3652	0.0000	0.0000
11. Hornet		Hymenoptera	5	7	14	3	0	0	2	2	2	2	0	0	-0.0961	-0.1795	-0.1947	-0.1300	0.0000	0.0000
12. Large Green Dragon Fly		Odonata	14	3	3	2	0	0	2	2	2	2	0	0	-0.1928	-0.1009	-0.0666	-0.0976	0.0000	0.0000
13. Yellow /Red/ Orange Dragon Fly		Odonata																		
14. Black Butterfly		Lepidoptera	36	47	29	11	6	2	2	2	2	2	2	2	-0.3159	-0.3606	-0.2898	-0.2833	-0.2572	-0
15. Green Cicada		Hemiptera	37	11	19	3	2	0	2	2	2	2	1	0	-0.3193	-0.2351	-0.2330	-0.1300	-0.1306	0.0000
16. Flying Lizard		Agamidae	5	3	3	2	0	0	2	2	2	2	0	0	-0.0961	-0.1009	-0.0666	-0.0976	0.0000	0.0000
Total			2	2	6	4	1	2	2	2	2	2	1	2	-0.0481	-0.0749	-0.1108	-0.1577	-0.0794	-0.2021
			189	106	186	74	49	25	20	18	28	21	15	15	1.9628	1.6813	2.1814	2.0497	1.8049	2.0369

Table 3.10. Mean Count (MC), Relative Density (RD), Relative Frequency (RF) and Absolute Frequency (AF) of Wildlife (Fauna) encountered/sighted in Lot 1 of Boayan Island, Sitio Daplag, San Vicente, Palawan in the morning (am) and afternoon (pm) at observation posts forests (A) and Shoreline (B).

Species	A					B					Total
	C	MC	RD	RF	AF	C	MC	RD	RF	AF	
1. Slender-billed Crow	am	13	3.5	3.76	7.14	0	0	0.00	0.00	0	13
	pm		3	6.82	8.70		0	0.00	0.00	0	
2. White Egret (cattle egret)	am	3	1	1.08	7.14	2	1	5.26	9.09	50	3
	pm		1	2.27	4.35		1	9.52	9.09	50	
3. Black Egret (Pacific Reef Egret)	am	2	1	1.08	7.14	5	1.5	7.89	18.18	100	5
	pm		0	0.00	0.00		1	9.52	18.18	100	
4. Yellow Vented Bulbul	am	53	20.5	22.04	7.14	5	2	10.53	18.18	100	58
	pm		6	13.64	8.70		1	9.52	9.09	50	
5. Lawin (Brahminy kite)	am	6	2.5	2.69	7.14	1	0	0.00	0.00	0	7
	pm		1	2.27	4.35		1	9.52	9.09	50	
6. Black Swiftlet	am	12	4	4.30	7.14	25	8.5	44.74	18.18	100	37
	pm		2	4.55	8.70		4	38.10	18.18	100	
7. Brown Squirrel	am	8	2.5	2.69	7.14	0	0	0.00	0.00	0	8
	pm		3	6.82	4.35		0	0.00	0.00	0	
8. Yellow Small Honey bee	am	66	21	22.58	7.14	0	0	0.00	0.00	0	66
	pm		12	27.27	8.70		0	0.00	0.00	0	
9. Hornet	am	24	7	7.53	7.14	0	0	0.00	0.00	0	24
	pm		5	11.36	8.70		0	0.00	0.00	0	
10. Large Green Dragon Fly	am	5	1.5	1.61	7.14	0	0	0.00	0.00	0	5
	pm		1	2.27	8.70		0	0.00	0.00	0	
11. Yellow /Red/ Orange Dragon Fly	am	38	14.5	15.59	7.14	9	3	15.79	18.18	100	47
	pm		4.5	10.23	8.70		1.5	14.29	18.18	100	
12. Black Butterfly	am	24	9.5	10.22	7.14	2	2	10.53	9.09	50	26
	pm		2.5	5.68	8.70		0	0.00	0.00	0	
13. Green Cicada	am	5	1.5	1.61	7.14	0	0	0.00	0.00	0	5
	pm		1	2.27	8.70		0	0.00	0.00	0	
14. Flying Lizard	am	10	3	3.23	7.14	3	1	5.26	9.09	50	13
	pm		2	4.55	8.70		1	9.52	18.18	100	
TOTAL	am	269	93	100	100	52	19	100	100	550	317
	pm		44	100	100		10.5	100	100	550	

Table 3.11. Mean Count (MC), Relative Density (RD), Relative Frequency (RF) and Absolute Frequency (AF) of Wildlife (Fauna) encountered/sighted in Lot 2 of Boayan Island, Sitio Daplag, San Vicente, Palawan in the morning (am) and afternoon (pm) at observation posts: grasslands (A), forests (B) and Shoreline (C).

Species	A					B					C					Total	
	c	MC	RD	RF	AF	c	MC	RD	RF	AF	c	MC	RD	RF	AF		
1. Sand piper (spotted light brown)	am	0	0	0.00	0.00	0	0	0	0.00	0.00	0	5	1.5	5.66	13.33	100	5
	pm		0	0.00	0.00	0		0	0.00	0.00	0		2	13.79	6.67	50	
2. Slender-billed Crow	am	0	0	0.00	0.00	0	13	3.5	3.76	7.14	100	0	0	0.00	0.00	0	13
	pm		0	0.00	0.00	0		3	7.89	9.52	100		0	0.00	0.00	0	0
3. White Egret (cattle egret)	am	0	0	0.00	0.00	0	2	1	1.08	7.14	100	4	1	3.77	6.67	50	6
	pm		0	0.00	0.00	0		0	0.00	0.00	0		1.5	10.34	13.33	100	0
4. Black Egret (Pacific Reef Egret)	am	0	0	0.00	0.00	0	2	1	1.08	7.14	100	6	1.5	5.66	13.33	100	8
	pm		0	0.00	0.00	0		0	0.00	0.00	0		1.5	10.34	13.33	100	0
5. Yellow Vented Bulbul	am	41	17	17.62	10.00	100	52	20.5	22.04	7.14	100	5	2	7.55	13.33	100	98
	pm		3.5	6.60	11.11	100		5.5	14.47	9.52	100		1	6.90	6.67	50	0
6. Lawin (Brahminy kite)	am	6	2	2.07	5.00	50	5	2.5	2.69	7.14	100	1	0	0.00	0.00	0	12
	pm		2	3.77	11.11	100		0	0.00	0.00	0		1	6.90	6.67	50	0
7. Black Swiftlet	am	64	21	21.76	10.00	100	14	4	4.30	7.14	100	23	8.5	32.08	13.33	100	101
	pm		11	20.75	11.11	100		3	7.89	9.52	100		3	20.69	13.33	100	0
8. Brown Squirrel	am	0	0	0.00	0.00	0	7	2.5	2.69	7.14	100	0	0	0.00	0.00	0	7
	pm		0	0.00	11.11	0		2	5.26	4.76	50		0	0.00	0.00	0	0
9. Sand Wasp	am	2	2	2.07	5.00	50	0	0	0.00	0.00	0	17	6	22.64	13.33	100	19
	pm		0	0.00	11.11	0		0	0.00	0.00	0		2.5	17.24	13.33	100	0
10. Yellow Small Honey bee	am	10	5	5.18	10.00	100	66	21	22.58	7.14	100	0	0	0.00	0.00	0	76
	pm		0	0.00	11.11	0		12	31.58	9.52	100		0	0.00	0.00	0	0
11. Hornet	am	12	2.5	2.59	10.00	100	17	7	7.53	7.14	100	0	0	0.00	0.00	0	29
	pm		3.5	6.60	11.11	100		1.5	3.95	9.52	100		0	0.00	0.00	0	0

Table 3.11. Con't...

Species	A						B				C				Total	
	c	MC	RD	RF	AF	c	MC	RD	RF	AF	c	MC	RD	RF		AF
12. Large Green Dragon Fly	am	17	7	7.25	10.00	100	5	1.5	1.61	7.14	100	0	0	0.00	0	22
	pm		1.5	2.83	11.11	100		1	2.63	9.52	100		0	0.00	0	
13. Yellow /Red/ Orange Dragon Fly	am	83	18	18.65	10.00	100	40	14.5	15.59	7.14	100	8	3	11.32	13.33	100
	pm		23.5	44.34	11.11	100		5.5	14.47	9.52	100		1	6.90	13.33	100
14. Black Butterfly	am	48	18.5	19.17	10.00	100	22	9.5	10.22	7.14	100	2	2	7.55	6.67	50
	pm		5.5	10.38	11.11	100		1.5	3.95	9.52	100		0	0.00	0	0
15. Green Cicada	am	8	2.5	2.59	10.00	100	5	1.5	1.61	7.14	100	0	0	0.00	0	13
	pm		1.5	2.83	11.11	100		1	2.63	9.52	100		0	0.00	0	0
16. Flying Lizard	am	4	1	1.04	10.00	100	10	3	3.23	7.14	100	3	1	3.77	6.67	50
	pm		1	1.89	11.11	100		2	5.26	9.52	100		1	6.90	13.33	100
TOTAL	am	295	96.5	100.00	100.00	1000	260	93	100.00	100.00	1400	74	26.5	100.00	100.00	750
	pm		53	100.00	100.00	900		38	100.00	100.00	1050		14.5	100.00	100.00	750

3.4 Social Environment³

3.4.1 Demography

Population

Based on the 2005 and 2008 MPDO-CBMS Surveys, it was shown that the increase population and households was 1623 and 492, respectively (**Table 3.12**). In terms of over-all average, household size in 2008 decreased from 4.94 to 4.80 in 2005.

In terms of population density, persons per square kilometer, barangays Poblacion and Binga are more densely populated compared to the rest of the barangays.

Table 3.12. Comparative household size and population density by barangay, 2005 and 2008, San Vicente, Palawan.

Barangays	No. of Population		No. of Household		Area (Has.)	Average HH Size		Population Density (Person/Km ²)	
	2005	2008	2005	2008		2005	2008	2005	2008
Alimanguan	3919	4010	761	828	4,295.7293	5.15	4.84	0.91	0.93
Binga	1714	1735	345	350	1,355.4520	4.97	4.96	1.26	1.28
Caruray	3667	3866	734	813	127,496.0420	5.00	4.76	0.03	0.03
Kemdeng	785	847	169	196	5,027.8101	4.64	4.32	0.16	0.17
New Agutaya	2490	2891	496	616	6,078.2624	5.02	4.69	0.41	0.48
New Canipo	1287	1416	267	276	2,708.4460	4.82	5.13	0.48	0.52
Poblacion	5033	5655	1,003	1,132	4,361.0060	5.02	5.00	1.15	1.30
Port Barton	4655	4686	980	1,011	14,474.9047	4.75	4.64	0.32	0.32
San Isidro*	800	813	177	188		4.52	4.32		
Santo Niño*	1079	1133	216	230		5.00	4.93		
Total	25429	27052	5,148	5,640	165,797.6525	4.94	4.80	0.15	0.16

Source: CBMS Survey, 2005 and 2008.

Barangays San Isidro and Sto. Niño were still part of Barangays Alimanguan and New Agutaya, respectively during the cadastral survey in 1988.

Religion

Roman Catholic is the dominant religion in the municipality of San Vicente, so with Barangay Poblacion, the project barangay under consideration. Based on the CBMS Survey of 2005, of the 5,033 households in Barangay Poblacion, 3,950 or 78.48% are Roman Catholics (**Table 3.13**). The results further showed that all other religions were a minority in the Barangay, such as, the Seventh Day Adventists, with 236 members; Protestants and Baptists, with 421 and 129 members, respectively. There are no reported Islam members in the Barangay. In totality, the town of San Vicente has less than one percent (20 members out of 25,429 residents) that belong to the Jehovah's Witnesses.

³ Based on the Community Based Monitoring System (CBMS) Report of San Vicente, Palawan dated 2008 and SEP, 2005, *ibid*.

Initial Environmental Examination (IEE) Report prepared by Global Tenets Consultancy. September 2009.

Table 3.13. Religious affiliations of residents, Barangay Poblacion, San Vicente, Palawan.

Religion	Membership	
	Number	Percent
Roman Catholic	3950	78.48
Protestant	421	8.36
Seventh Day Adventist	236	4.69
Iglesia ni Kristo	181	3.60
Baptist	129	2.56
Jehovah's Witnesses	36	0.72
Others	80	1.59
TOTAL	5033	100

Source: CBMS 2005 as cited in SEP San Vicente 2008, p.10.

Ethnic Groups

San Vicente is composed of different ethnic groups. The Agutaynens and Cuyunens who were the original migrants from Cuyo Island, to the municipality when it was still called Malagnang (meaning muddy), generally settled in Barangay New Agutaya, New Canipo, Poblacion and Kemdeng.

The current biggest single ethnic groups in San Vicente remain to be the Tagalogs, comprising 38.67% of the total population of the municipality. The group is followed in number by the Visayan who came over to the municipality in the 1980s during the height of the logging industry in the area (**Table 3.14**). The Visayan groups are generally composed of Cebuanos, Ilonggos, Warays and Aklanons.

Table 3.14. Ethnic groups in Barangay Poblacion, San Vicente, Palawan, 2005.

Ethnic Group	Membership	
	Number	Percent
Tagalog	1931	38.37
Cebuano	638	12.68
Cuyunen	630	12.52
Ilonggo	450	8.94
Agutaynen	419	8.33
Waray	404	8.03
Masbateño	278	5.52
Mindorenses	86	1.71
Bicolano	67	1.33
Ilocano	24	0.48
Akalanon	24	0.48
Others	82	1.63
TOTAL	5033	100

Source: MPDO CBMS Survey 2005 as cited in SEP San Vicente, p.17

3.4.2 Major Economic Activities

The more common economic activities engaged in by the constituents of the municipality in 2008 are agriculture, hunting, forestry, fishing, wholesale and retail trade, construction work/carpentry, and other social and personal services/activities.

At Boayan, particularly at Daplac and Casoyan, some of its residents are involved in reef gleaning if they could not go out fishing. Generally, though, it is for home consumption or sharing with neighbors. Others are engaged in helping their husbands harvest cashew or in mat weaving especially among the women.

3.4.3 Social Services

The Municipal Social Welfare and Development Office (MSWDO) of San Vicente implemented mostly the welfare services and programs of the municipal government. Some of the programs of the office include Practical Skills Development, Self-Employment Assistance, Family Welfare Program, Community Welfare Program, Women Welfare Program, Child and

Youth Welfare Program and Emergency Assistance Program. The office also takes care of the activities and services for the town's population of senior citizens.

A Social Worker III heads the MSWDO. She is assisted by one Social Worker Aide, one regular Day Care Worker III, one clerk, one utility worker and 32 Day Care workers.

Within Barangay Poblacion, there are six (6) Day Care Centers established in different sitios to cater to the educational needs of pre-school children. These are located in Poblacion Proper, Sitio Panindigan, Sitio Macatumbalen, Casuyan Island, Daplac Island, and in Sitio Pinagmangalucan.

The MSWDO has supervision over the Municipal Population Office (MPO) and the Municipal Nutrition Action Office (MNAO). The MPO headed by one (1) MPO designate, assisted by one clerk and three (3) Barangay Population Officers assigned in Barangay Poblacion, Port Barton and Caruray. She operates with one clerk and the Barangay Education and Nutrition Scholars (BEANS) in all the barangays.

3.4.4 Transportation and Communication

Within the inland barangays of San Vicente, the general means of transportation are the single motorcycles and tricycles which are either for family use or for ferrying passengers or commodities. The island communities within the jurisdiction of San Vicente could be reached with the use of motorized bancas, pump boats or outrigger boats. In terms of communication, the barangay has radio contact with the municipal government. El Busero beach resort has VHF facilities connected to the barangay, municipal government, and Puerto Princesa City. Swissipini Resort maintains radio contact with its Puerto Princesa office.

3.4.5 Tourism and Recreation

The Municipality of San Vicente, with the support of the local government, is slowly developing into a tourism center in Northern Palawan. It offers a unique tourism attraction that lures thousands of tourists to come particularly at Port Barton, which at present continues to be a popular destination.

San Vicente also endowed with other attractions:

- a. *The New Agutaya-Alimanguan Beach.* This area boasts its 14 km beach that is splendid for swimming and surfing. This area that is presently undeveloped, is a potential tourism "magnet" for local and foreign visitors.
- b. *The Pamoáyán Falls.* A one-hour trek from Port Barton, this area is a potential for recreational activities.
- c. *The Port Barton Beach Resort.* This area is popular because of its abundance in coral reefs and good food, as well as, its suitability for swimming and other recreational activities.
- d. *The Port Barton Falls.* This area is a good site for recreation and nature appreciation.
- e. *The Little Baguio Falls.* Identified for potential spot for recreation and nature application.

CHAPTER 4:

PROJECT DEVELOPMENT PLAN

This development plan is for tourism management of Boayan Island. By providing a specific and purposeful intervention to enhance tourism so that benefits are maximized and problems minimized. The limited carrying capacity would require better bathing establishment management planning. In Boayan Island, this intervention can take the form of –

- managing volumes of visitors;
- managing tourist arrivals;
- instituting other built infrastructure guidelines (e.g. signage, etc.); and
- creating appropriate organizational mechanisms with the power to manage tourism development.

4.1 General Strategy

The strategies formulated for sustainable tourism development should follow the important principles given below:

- Tourism should integrate the natural, cultural and human environments. It must respect the fragile balances that characterize many tourist destinations through analysis of carrying capacity, in particular, for islands and environmentally sensitive areas.

The assessment of the physical carrying capacity in coastal environments is a good planning tool for sustainable tourism development. The carrying capacity is the level of visitor use an area can accommodate with levels of satisfaction for visitors and few impacts on resources. The concept implies that there are limits to visitor use. Exceeding the carrying capacity will place too much stress on limited coastal resources.

Carrying capacity can be maintained or increased through proper management like designing viewing tracks, trails, etc. to distribute use widely; provide adequate information and interpretation services to minimize negative impact; increased durability of heavily used resources (e. g. surfacing materials, anchor buoys); and provide facilities and design policies that encourage wet or off-season use.

- Government should promote actions for integrating the planning of tourism with environmental NGOs and local communities.
- Measures must be developed to permit a more equitable distribution of the benefits and burdens of tourism. This implies a change in consumption patterns and the introduction of resource user's fees.
- There is a need to support and promote tourism demonstration projects within the framework of sustainable tourism development.

The sustainable management of Boayan Island shall be in holistic, rights based, community based, and in collaborative manner to ensure sustainable marine resources, to encourage meaningful and active participation of stakeholders within the reserve, and its environs and to ultimately establish a sustainable and multi-sectoral institutions capable of addressing natural resources.

4.2 Carrying Capacity

Carrying capacity is the maximum number of individuals that can be accommodated in an area without affecting the state of the environment, the level of satisfaction of the visitor and the social culture of the host community Libosada (1998). The following are the considerations in determining the carrying capacity:

- a) the space where the tourist (individual) can move about without causing annoyance, stress or uneasiness on another individual nearby;
- b) the disturbance that tourist can possibly make, e.g. noise, mobility;
- c) the nature of the place itself, e.g., rocky, muddy, forested, etc.; and
- d) the distance/ length of time traveled by the visitors between her/his place of origin to the intended destination.

The carrying capacity of the project was adapted from the formula suggested by Boullon, Roberto C., 1985.

$$\text{Carrying Capacity (CC)} = \frac{\text{Area used by tourists}}{\text{Average individual standard}}$$

The *Area Used by Tourists* is the actual measurement in sq. meter, of the space that can possibly be occupied by people. The *Average Individual Standard* is the number of individuals at any given time that management will allow after weighing the considerations in determining the carrying capacity of the attractions.

For instance, if considerations such as space for movement, disturbance each person make, i.e., noise, nature of the place and length of time traveled by the visitors are factored in, the average individual standard is 10 sq. m. and the area used by the tourists is 3,570 sq. meter for 21 units of 3-storey hotel, then the carrying capacity is 357 persons.

The *Rotation Coefficient* on the other hand, determines the number of batch of people which can be allowed to stay in the attractions within a particular time duration. It is computed by dividing the number of hours the area is open to tourists over the average time (hour) spent during the visit.

$$\text{Rotation Coefficient (RC)} = \frac{\text{No. of Daily hours area is open to Tourists}}{\text{Average Time of Visit}}$$

For this project, the number of daily hours area is open to tourists is 10hours and the average time of visit is 6 hours, then the Rotation Coefficient is 2.

The total number of allowed daily visits is then obtained:

$$\text{Total of Daily Visits (TDV)} = \text{Carrying Capacity} \times \text{Rotation Coefficient}$$

In this case, the total of daily Visits is 595 persons/day.

4.3 Boundary and Maintenance

The Bathing Establishment Project of Palawan Cove Corporation located at Boayan Island, Brgy. Poblacion, San Vicente, Palawan has an approved Forest Land Use Agreement for Tourism Purposes (FLAgT) No. 01-2012. The area covered by the FLAgT has been bounded by geographical coordinates. **Figure 5 of Chapter 3** shows the general location and technical description of the area.

4.4 Infrastructure Development

Planning is necessary before construction of the different infrastructures and actual operations begin. It deals with the proper lay-outing and construction of infrastructures that may provide comfort and general welfare to its prospective guests.

All project activities or work will be carefully managed such that impact on the environment is minimal. Grading, excavation and earthwork will also be carried out with limited use of heavy equipment to prevent impacts on the soil profile and vegetation.

Based on the approved FLAgT Application, the proponent may construct permanent and or temporary improvements or infrastructures in the FLAgT Area necessary and appropriate for its development for tourism purposes. In most cases, the developer can use local materials for the construction of facilities besides that of conventional materials like sand, gravel and wood.

4.4.1 Permanent Improvements

The bathing establishment project entails the construction of the following facilities:

- Three Club House which comprise of Multi-Purpose Hall, Bar, Office, Reception Area, Gift Counter, Luggage, Billiards Hall, Library, Kids Room and Entertainment Area (can accommodate 30 persons)
- Twenty-one units of 3-storey hotel (with maximum capacity of 500 occupants)
- Four Mooring

Illustrated in **Figure 11** are the bathing establishment project facilities to be constructed.

4.4.2 Temporary Improvements

The temporary improvements in the FLAgT Area are the following:

- One 25-HP genset and a 10-HP genset for spare;
- One Water Desalination Plant with 100 liter per hour capacity; and
- One Water Purifier with 50 liter capacity per hour.

This also includes the transportation facilities like the: one passenger vessel with 30-40 capacity (Registered with MARINA), one 25-HP speedboat and one 16-HP pumpboat. Paddle boats, dinghies and kayaks are available, so are masks, snorkels and fins. Scuba gears are supplied by reliable and credible dive shops in Puerto Princesa, together with the services of a professional and licensed dive master.

The scale of construction of the various buildings and structures will be characterized by medium structural works and intensive sanitary work activities. The aesthetical value of the project site will also be given a high degree of importance. The design is such that remaining natural areas will not be further affected. Construction activities will be carefully managed to protect the environment, in general, and the investments for clean beaches and seas.

4.5 Manpower Requirement

The required work force will be hired within the barangay and consequently adjoining barangays. If skilled (technical) employees are not available locally, they will be sourced from other municipalities within the province and beyond.

It is projected that about 27 skilled and unskilled laborers will be employed by the company during operation stage. Additional manpower will be hired as the need arises during the actual operation.

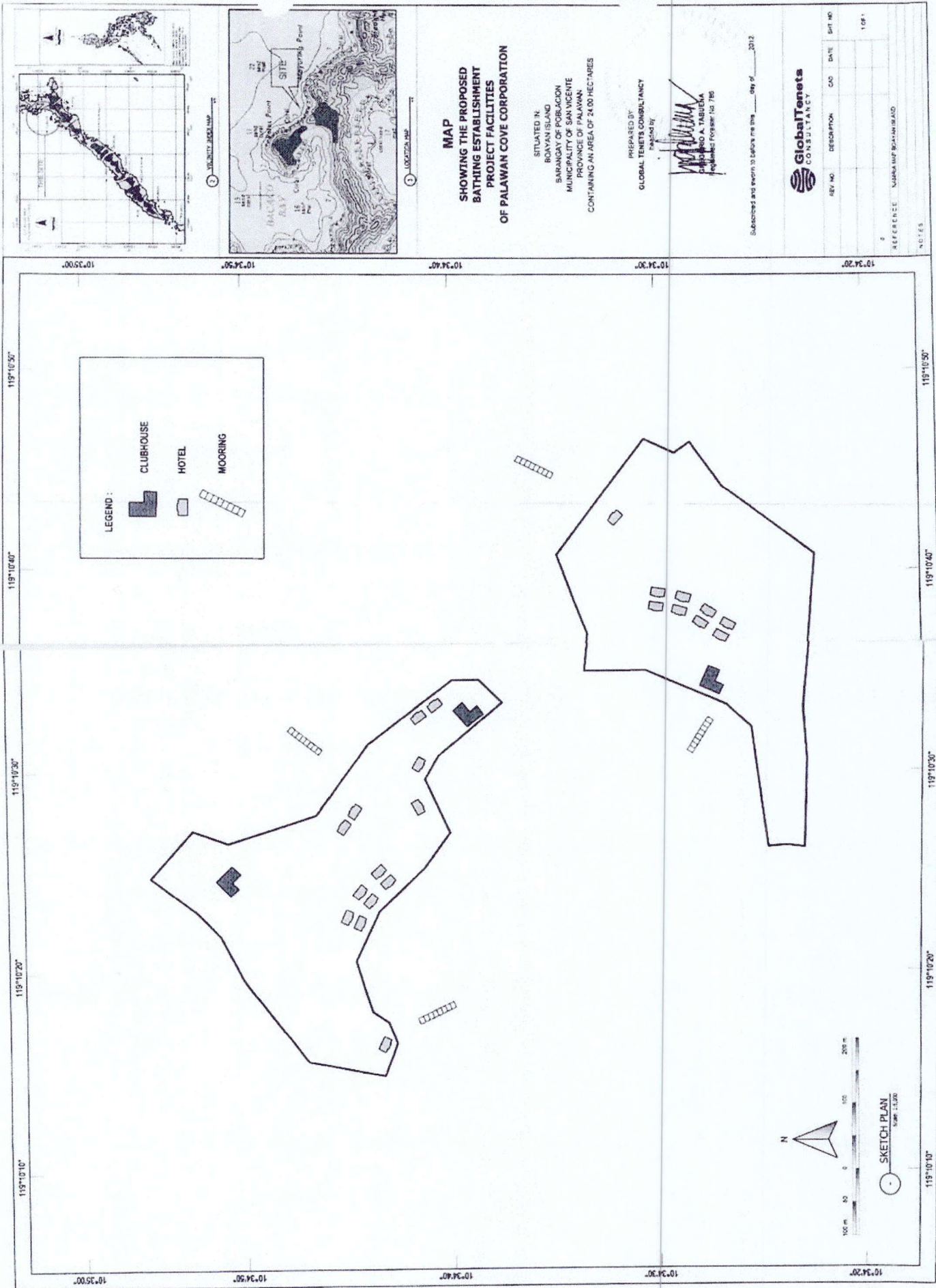


Figure 11. Proposed Project Facilities

Pay scale for non- skilled workers will be based on the regional wage standard. These local manpower requirements will boost the LGUs income and triggered other livelihood opportunities (i.e., food, recreation, etc.).

Hiring of unskilled laborers will be done through the LGUs and community organization. Technical staffs that are not available in the locality or province will be sourced by PCC.

4.6 Schedule

The project development will be completed in twenty five (25) years. The project activities schedule to be undertaken is presented in Table 4.1.

Table 4.1. Development Schedule of Project Activities.

PROJECT ACTIVITIES	YEAR 1				YEAR 2				YR 3	YR 4	YR 5	YR 6 onwards...	YR 25
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
Pre-construction phase													
Acquisition of all necessary permits													
Survey, architectural programming, design and tendering works													
Construction phase													
Construction of mooring area													
Construction of hotels, clubhouse and other civil works													
Installation of various electrical and mechanical appliances													
Plumbing and sanitary installations													
Building security and management systems													
Building support facilities and ancillary works													
Operation Phase													
Marketing, promoting and advertising													
Implementation of Environmental Protection													

CHAPTER 5:

MONITORING AND EVALUATION

In any development project it could be expected that a disturbance of the ecological balance prevailing in the ecosystem where a project would be established will occur. Due to high level of biodiversity in Boayan Island and its surrounding marine areas, there is a need to conserve these resources. CDMP is formulated to address the threats to the environment and existing natural resources, the underlying conflicts that cause the degradation and the constraints to successful management. The project development could greatly help to protect the environment and natural resources while promoting tourism. The precautionary principle is that many of the environmental goods and services of the island are irreplaceable.

Disturbances may be inevitable, but the extent and level have to be within tolerable limits so as not to cause negative effects on the physical or biological attributes and characteristics of an area. By following the precautionary principle, the proponent of the project will be overcautious in making decisions about the level of development activities because rate of damage can always be increased but once a natural system has been destroyed it cannot be recreated.

5.1 Impact Identification and Assessment

The proposed development project at Boayan Island has direct potential impacts on the environment during the construction and development stages as well as during their operational stages. A major consideration during the construction stage of these projects would be earth movement and soil dumping. Soil exposure and erosion leading to coastal sedimentation are main consideration during the construction and development stages.

The construction of the facilities would entail the removal of considerable vegetation on the site and the excavation and movement of soil and rocks. Exposed soil with virtually no vegetative cover, even in relatively flat terrain, is susceptible to erosion. Especially during rainy season, exposed soil can be easily eroded and will eventually be deposited as sediment on the near-shore marine habitats. Although the impacts of soil erosion and sedimentation may be temporary (*i.e.* during construction phase), it is important to limit their effects.

The timing of the commencement of construction is important. The construction activities and its critical components, such as earth moving, should be timed during dry season where there is less likelihood of rain that can erode the soil.

The management of solid and liquid waste also needs to be addressed. These wastes, more often than not, find their way into sewage systems (natural or man-made) that eventually lead into the marine environment. It is essential that a waste minimization and management strategy is implemented before and during the operation of the bathing establishment facility.

The possible environmental and social impacts of the bathing establishment are enumerated below. The proposed bathing establishment project in the area will generate potential damage which, if not properly managed, will seriously affect the environment. Mitigating measures can be applied so that ecosystem integrity can be maintained at acceptable levels to prevent harmful effects on the soil, water, wildlife, and population.

5.1.1 Impacts on Land Resource

- Alteration of landscape
- Siltation
- Disturbances or perturbation of the area
- Displacement/loss of wildlife
- Solid waste generation

5.1.2 Impacts on Water Resource

- Increase in water requirements
- Degradation of water quality
- Liquid waste generation
- Alteration/destruction of habitat

5.1.3 Impacts on Air Quality

- Dust generation
- Increase in TSP
- Increase in noise level

5.1.4 Impacts to Local Communities

- Possible influx of migrants/settlers into the area, contributing to population increase.
- Time may come for competition in food needs and space.
- Employment would be competitive.
- Need for housing and social services increase due to increase in population.
- Possible problem on encroachment of settlements even up to the edge of the shorelines.
- Need for more protective services personnel and social services.
- Problems in waste and garbage disposal system may highly affect the environmental condition, sanitation, and consequently, people's health.
- Drainage and sewerage system may become inadequate due to the expected increase in population.
- Interpersonal relationship among the population changes, from one of "close-knit" to individualism and "does not care attitude".
- As progress occurs, lifestyle changes – i.e., food selection and recreation.
- Municipal/barangay income (especially the affected ones) may improve.
- Productive capacity and income of the less privileged may improve.
- Possible enhancement in self-employment and/or entrepreneurial activities of community members.
- Crime and delinquency may increase.
- Manpower protective services and facilities may not be enough to cope with the needs for peace and order.

Through the construction and operation of the bathing establishment project, certain benefits could be derived for the welfare of the constituents in the barangay and the municipality. It is deemed that the proposed project would enhance the development of the municipality and uplift its local economy through employment, improved infrastructure, enhanced taxation, or improved social services for the general well-being of the people of the Municipality of San Vicente. Moreover, it is hoped that the project could contribute to the country's economic growth. On the other hand, there are those who have negative thinking, apathy, doubts and apprehensions on the effects of the proposed project on their environment, health and livelihood.

5.2 Mitigating Measures

Any development project is bound to have impacts on its immediate environment, be it negative or positive. As such, it is prudent to set up a monitoring program that will help ensure that negative impacts are minimized and the positive impacts supported. A precautionary and conservative approach to monitoring strategies needs to be taken. The programs should be designed and implemented in varying scales and magnitude depending on the project and predicted impacts address. These monitoring programs need to be implemented before the commencement of development, during the construction phase and throughout the operational phases.

With all the possible environmental effects of the project identified, PCC envisions to adopt the following mitigating measures to ensure that there will be less or no adverse effects in the locality. The mitigating measures of the project that the proponent plans to undertake in order to lessen the adverse effects of the project are as follows:

5.2.1 Enhancement Measures on Land Resource

- Construct drainage facilities and provide detour routes for surface run-off water.
- Strictly implement erosion control measures. Planting of ornamental plants, landscaping and construction of ripraps will be done to control soil erosion.
- All endemic and exotic tree species in the area shall be preserved. Enrichment planting and timber stand improvement shall be done.
- Monitor the area regularly to detect the extent and intensity of disturbance.
- Waste management will be done. Receptacles will be provided in the bathing establishment to avoid garbage from scattering. Waste segregation shall be practiced. Biodegradable shall be buried in a compost pit.

5.2.2 Enhancement Measures on Water Resource

- Conduct monitoring of water quality in the area or as the need arises.
- Monitor the area to detect the extent and intensity of disturbance.
- Conduct seminars on fisheries and coastal resource management.
- All sewage will be treated in properly designed and constructed septic tanks.

5.2.3 Enhancement Measures on Air Quality

- Monitor ambient air quality in the area.
- Conduct daily routine equipment and motorboat check-up.
- Monitor regularly the use of cleaner fuel (low sulfur content) to lessen the air pollutants from pump boats going to and from Boayan Island.
- Monitor noise level using audiometer.

5.2.4 Enhancement Measures to Local Communities

- Regulate entry of migrants into the community
- Carrying capacity of the bathing establishment should be defined so that the target occupants can be sustained without overburdening facilities and resources.
- Prioritize hiring of qualified locals.
- Provide skilled manpower training to locals to qualify for possible job placement.
- Resolve land use conflicts, if any. Conduct dialogues, consultations and information drive.
- Provide personnel and facilities to enhance protective and social services.
- Implement programs for the elderly.
- Improve/expand the communication, water, power supply, drainage and sewerage systems of the municipality and barangay.
- Design and implement an effective program on Waste Management.
- Conduct a massive Information Education Communication campaign to enhance people's awareness towards effective waste management practices.
- Monitor, implement existing laws and ordinances on waste management.
- Identify and design a long range plan for a sustained environmental sanitation/ cleanliness.
- Conduct health and nutrition safety seminars/trainings to combat work-related illnesses.
- The municipal government should undertake a system of intensified taxation and collection of revenues.
- Prioritize projects and livelihood activities in the development plans from barangay to municipal levels to facilitate support and implementation.
- Coordinate with GO and NGO development functionaries, to enhance manpower skills, training and financial support for better livelihood programming
- Provide facilities, equipment and personnel to maintain/sustain peace and order at the Municipal and barangay levels.

- Establish outposts at strategic places in the barangay to deter crimes.
- Put up street lights in the barangays.
- Upgrade the capabilities of the barangay tanods to maintain peace and order at barangay level.
- Implementation laws and ordinances strictly for the protection and enhancement of peace and order at the Municipal and barangay levels.

It is important that mitigating measures are implemented to minimize if not eliminate the potential negative impacts of the proposed project. Monitoring programs unique to specific development projects need to be formulated and implemented even prior to the start of construction activities.

5.3 Monitoring Plan

Monitoring is part of the continuing process of plan, program, project, and activity evaluation. It is simply the comparison of what is being done with what was proposed in the plan. An important aspect of monitoring is not a fault find but to recognize problems as they develop so that remedial action can instantly be taken. It is an on-going process to learn the efficiency with which the plans are implemented.

The environmental monitoring plan identifies the parameters that should be monitored during project implementation. Monitoring these parameters enables the proponent or other concerned agencies to identify whether certain parameters are reaching critical levels or concentrations that might affect humans, animals and plants. Availability of such data would facilitate interim assessment to determine whether the projected benefits have been optimized while minimizing negative environmental impacts. Regular monitoring is necessary to properly assign and attribute environmental changes to certain conditions or actions.

A system of monitoring important parameters that reflect the health condition of the employees and personnel will be put in place to ensure that project activities and programs are meeting its target effectively and efficiently. The monitoring system will include land, water, air and people.

Land

Strict implementation of erosion control and revegetation of disturbed areas should be done. Agronomic practices and erosion control hedgerows should be carried out with limited conversion of forest to other uses to prevent unfavorable land-use changes. On the other hand, climate mitigation strategies should be implemented not only by the proponent but by the LGUs.

Water

Monthly monitoring of water quality of Daplac Bay should be done. Parameters to be measured include pH, temperature, dissolved oxygen (DO), total/fecal coliform, color, turbidity, TSS, TDS, COD, and oil and grease. Sampling stations should be distributed along the perimeter of the island with the intention that all parcels are represented. Potability test of water source should be conducted at least once a year to determine suitability for domestic use. Water supply monitoring needs to be done semi-annually to observe ground water and surface sources during the wet and the dry seasons. Hydrological studies are needed in this aspect.

Air

Quarterly monitoring of ambient air quality would be conducted in the sampling stations identified in the study. Parameters to be measured should include TSP, NO₂ and SO₂. The frequency of monitoring could be increased to a monthly basis depending on the results of the monitoring. Additional sampling stations could also be considered depending on the future developments in the area.

Noise

Monthly monitoring of noise pollution is considered. It is advisable to determine if the noise is within the DENR standard. Noise in the project premises would emanate from heavy equipment, vehicles, power generation, and human noise. A proper preventive maintenance program is necessary to reduce noise.

People

Monthly reports should be given to the management on the health conditions of the people employed by the company. It is advisable that employees should consult the company physician-designate when the need arises.

Table 5.1 Environmental Management Plan (EMP) and corresponding costs.

Parameters	Location	Frequency	Responsibility	Annual Cost
<u>Land</u>				
Land-use and Vegetation	Project Site	Quarterly	Multipartite Monitoring Team	PhP 50,000
Soil Erosion	Civil works areas and vicinities Natural drainage ways	Just after strong rainfall events	Multipartite Monitoring Team	PhP 100,000
Monitoring of solid wastes	Project area and premises	Monthly	Multipartite Monitoring Team	PhP 50,000
Water Supply	Rain gauge	Daily	Multipartite Monitoring Team	PhP 20,000
➤ Rainfall	Deep well pump Faucets	Semi-annually		
➤ Potability				
Ground water static level	Project area and premises	At least twice a year or as the need arises	Multipartite Monitoring Team	PhP 30,000
<u>Air</u>				
Air quality	Project area and premises	Monthly	Multipartite Monitoring Team	PhP 100,000
TSP, NO ₂ , SO ₂				
Noise Pollution	Project area and premises	Monthly	Multipartite Monitoring Team Multipartite	PhP 50,000
<u>People</u>				
Socio-economics Census of community migration	Inside and around the project site	Once a year	Monitoring Team	PhP 100,000
Health	All employees	Monthly	Proponent	PhP 50,000

5.3.1 Self-Monitoring Plan

The general categories to be monitored are land, water, air, noise and people environments. The monitoring plan shall focus on the parameters to be monitored, methodology or instruments to be used, the schedule of monitoring, the responsible party, the cost of monitoring and the goals based on applicable standards.

Quarterly self-monitoring activities will be conducted by the proponent in order to determine and resolve the possible effect or changes on the environment and to make sure that no unnecessary pollutants are added to the environment, as well as, to facilitate effective implementation of mitigation measures.

5.3.2 Multi-sectoral Monitoring Framework

A multi-partite monitoring team (MMT) shall be formed immediately. The purpose of organizing MMT is to promote public participation and stakeholder vigilance and to provide appropriate check and balance mechanism in the monitoring of project implementation.

As much as possible, MMT shall be composed of representative from DENR, the proponent and from stakeholders group, including representatives from concerned LGUs, directly affected vulnerable/marginalized groups (e.g., women, youth and fisher folks) as may be represented by locally accredited NGOs/POs, the community, concerned EMB Regional Office, and other sectors or relevant government agencies. The team shall be tasked to undertake monitoring of compliance with the conditions stipulated in the ECC as well as the commitment made by the proponent in the EMP.

The multi-sectoral monitoring framework is presented in **Table 5.2** which shows the proposed members of MMT, the sectors they represent, the basis of their selection, and their specific roles.

Table 5.2 Multi-sectoral monitoring framework.

Members	Type	Basis of Selection	Role
❖ DOT Representative	Government Agency	National Gov't regulatory function	Team leader; provide overall supervision in implementing the environmental monitoring plan (EMoP) of the Project.
❖ PENRO	Provincial DENR	Regional Gov't regulatory function	Member; assist in implementing the EMoP and provide guidance on the laws and standards of the DENR at the regional level.
❖ CENRO	Local DENR	Gov't regulatory function	Member; assist in implementing the EMoP and provide guidance on the laws and standards of the DENR at the local level.
❖ Municipal LGU Representative	Municipal LGU	Municipal gov't regulatory function	Member; assist in implementing the EMoP and provide guidance on the laws and standards of municipal LGU.

Table 5.2. Con't...

Members	Type	Basis of Selection	Role
❖ Representative from San Vicente	Barangay LGU	Political heads of the affected barangays	Member; assist in implementing the EMoP and provide guidance on the laws and standards of Barangay LGU, and serve as the link between the community and the MMT.
❖ Representative from the business groups	Business sector	Directly affected by the ecotourism	Member; assist in implementing the EMoP and serve as the link between the business groups and the MMT. Suggest measures to improve the EMoP to suit the needs of farmers.
❖ Representative from the NGO	NGO	To achieve transparency in the dissemination of environmental information.	Member; assist in implementing the EMoP and provide guidance/ suggestions on the most effective and efficient modes of information dissemination.
❖ Representative from the local media	Local media	To achieve transparency in the dissemination of environmental information.	Member; assist in implementing the EMoP and provide guidance/ suggestions on the most effective and efficient modes of information dissemination.
❖ Representative from MHO	Local MHO	To achieve transparency in the dissemination of health, sanitation and applied nutrition.	Member; assist in implementing the EMoP and provide guidelines on health and nutrition standards to make the monitoring system more effective.
❖ Representative from Project Proponent	Proponent	To enhance technical and financial support to make EMoP more effective.	Member; assist in implementing the EMoP and provide guidance/ suggestions to make the monitoring system more effective. Provide funds required to implement the EMoP.

5.4 Water Quality Management Measures

The project will implement a comprehensive water quality monitoring program. The program aims to lessen if not totally prevent pollution that may result from the activities in the bathing establishment. The focus will be on protecting surface water to ensure that the aquatic habitats are not compromised. This will be achieved through a strict program of pollution prevention, emergency response preparedness and water quality monitoring.

Monitoring the water discharge from the beach site will ensure that the water quality that will pass through the water receiving bodies shall conform to Class C standard. The water quality parameters that were analyzed in this study will be monitored on a quarterly basis at major discharge points. By doing so, pollution deriving from the ecotourism will be eliminated.

Wherever possible, the open channels for runoff water will pass through vegetated drainage lines to minimize sedimentation of the nearby coastal environments.

An environmental awareness seminar among the contractors will also be conducted. This will ensure that all workers will be environmentally conscious to prevent human induced environmental accidents.

5.4.1 Solid Waste Management & Recycling Initiatives

Operation of the bathing establishment project will generate a lot of solid waste that may potentially enter the surface waters. Wastes will consist largely of industrial, office and domestic materials. These are in the forms of paper, plastic, rubber, metallic materials and house keeping chemicals. These wastes may impact on any of the resources in the area. Their impacts to the water resources include water quality degradation due to leachates, odors and BOD. Such impacts may be made acceptable through proper waste management.

To prevent this, a solid waste management strategy will be identified to effectively handle the waste from catering services, customers, restaurants and sanitary wastes. The cornerstones of the waste management program to be implemented for the project are sorting, composting, and recycling. All solid wastes will be segregated according to disposition. By providing color coded waste bins and collection mechanisms, the solid wastes can be segregated at source and disposed or recycled accordingly. There will be a composting program for the bio-degradables and these will be used as organic inputs for the rehabilitation scheme. Recyclable materials will be compacted, packaged, and offered locally to any non-profit organization that can benefit from it. Disposal of used oil, left-over paints and hazardous materials will be taken to waste recycling and processing facilities. For the non-bio-degradables, recycling and reuse will be implemented. The waste water will be treated in traditional septic vaults. The treated waste water from the vaults which passes the environmental standards can be disposed to the public drain. Thus, non-recyclable waste will be packed and moved from the project site to an approved dumping area.

Several of the wastes that will be generated from this project will require treatment before these materials are reused, recycled or finally disposed.

5.4.2 Biodiversity Management Strategy

A Biodiversity Management Strategy will balance the environmental cost of development of bathing establishment site with biodiversity concerns especially in Boayan Island of San Vicente, Palawan.

5.5 Risk Management and Emergency Response Program

Emergency preparedness program is needed to enable the company to successfully respond and deal with emergencies caused by natural or artificial hazard. Thus, an emergency preparedness plan shall be developed by Palawan Cove Corporation.

A clear emergency response policy is essential in order to establish and maintain adequate arrangements to deal with all aspects of the proponent's emergency threats. In order to define an emergency response policy, the following factors usually apply:

- An accurate definition of emergency threats.
- Identification of the effects which are likely to be caused by the threat.
- Assessment of the resources available with the threat.
- The organizational arrangements which are required for respond to and recover from emergency events.

- **Definition** of how emergency response policy interlocks with those aspects concerned with **development** and protection of the environment.
- Any **other** specific factors which may be applicable.

For purposes of defining emergency policy, two aspects need to be carefully reviewed: (i) the threat and its effects, and (ii) the policy itself. This is particularly relevant to the selection of options and the priorities given within the emergency response policy which should be analyzed against the following definitions available options:

Prevention. Measures aimed at impeding the occurrence of an emergency event and/or preventing such an occurrence having harmful effects on communities.

Mitigation. Action taken usually in the form of specific programs to reduce the effects of an emergency threat on the community. It is possible to prevent some emergency threat effects, while others will persist and can be modified or reduced if appropriate action is taken.

Preparedness. Measures which enable LGUs, communities and individuals to respond rapidly and effectively to emergency situations. Preparedness measures include the formulation of viable emergency threats plan, the maintenance of inventories of resources and the training of personnel.

Response. Response measures are usually those which are taken immediately prior to and following emergency threat impact. These are directed towards saving life and protecting property and dealing with the immediate damage and other effects caused by the emergency threat.

Recovery. The process by which the communities and LGUs are assisted in returning to their proper levels of functioning following an emergency threat. The recovery process can be protracted. Recovery is usually taken to include other aspects such as restoration and reconstruction.

Development. The progressive advancement of the community as it interrelates with the effects of emergency threat and emergency response policy and management.

Emergency Threat and Likely Effects

It is important for emergency response managers to analyze the effects emergency threats in relation to circumstances obtaining in the bathing establishment area of the proponent. Through such an analysis, it is possible to define in advance many of the requirements which apply to the emergency response cycle. This is especially valuable for anticipating action needed for response and recovery. In general terms, typical effects of emergency threats tend to be: loss of life, injury, damage to and destruction of property, damage to and destruction of subsistence and cash crops, disruption of production, disruption of lifestyle, loss of livelihood, disruption of essential services, damage to infrastructure and disruption of local government systems, economic loss, and sociological and psychological after-effects.

Assessment of Available Resources

Effective utilization of resources is a major emergency response objective. To achieve this objective, there must be: accurate identification of resources; correct assessment of their capability; allocation of suitable roles for resource organizations; and plans and procedures to utilize resources in a timely and effective manner. The emergency response policy, therefore, has to be balanced with the various resources which exist in terms of equipment, facilities and personnel. It is essential to consider the widest range of both government and non-government organizations in the course of assessing resources. In order to determine the suitability and effectiveness of resources for emergency response management purposes, it is also important to evaluate national and local resources with respect to capability, availability, durability and operational integrity.

Organizational Arrangements

In framing the emergency response policy, careful considerations must be given to organizational aspects, and to their inclusion in the relevant policy statement. In this regard, it is usually prudent to frame the policy so that minor adjustments to organizational arrangements can be made without having to amend the policy itself.

Inter-relation of Emergency Response Policy with Other National Emergency Response Policies

Those responsible for drafting and formulating emergency response policy must aim to achieve a balance and inter-relationship with other national emergency response policies. This involves a careful consideration by the proponent to other policies, especially with a view to ensuring, as far as possible, compatibility of interest. In some cases, it may be that an astute emergency response policy can offer advantages to other national emergency response policies.

Other Factors

In addition to the foregoing factors, others are relevant to the proponent's circumstances. Therefore, before drafting the emergency response policy, emergency response officials of Palawan Cove Corporation should take careful survey to identify any such additional factors.

CHAPTER 6:

MARKET AND UTILIZATION

6.1 Market Information

Different motivations and strategies are planned before visitors come to a tourism area. Accessing market data from the Department of Tourism (DOT) and other sources will greatly improve chances to develop a viable tourism product. This product is an essential part of any form of tourism development. Thus, one must have to know the market so that one can offer the right tourism product.

As part of the early planning process, in a conventional coastal tourism projects the developer conducts a market analysis and feasibility study to set up a successful and professional business enterprise.

The development of different products in tourism that are sold to tourists must ensure a safe, enjoyable, comfortable and well-informed travel. The product and services include all type of transportation to and from the tourist destinations, food and drinks, accommodations, tour, tour guiding, tour books, facilities for interpretation, rest, recreation and other things.

An ecotour product is created by skillfully combining different kinds of tourism resources (tourism attractions and activities), tourism workers (e.g. guides, boatmen, and cooks), tourism products (crafts, food, accommodations) and many others to enable tourists to have an active experience with the natural environment and local culture.

The steps to develop a tourism product are outlined in **Figure 12**. This process will vary from one project to another depending on the local context, needs and potentials (Huttche, 2002).

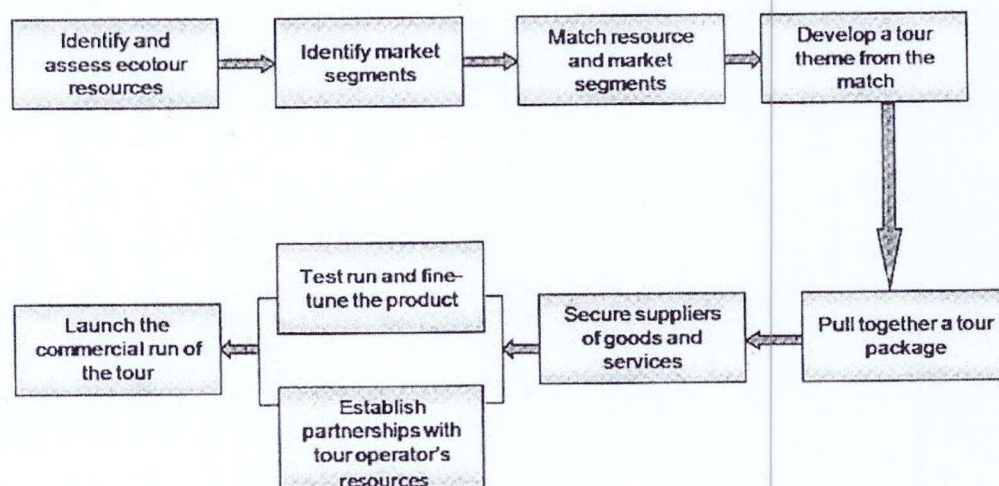


Figure 12. Ecotourism product development steps.

6.1.1 Marketing Strategies

The natural environment of Boayan Island will draw more visitors to enjoy both nature and development. In addition, programs and strategies will be implemented in this project:

a) Advertising

Services will be made available to guest and visitors either local or foreign tourist. Advertising will be conducted locally and abroad to bring more visitors, guests and tourists.

b) Used of Private and Government Promotions

Promotion of bathing establishment shall be made thru local government for information and networking. Likewise, other prospective visitors shall be contacted through friends, associates and thru web site.

c) Pricing Structure

The pricing structure shall be evaluated and analyzed later upon completion of the establishments.

6.2 Utilization

Bathing establishment project aims to a sustainable tourism taking into consideration to value the concept of equality and partnership, having unity with nature. Tourism is sustainable when it dignifies and makes people proud of it, satisfies the visitors and promotes well-being.

One of the principles of sustainable tourism is that tourism must consider its effects on cultural heritage and traditional elements, activities and dynamics of each local community. These elements must at all times play a central role in the formulation of tourism strategies. Environmentally and culturally vulnerable spaces, both now and in the future shall be given special priority in the matter of technical cooperation and financial aid for sustainable tourism development.

CHAPTER 7:

ORGANIZATION

7.1 Project Organization

The proposed bathing establishment project at Boayan Island of Palawan Cove Corporation (PCC) covers an area of 24 hectares. The Resort Manager would be the proponent and twenty-seven (27) resort staffs will be hired to cater the needs of guests and visitors. They will be employed as marketing officer, planning officer, accountant, boat crew, kitchen staff, security officer, fire and safety officer, personnel officer, front desk, housekeeping, ground keeping, maintenance staff, senior and junior staff. The specified position will be assigned to a qualified applicant.

Hiring of employees will be based on the following profile of projected staff employment:

- a) The staff will be hired according to the needs of the bathing establishment and the qualifications of the applicants. Applicants are not evaluated according to their cultural affiliations or status as an Indigenous Person. Special skills will be sourced from outside the area, if necessary.
- b) Market forces will dictate the wage rates required to maintain the quality and quantity of staff required for an efficient and reliable operation. Wage levels will be in keeping with the current Wage Order for Region IV-MIMAROPA as a minimum.
- c) Health Facilities located on the site will be confined in an Aid Station. All staff members will be trained in basic first aid and CPR. Certain key staff will be trained in special lifesaving techniques for the purpose of stabilizing a casualty and preparing for transport.
- d) All employees will be hired by formal, written contract. The contract will contain all elements of compensation and benefits as required by PD 442. The Palawan District Office of the DOL will be consulted on a regular basis to ensure that company operations are in keeping with regulatory requirements.
- e) The local inhabitants of the Municipality of San Vicente will benefit primarily through the increase in tax revenue and through the local share. Some residents will benefit directly by way of employment.
- f) Some benefits with regards to increased vigilance in the area of conservation and enforcement of environmental laws from the implementation of the project.
- g) The cultural norms, morals and lifestyle of the local inhabitants are of concern to the bathing establishment as they affect or otherwise have a direct bearing on the project. Employees are required to conduct themselves in a professional manner while in the site. While off-site, employees are encouraged to conduct themselves in a manner which brings credit upon themselves and the Company. The Company seeks to run a respectable and law-abiding business. Guests will be fully advised regarding the customs and courtesies to be observed when traveling outside of the bathing establishment.

An organization chart of the bathing establishment is presented in **Figure 13**.

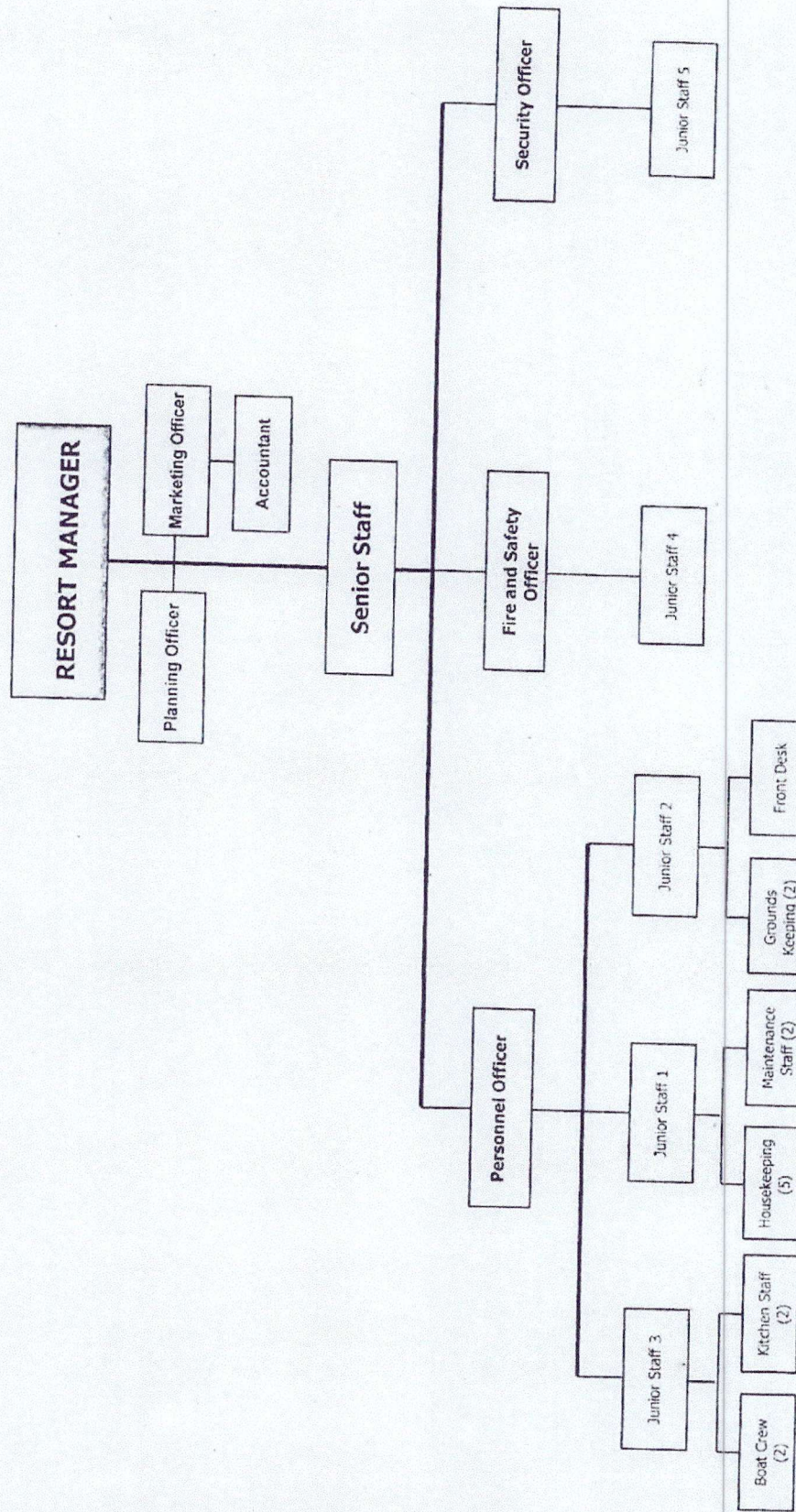


Figure 13. Bathing Establishment Project Organizational Chart.

CHAPTER 8:

FINANCIAL ASPECTS

8.1 Estimated Cost

The estimated cost of developing the bathing establishment is about PhP 147,711,783.96 broken down as follows:

<u>Particulars</u>	<u>Amount</u>
1.0 Fixed Assets	129,360,000.00
1.1 Accommodation and Amenities	10,000,000.00
1.2 Furniture and Fixture	495,000.00
1.3 Water, Power and Electricity	495,000.00
1.4 Transportation Equipment	140,350,000.00
Sub-Total	
2.0 Organizational & Pre-operating Expenses	1,688,002.00
3.0 Working Fund	5,673,781.96
TOTAL	147,711,783.96

[illegible]

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Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	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Table 1.1. Summary of data for the project

Variable	Variable description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Variable 1	Variable 1 description	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.89	1.90	1.91	1.92	1.93	1.94	1.95	1.96	1.97	1.98	1.99	2.00
Variable 2	Variable 2 description	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10	2.11	2.12	2.13	2.14	2.15	2.16	2.17	2.18	2.19	2.20	2.21	2.22	2.23	2.24	2.25	2.26	2.27	2.28	2.29	2.30	2.31	2.32	2.33	2.34	2.35	2.36	2.37	2.38	2.39	2.40	2.41	2.42	2.43	2.44	2.45	2.46	2.47	2.48	2.49	2.50	2.51	2.52	2.53	2.54	2.55	2.56	2.57	2.58	2.59	2.60	2.61	2.62	2.63	2.64	2.65	2.66	2.67	2.68	2.69	2.70	2.71	2.72	2.73	2.74	2.75	2.76	2.77	2.78	2.79	2.80	2.81	2.82	2.83	2.84	2.85	2.86	2.87	2.88	2.89	2.90	2.91	2.92	2.93	2.94	2.95	2.96	2.97	2.98	2.99	3.00
Variable 3	Variable 3 description	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	3.10	3.11	3.12	3.13	3.14	3.15	3.16	3.17	3.18	3.19	3.20	3.21	3.22	3.23	3.24	3.25	3.26	3.27	3.28	3.29	3.30	3.31	3.32	3.33	3.34	3.35	3.36	3.37	3.38	3.39	3.40	3.41	3.42	3.43	3.44	3.45	3.46	3.47	3.48	3.49	3.50	3.51	3.52	3.53	3.54	3.55	3.56	3.57	3.58	3.59	3.60	3.61	3.62	3.63	3.64	3.65	3.66	3.67	3.68	3.69	3.70	3.71	3.72	3.73	3.74	3.75	3.76	3.77	3.78	3.79	3.80	3.81	3.82	3.83	3.84	3.85	3.86	3.87	3.88	3.89	3.90	3.91	3.92	3.93	3.94	3.95	3.96	3.97	3.98	3.99	4.00
Variable 4	Variable 4 description	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	4.10	4.11	4.12	4.13	4.14	4.15	4.16	4.17	4.18	4.19	4.20	4.21	4.22	4.23	4.24	4.25	4.26	4.27	4.28	4.29	4.30	4.31	4.32	4.33	4.34	4.35	4.36	4.37	4.38	4.39	4.40	4.41	4.42	4.43	4.44	4.45	4.46	4.47	4.48	4.49	4.50	4.51	4.52	4.53	4.54	4.55	4.56	4.57	4.58	4.59	4.60	4.61	4.62	4.63	4.64	4.65	4.66	4.67	4.68	4.69	4.70	4.71	4.72	4.73	4.74	4.75	4.76	4.77	4.78	4.79	4.80	4.81	4.82	4.83	4.84	4.85	4.86	4.87	4.88	4.89	4.90	4.91	4.92	4.93	4.94	4.95	4.96	4.97	4.98	4.99	5.00
Variable 5	Variable 5 description	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	5.10	5.11	5.12	5.13	5.14	5.15	5.16	5.17	5.18	5.19	5.20	5.21	5.22	5.23	5.24	5.25	5.26	5.27	5.28	5.29	5.30	5.31	5.32	5.33	5.34	5.35	5.36	5.37	5.38	5.39	5.40	5.41	5.42	5.43	5.44	5.45	5.46	5.47	5.48	5.49	5.50	5.51	5.52	5.53	5.54	5.55	5.56	5.57	5.58	5.59	5.60	5.61	5.62	5.63	5.64	5.65	5.66	5.67	5.68	5.69	5.70	5.71	5.72	5.73	5.74	5.75	5.76	5.77	5.78	5.79	5.80	5.81	5.82	5.83	5.84	5.85	5.86	5.87	5.88	5.89	5.90	5.91	5.92	5.93	5.94	5.95	5.96	5.97	5.98	5.99	6.00
Variable 6	Variable 6 description	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	6.10	6.11	6.12	6.13	6.14	6.15	6.16	6.17	6.18	6.19	6.20	6.21	6.22	6.23	6.24	6.25	6.26	6.27	6.28	6.29	6.30	6.31	6.32	6.33	6.34	6.35	6.36	6.37	6.38	6.39	6.40	6.41	6.42	6.43	6.44	6.45	6.46	6.47	6.48	6.49	6.50	6.51	6.52	6.53	6.54	6.55	6.56	6.57	6.58	6.59	6.60	6.61	6.62	6.63	6.64	6.65	6.66	6.67	6.68	6.69	6.70	6.71	6.72	6.73	6.74	6.75	6.76	6.77	6.78	6.79	6.80	6.81	6.82	6.83	6.84	6.85	6.86	6.87	6.88	6.89	6.90	6.91	6.92	6.93	6.94	6.95	6.96	6.97	6.98	6.99	7.00
Variable 7	Variable 7 description	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	7.10	7.11	7.12	7.13	7.14	7.15	7.16	7.17	7.18	7.19	7.20	7.21	7.22	7.23	7.24	7.25	7.26	7.27	7.28	7.29	7.30	7.31	7.32	7.33	7.34	7.35	7.36	7.37	7.38	7.39	7.40	7.41	7.42	7.43	7.44	7.45	7.46	7.47	7.48	7.49	7.50	7.51	7.52	7.53	7.54	7.55	7.56	7.57	7.58	7.59	7.60	7.61	7.62	7.63	7.64	7.65	7.66	7.67	7.68	7.69	7.70	7.71	7.72	7.73	7.74	7.75	7.76	7.77	7.78	7.79	7.80	7.81	7.82	7.83	7.84	7.85	7.86	7.87	7.88	7.89	7.90	7.91	7.92	7.93	7.94	7.95	7.96	7.97	7.98	7.99	8.00
Variable 8	Variable 8 description	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	8.10	8.11	8.12	8.13	8.14	8.15	8.16	8.17	8.18	8.19	8.20	8.21	8.22	8.23	8.24	8.25	8.26	8.27	8.28	8.29	8.30	8.31	8.32	8.33	8.34	8.35	8.36	8.37	8.38	8.39	8.40	8.41	8.42	8.43	8.44	8.45	8.46	8.47	8.48	8.49	8.50	8.51	8.52	8.53	8.54	8.55	8.56	8.57	8.58	8.59	8.60	8.61	8.62	8.63	8.64	8.65	8.66	8.67	8.68	8.69	8.70	8.71	8.72	8.73	8.74	8.75	8.76	8.77	8.78	8.79	8.80	8.81	8.82	8.83	8.84	8.85	8.86	8.87	8.88	8.89	8.90	8.91	8.92	8.93	8.94	8.95	8.96	8.97	8.98	8.99	9.00
Variable 9	Variable 9 description	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	9.10	9.11	9.12	9.13	9.14	9.15	9.16	9.17	9.18	9.19	9.20	9.21	9.22	9.23	9.24	9.25	9.26	9.27	9.28	9.29	9.30	9.31	9.32	9.33	9.34	9.35	9.36	9.37	9.38	9.39	9.40	9.41	9.42	9.43	9.44	9.45	9.46	9.47	9.48	9.49	9.50	9.51	9.52	9.53	9.54	9.55	9.56	9.57	9.58	9.59	9.60	9.61	9.62	9.63	9.64	9.65	9.66	9.67	9.68	9.69	9.70	9.71	9.72	9.73	9.74	9.75	9.76	9.77	9.78	9.79	9.80	9.81	9.82	9.83	9.84	9.85	9.86	9.87	9.88	9.89	9.90	9.91	9.92	9.93	9.94	9.95	9.96	9.97	9.98	9.99	10.00
Variable 10	Variable 10 description	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	10.10	10.11	10.12	10.13	10.14	10.15	10.16	10.17	10.18	10.19	10.20	10.21	10.22	10.23	10.24	10.25	10.26	10.27	10.28	10.29	10.30	10.31	10.32	10.33	10.34	10.35	10.36	10.37	10.38	10.39	10.40	10.41	10.42	10.43	10.44	10.45	10.46	10.47	10.48	10.49	10.50	10.51	10.52	10.53	10.54	10.55	10.56	10.57	10.58	10.59	10.60	10.61	10.62	10.63	10.64	10.65	10.66	10.67	10.68	10.69	10.70	10.71	10.72	10.73	10.74	10.75	10.76	10.77	10.78	10.79	10.80	10.81	10.82	10.83	10.84	10.85	10.86	10.87	10.88	10.89	10.90	10.91	10.92	10.93	10.94	10.95	10.96	10.97	10.98	10.99	11.00
Variable 11	Variable 11 description	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	11.10	11.11	11.12	11.13	11.14	11.15	11.16	11.17	11.18	11.19	11.20	11.21	11.22	11.23	11.24	11.25	11.26	11.27	11.28	11.29	11.30	11.31	11.32	11.33	11.34	11.35	11.36	11.37	11.38	11.39	11.40	11.41	11.42	11.43	11.44	11.45	11.46	11.47	11.48	11.49	11.50	11.51	11.52	11.53	11.54	11.55	11.56	11.57	11.58	11.59	11.60	11.61	11.62	11.63	11.64	11.65	11.66	11.67	11.68	11.69	11.70	11.71	11.72	11.73	11.74	11.75	11.76	11.77	11.78	11.79	11.80	11.81	11.82	11.83	11.84	11.85	11.86	11.87	11.88	11.89	11.90	11.91	11.92	11.93	11.94	11.95	11.96	11.97	11.98	11.99	12.00
Variable 12	Variable 12 description	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	12.10	12.11	12.12	12.13	12.14	12.15	12.16	12.17	12.18	12.19	12.20	12.21	12.22	12.23	12.24	12.25	12.26	12.27	12.28	12.29	12.30	12.31	12.32	12.33	12.34	12.35	12.36	12.37	12.38	12.39	12.40	12.41	12.42	12.43	12.44	12.45	12.46	12.47	12.48	12.49	12.50	12.51	12.52	12.53	12.54	12.55	12.56	12.57	12.58	12.59	12.60	12.61	12.62	12.63	12.64	12.65	12.66	12.67	12.68	12.69	12.70	12.71	12.72	12.73	12.74	12.75	12.76	12.77	12.78	12.79	12.80	12.81	12.82	12.83	12.84	12.85	12.86	12.87	12.88	12.89	12.90	12.91	12.92	12.93	12.94	12.95	12.96	12.97	12.98	12.99	13.00
Variable 13	Variable 13 description	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	13.10	13.11	13.12	13.13	13.14	13.15	13.16	13.17	13.18	13.19	13.20	13.21	13.22	13.23	13.24	13.25	13.26	13.27	13.28	13.29	13.30	13.31																																																																					

Company	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	2934	2935	2936	2937	2938	2939	2940	2941	2942	2943	2944	2945	2946	2947	2948	2949	2950	2951	2952	2953	2954	2955	2956	2957	2958	2959	2960	2961	2962	2963	2964	2965	2966	2967	2968	2969	2970	2971	2972	2973	2974	2975	2976	2977	2978	2979	2980	2981	2982	2983	2984	2985	2986	2987	2988	2989	2990	2991	2992	2993	2994	2995	2996	2997	2998	2999	3000
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8.2 Sources of Finance

To finance proposed total investment of PhP 147,711,783.96, the proponent intends to tap the following:

<u>Particulars</u>	<u>Amount</u>
1. Cash of P P88,500,000.00 payable in 25 years equal installments annually beginning on the 1st year	88,500,000.00
2. Equity contribution by the proponent and other stockholders to be paid-in within one (1) year	59,211,783.96

Total Funds for Project Financing

147,711,783.96

8.3 Returns

<u>Year</u>	<u>Amount (PhP)</u>
1	(12,281,962)
2	(4,642,096)
3	2,990,241
4	10,614,676
5	24,476,333
6	25,285,287
7	25,279,157
8	25,182,781
9	25,076,135
10	23,822,042
11	24,749,485
12	24,689,307
13	24,536,181
14	24,369,946
15	23,053,286
16	23,915,033
17	23,785,875
18	23,560,318
19	23,318,033
20	21,921,519
21	22,699,420
22	22,482,223
23	22,164,226
24	21,824,878
25	20,326,448
Total	493,198,768

8.4 Financial Analysis

The result of study suggests that this project is feasible. The annual net profit of the proposed project is computed at P 2,990,241.00. The analysis on return on investment reveals that the average annual rate of return on investment is 13% equivalent to the average annual profit of P 19,741,785.00 which implies that the project is financially sound. The payback period is 1.81 years or 1 year and 7 months. The calculation also shows that the bathing establishment project is still viable.

Trial Run Expenses, 3 months

Particulars	Amount
1. Direct labor	178,296.00
2. Supervision and indirect labor, full force	300,432.00
3. Field Administration	96,270.00
4. Supplies	166,666.67
5. Power	100,000.00
6. Fuel and Lubricants	188,370.00
7. Miscellaneous	20,000.00
Total Trial Run Expenses	1,050,034.67

Loan Amortization & Interest

Principal Amount: PHP 88,500,000

Repayment Terms : In twenty-five (25) equal annual installments starting on the 1st year after availment

Interest Rate : 12%

Guarantee Pay : 2% of outstanding principal amount guaranteed per annum

Total Interest Rate : 14% per annum

LOAN AMORTIZATION SCHEDULE

Year	Principal	Balance of Principal	Principal Payment	Interest Charges	Guarantee Pay	Total Interest Payments	Total Loan Payments
0	88,500,000						
1		88,500,000	885,000	10,620,000	1,770,000	12,390,000	13,275,000
2		87,615,000	885,000	10,513,800	1,752,300	12,266,100	13,151,100
3		86,730,000	885,000	10,407,600	1,734,600	12,142,200	13,027,200
4		85,845,000	885,000	10,301,400	1,716,900	12,018,300	12,903,300
5		84,960,000	885,000	10,195,200	1,699,200	11,894,400	12,779,400
6		84,075,000	885,000	10,089,000	1,681,500	11,770,500	12,655,500
7		83,190,000	885,000	9,982,800	1,663,800	11,646,600	12,531,600
8		82,305,000	885,000	9,876,600	1,646,100	11,522,700	12,407,700
9		81,420,000	885,000	9,770,400	1,628,400	11,398,800	12,283,800
10		80,535,000	885,000	9,664,200	1,610,700	11,274,900	12,159,900
11		79,650,000	885,000	9,558,000	1,593,000	11,151,000	12,036,000
12		78,765,000	885,000	9,451,800	1,575,300	11,027,100	11,912,100
13		77,880,000	885,000	9,345,600	1,557,600	10,903,200	11,788,200
14		76,995,000	885,000	9,239,400	1,539,900	10,779,300	11,664,300
15		76,110,000	885,000	9,133,200	1,522,200	10,655,400	11,540,400
16		75,225,000	885,000	9,027,000	1,504,500	10,531,500	11,416,500
17		74,340,000	885,000	8,920,800	1,486,800	10,407,600	11,292,600
18		73,455,000	885,000	8,814,600	1,469,100	10,283,700	11,168,700
19		72,570,000	885,000	8,708,400	1,451,400	10,159,800	11,044,800
20		71,685,000	885,000	8,602,200	1,433,700	10,035,900	10,920,900
21		70,800,000	885,000	8,496,000	1,416,000	9,912,000	10,797,000
22		69,915,000	885,000	8,389,800	1,398,300	9,788,100	10,673,100
23		69,030,000	885,000	8,283,600	1,380,600	9,664,200	10,549,200
24		68,145,000	885,000	8,177,400	1,362,900	9,540,300	10,425,300
25		67,260,000	885,000	8,071,200	1,345,200	9,416,400	10,301,400
TOTAL	88,500,000		22,125,000	233,640,000	38,940,000	272,580,000	294,705,000

Manning Requirements, Salaries & Wages (Operating Management)

Office and Position	No.	Rate per Month	Subtotal Salaries per month	SSS Premium	PhilHealth	Pag-Ibig Fund	Sub-total Fringe Benefit	Total Fringe Benefit	Total Salaries and Wages
1. Resort Manager	1	30,000	30,000	1,090	100	900	2,090	2,090	32,090
2. Marketing Officer	1	20,000	20,000	1,090	100	600	1,790	1,790	21,790
3. Planning Officer	1	20,000	20,000	1,090	100	600	1,790	1,790	21,790
4. Accountant	1	15,000	15,000	1,090	100	450	1,640	1,640	16,640
5. Boat Crew	2	8,000	16,000	575	100	240	915	1,830	17,830
6. Kitchen Staff	2	8,000	16,000	575	100	240	915	1,830	17,830
7. Security Officer	1	12,000	12,000	848	100	360	1,308	1,308	13,308
8. Fire and Safety Officer	1	12,000	12,000	848	100	360	1,308	1,308	13,308
9. Personnel Officer	1	12,000	12,000	848	100	360	1,308	1,308	13,308
10. Front Desk	1	8,000	8,000	575	100	240	915	915	8,915
11. Housekeeping	5	6,000	30,000	434	100	180	714	3,570	33,570
12. Ground Keeping	2	8,000	16,000	575	100	240	915	1,830	17,830
13. Maintenance Staff	2	6,000	12,000	434	100	180	714	1,428	13,428
14. Senior Staff	1	12,000	12,000	848	100	360	1,308	1,308	13,308
15. Junior Staff	5	10,000	50,000	717	100	300	1,117	5,585	55,585
TOTAL	27	187,000	281,000	11,637	1,500	5,610	18,747	29,530	310,530

Lubricants Requirements, in liters						
EQUIPMENT	No. of Units	Unit of Issue	per Day	per Month	per Annun	
1.0 Automotive Diesel Fuel (ADF)						
1.1 25-HP genset	1	unit	10	250	3,000	
1.2 10-HP genset	1	unit	10	250	3,000	
1.3 25-HP speedboat	1	unit	15	375	4,500	
Sub-total ADF	3		35	875	10,500	
Net Consumption @ 80% Equipment Availability Factor			28.0	700.0		8,400.0
2.0 Gasoline						
2.1 Passenger vessel	1	units	10	250	3,000	
2.2 Pumpboat	1	units	10	250	3,000	
Sub-total, Gasoline	2		20	500	6,000	
Net Consumption @ 90% Equipment Availability Factor			18	450		5,400
Cost of Automotive Diesel Fuel (ADF) at P42.00 per liter, landed @ Plantation			1,176	29,400		352,800
Cost of Gasoline Fuel at P56.00 per liter, landed @ Plantation			1,008	25,200		302,400
3.0 TOTAL COST OF FUEL			2,184	54,600		655,200
4.0 Cost of Lubricants @ 15% of Fuel & Lubricants Cost			328	8,190		98,280
5.0 Cost of Fuel & Lubricants			2,512	62,790		753,480
6.0 Cost of Repair & Maintenance, estimated @ 20% of Fuel & Lubricants Cost			502	12,558		150,696

Cost of Buildings and Equipments

Particulars	No. of Units	Service Life in years	Cost per Unit	Total cost (P)
1.0 Accomodation and Amenities				
1.1 Clubhouse (400sq.m)	3	25	4,000,000.00	12,000,000.00
Multi Purpose Hall				
Bar				
Office				
Reception Area				
Gift Counter				
Luggage				
Billiards Hall				
Library				
Kids Room				
Entertainment Area				
1.2 3-storey Hotel (500sq.m)	21	25	5,000,000.00	105,000,000.00
1.3 Mooring	4	25	150,000.00	600,000.00
				117,600,000.00
Add: 10% Contingencies				11,760,000.00
Sub-total	28			129,360,000.00
NOTE: P10,000/sq.m				
2.0 Water, Power and Electricity				
2.1 25-HP genset	1	10	200,000.00	200,000.00
2.2 10-HP genset	1	10	100,000.00	100,000.00
2.3 Water desalination plant	1	10	100,000.00	100,000.00
2.4 Water purifier	1	10	50,000.00	50,000.00
				450,000.00
Add: 10% Contingencies				45,000.00
Sub-total	4			495,000.00
3.0 Transportation Equipments				
3.1 25-HP speedboat	1	10	250,000.00	250,000.00
3.2 Passenger vessel	1	10	100,000.00	100,000.00
3.3 16-HP pumpboat	1	10	100,000.00	100,000.00
				450,000.00
Add: 10% Contingencies				45,000.00
Sub-total	3			495,000.00
Total Cost of Buildings and Equipments	35			130,350,000.00

Organizational and Pre-operating Expenses, 3 months

Particulars	Peso Share (P)
A. Organizational Expenses	
1 Initial Market Survey and Technical Investigation	20,000.00
2 Pre-investment Project Feasibility Study	50,000.00
3 Loan guarantee application fee - 0.1% of loan value	88,500.00
4 Financial Intermediation and loan management service fee - 0.1% of loan	88,500.00
5 Mortgage and Documentation Fee, 0.08% of loan	70,800.00
6 Management and professional service fees, 0.1% of loan	88,500.00
Total Organizational Expenses	406,300.00
B. Pre-operating Expenses	
1 Recruitment and Advertising	30,000.00
2 Salaries and Wages	396,702.00
3 Professional fees for Technical Consultants	60,000.00
4 Professional fees for Project Management Consultants	200,000.00
5 External engineering service for land survey, soil and water test, etc.	75,000.00
6 Initial Environmental Examination, Add: ISO 9002, ISO 1500	400,000.00
7 Miscellaneous Office expenses	20,000.00
8 Miscellaneous Construction Site expenses	50,000.00
9 Equipment Insurance during installation period	30,000.00
10 Employees recruitment and mobilization expenses	20,000.00
Total Pre-operating Expenses	1,281,702.00
Total Organizational and Pre-operating Expenses	1,688,002.00

Working Fund

Particulars		Amount
1.0 Minimum Cash Before Operations	p	2,000,000
2.0 Inventories/Supplies		103,484
3.0 Pre-paid Insurance ¹		2,807,000
4.0 Advance Payment, Transportation Equipment		247,500
Sub-Total	p	5,157,984
Add: 10% Contingency		515,798
Total Cost of Working Fund	p	5,673,782

¹ 2% of Total Fixed Assets

CHAPTER 9:

CONCLUSION

The construction and operations of the proposed bathing establishment could contribute to the socio-economic growth of the municipality. It will also provide new avenues and opportunities for employment, entrepreneurial development, physical/infrastructural development, and consequently, enhanced municipal taxation among others, would happen. The proponent also wants to pursue the project not only for personal interest but for the general good and welfare of San Vicente.

In addition, the bathing establishment project activities are environment friendly and no harmful effects on the soil, water, wildlife, and population. The natural beauty of the island is the major factor that attributes tourism attraction hence always be taken into priority consideration for its protection whenever development is being introduced. Approval of the Comprehensive Development and Management Plan (CDMP) is earnestly requested by PCC.

CHAPTER 10:

REFERENCES

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- MPD Office, 2000. "Comprehensive Land and Water Use Plan: San Vicente, Palawan – CY 2001 – 2010."
- Palawan Council for Sustainable Development website.
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- www.sanvicentepalawan.com.ph

ATTACHMENT 1

Forest Land Use Agreement for Tourism Purposes (FLAgT)



Republic of the Philippines
Department of Environment and Natural Resources
Visayas Avenue, Diliman, Quezon City
Tel Nos. 929-8626 to 29; 929-8633 to 35
929-7041 to 43; 929-8252; 929-1669
Website: <http://www.denr.gov.ph> / E-mail: web@denr.gov.ph

**FOREST LAND USE AGREEMENT
FOR TOURISM PURPOSES
(FLAGT) No. 01-2012**

Of

PALAWAN COVE CORPORATION
(Second Party)

BOAYAN ISLAND, SITIO DAPLAC, BARANGAY POBLACION, SAN VICENTE, PALAWAN
(Location of Area)

This **AGREEMENT** made and entered into by and between:

The **REPUBLIC OF THE PHILIPPINES**, through the **DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES ("DENR")**, with postal address at Visayas Avenue, Diliman, Quezon City, herein represented by its Secretary, **RAMON J.P. PAJE**, hereinafter referred to as the **FIRST PARTY**,

-and-

PALAWAN COVE CORPORATION, represented by **LESLIE ANN T. YAPKIANWEE** with postal address at 130 Amorsolo corner Herrera Sts., Legaspi Village, Makati City, herein referred to as the **SECOND PARTY**,

WITNESSETH

WHEREAS, under Executive Order No. 192, promulgated on June 10, 1987, the DENR is empowered to exercise supervision and control over the forestlands of the Philippines;

WHEREAS, Section 57 of Presidential Decree No. 705, also known as the "Revised Forestry Code of the Philippines", authorizes the special use of forestlands for beneficial purposes which do not impair the forest resources therein;

WHEREAS, after conducting evaluation and assessment, the **SECOND PARTY** has determined that the establishment, development and operation of a Tourism Project in the above-mentioned area is technically and financially feasible;

WHEREAS, the **SECOND PARTY** has applied for Forest Land Use Agreement for Tourism Purposes (FLAGT) covering **Twenty Four (24.00) hectares** of forestland in Boayan Island, Sitio Daplac, Barangay Poblacion, San Vicente, Palawan in accordance with DENR Administrative Order Nos. 2004-28 dated August 25, 2004 and 2009-16 dated November 25, 2009;

**DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
(FIRST PARTY)**

**PALAWAN COVE CORPORATION
(SECOND PARTY)**

By:



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES



8ENR032223

RAMON J.P. PAJE
Secretary

LESLIE ANN T. YAPKIANWEE
Authorized Representative

WITNESSES:

Let's Go Green

CERTIFIED XEROX COPY
VERGINO, ANGELES
Records Officer III
Chief, Records Unit

WHEREAS, after review and validation of the application, the **FIRST PARTY** found that the **SECOND PARTY** has complied with the requirements for FLAGT;

NOW, THEREFORE, for and in consideration of the foregoing premises and the terms and conditions set forth below, the parties agree as follows:

Area, Purpose and Duration

I. The **FIRST PARTY** hereby grants the **SECOND PARTY** the exclusive right to occupy, manage and develop approximately **Twenty Four (24.00) hectares** of public forestland (the "FLAGT Area") for Tourism Purposes for a period of twenty five (25) years to expire on _____, renewable for another twenty-five (25) years, located at Boayan Island, Sitio Daplac, Barangay Poblacion, San Vicente, Palawan, the boundaries of which are shown in the attached map and form as an integral part of this **AGREEMENT**.

II. The FLAGT Area shall be confined within the perimeter of the parcel of land described in the attached map. No other parcel of public forestland shall be utilized by the **SECOND PARTY** without first securing the prior approval of the **FIRST PARTY**.

III. The FLAGT Area is a public forestland to the best knowledge and belief of the parties, and the **FIRST PARTY** confirms that based on applicable land classification maps, control maps, and available records of the DENR, there are no prior existing rights therein granted in favor of third parties. The **FIRST PARTY** shall not be responsible for any loss that the **SECOND PARTY** may suffer in case the FLAGT Area or portion thereof is declared with finality by a competent court or authority as the private property of another, or is found to be covered by a prior existing right.

IV. The **SECOND PARTY** shall utilize the FLAGT Area only for the purpose for which this **AGREEMENT** is granted. In the event the said area will be used for a different purpose, said use shall be subject to prior approval of the Secretary or his duly authorized representative.

V. The **SECOND PARTY** shall, within six (6) months from the issuance of this **AGREEMENT**, delineate and mark on the ground the boundaries of the FLAGT Area under the supervision of the DENR. It shall preserve the monuments and other landmarks indicating corners and outlines along the boundaries and within the confines of the FLAGT Area.

Comprehensive Development and Management Plan (CDMP)

VI. The **SECOND PARTY** shall submit within six (6) months from the issuance of this **AGREEMENT** a Comprehensive Development and Management Plan ("CDMP") for the FLAGT Area. The CDMP shall provide, among others, for appropriate schemes, arrangements, or activities therein, which are compatible with the Tourism Project for the protections of the environment and conservation of natural resources in the area and shall benefit the host community. The CDMP shall be submitted to, and approved by, the Regional Executive Director concerned, after review and deliberation by a Review Committee composed mainly of technical staff of the Forest Management Sector. The approved CDMP shall form part of the FLAGT;

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
(FIRST PARTY)

By:

RAMON J. P. PAJE
Secretary

PALAWAN COVE CORPORATION
(SECOND PARTY)

By:

LESLIE ANN T. YAPKIANWEE
Authorized Representative

WITNESSES:

CERTIFIED XEROX COPY.

VIRGINIA M. ANGELES
Records Officer III
Chief, Records Unit



VII. The **SECOND PARTY** may construct permanent and/or temporary improvements or infrastructure in the FLAgT Area necessary and appropriate for its development for tourism purposes pursuant to the approved CDMP. "Permanent Improvements" refer to access roads, and buildings or structures which adhere to the ground in a fixed and permanent manner. On the other hand, "Temporary Improvements" include those which are detachable from the foundation or the ground introduced by the **SECOND PARTY** in the FLAgT Area and which the **SECOND PARTY** may remove or dismantle upon expiration or cancellation of this **AGREEMENT**. Any substantial deviations or modifications from, and/or additional improvements in, the approved CDMP shall be subject to prior approval of the Regional Executive Director, or his duly authorized representative. Such deviations, modifications or additional improvements shall at all times be consistent with the purpose for which the FLAgT Area is granted under paragraph I hereof.

Government Share and Performance Bond

VIII. The **SECOND PARTY** shall pay annual Government Share of Nine Hundred Thousand Pesos (Php900,000.00), Philippine Currency, within thirty (30) days upon approval of this **AGREEMENT**, and annually thereafter, within the same month that this **AGREEMENT** is issued, together.

IX. The annual Government Share shall be paid by the **SECOND PARTY**, without need of demand, within the same month that this **AGREEMENT** was issued. In case of failure to pay the annual Government Share on the date due, the **SECOND PARTY** shall pay additional charges of 8.33% per month of delay or 100% for one (1) year.

X. The Government Share is non-refundable.

XI. Payment of Government Share after the expiration of this **AGREEMENT** shall not be construed as an assurance for the renewal thereof.

XII. As guarantee for the faithful performance of the terms and conditions of this **AGREEMENT**, and compliance with applicable Forest Laws and Regulations, the **SECOND PARTY** shall post a Performance Bond of One Million, Eight Hundred Thousand Pesos (Php1,800,000.00) which is twice the amount of annual Government Share or 50% cash and the 50% in the form of surety bond with a duration of five (5) years renewable every five (5) years. Provided, that the face value of the surety bond shall be increased by at least 25%. The performance bond shall be posted within three (3) months upon approval of this agreement, pursuant to DENR Administrative Order No. 2004-28, dated August 25, 2004.

Obligations of the Second Party

XIII. The **SECOND PARTY** shall immediately secure the required Environmental Compliance Certificate (ECC) and other necessary permits prior to conduct of any activity in the area.

XIV. No trees, regardless of species, shall be cut in the FLAgT Area if found within twenty (20) meters from banks of rivers, creeks or streams and of public roads. In case the said 20-meter strip is bereft of trees, the same shall be rehabilitated by the **SECOND PARTY**.

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
(FIRST PARTY)

By:

RAMON J. PAJE
Secretary

PALAWAN COVE CORPORATION
(SECOND PARTY)

By:

LESLIE ANN T. YAPKIANWEE
Authorized Representative

WITNESSES:

CERTIFIED XEROX COPY:
VIRGINIA M. ANGELES
Records Officer
Chief, Records Unit



XV. The **SECOND PARTY** shall strictly observe sanitary measures within the FLAgT Area to ensure protection of watershed values;

XVI. The **SECOND PARTY** shall protect the FLAgT Area from forest fires and other forms of forest destruction.

XVII. The **SECOND PARTY** shall protect and conserve unique, rare and endangered flora and fauna, if any, within the FLAgT Area pursuant to existing laws, rules and regulations.

XVIII. The **SECOND PARTY** shall not impede, obstruct or prevent the entry and exit through the FLAgT Area of legitimate stakeholders and/or forest users authorized by the DENR.

XIX. The **SECOND PARTY** shall submit an Annual Report to the Regional Executive Director thru the CENRO concerned copy furnished the FMB Director showing developmental activities undertaken within the FLAgT Area in accordance with the approved CDMP.

XX. All authorized DENR officials and/or employees shall be allowed by the **SECOND PARTY** to enter and inspect the FLAgT Area for the purpose of monitoring compliance with the terms and conditions of this **AGREEMENT** and the activities authorized under the approved CDMP.

XXI. The **SECOND PARTY** shall inform the RED or his duly authorized representative on any changes in the management, ownership or capital stock of the company or corporation or transfer of a majority of the stock or shares of the company or corporation as provided for in PD 705, as amended.

Termination

XXII. This **AGREEMENT** may be terminated or cancelled by the **FIRST PARTY**, after giving the **SECOND PARTY** due notice and opportunity to be heard, on any of the following grounds:

- a) Violation of any of its terms and conditions, or failure to comply with the obligations under this **AGREEMENT**;
- b) In case this **AGREEMENT** was determined, after appropriate proceedings, to have been obtained through fraud, misrepresentation or omission of material facts existing at the time of filing of the application;
- c) Abandonment of the FLAgT Area or failure to utilize the same for the purpose it was granted within the prescribed period of six (6) months without justifiable cause;
- d) Failure to introduce improvements or develop the FLAgT Area as indicated in the CDMP; and
- e) Failure to pay the Government Share and other administrative fees after three (3) consecutive notices after the same had become due and demandable;

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
(FIRST PARTY)

By:

RAMON J. P. PAJE
Secretary

PALAWAN COVE CORPORATION
(SECOND PARTY)

By:

LESLIE ANN T. YAPKIANWEE
Authorized Representative

WITNESSES:

CERTIFIED XEROX COPY

WITNESSES

XXIII. In the event the **FIRST PARTY** determines that any of the above grounds exist, a notice of breach shall be sent to the **SECOND PARTY** giving the latter at least fifteen (15) calendar days to submit a written explanation. Before any termination is resorted to, the parties shall meet and exert best efforts to resolve the dispute, except when the grounds refer to items (b) and (c) above. The **SECOND PARTY** shall be given reasonable time within which to remedy the breach or to implement the agreed remedial measures.

XXIV. In case of termination or cancellation of this **AGREEMENT** due to the fault of the **SECOND PARTY**, the Performance Bond shall be forfeited in favor of the **FIRST PARTY**, and the **SECOND PARTY** shall have no right to claim for reimbursement or compensation of whatever kind for the permanent improvements introduced within the FLAgT Area as defined in paragraph VII hereof. Such improvements, which shall not include the Temporary Improvements referred to in paragraph VII above, shall be forfeited in favor, and become the property, of the **FIRST PARTY**.

XXV. Upon termination of this **AGREEMENT**, the **SECOND PARTY** shall be allowed to continue to occupy the FLAgT Area for a period not exceeding ninety (90) days to enable it to remove the Temporary Improvements referred to in paragraph VII above, and to revert the land to its original condition to the extent possible.

Ownership and Transfer

XXVI. The **SECOND PARTY** shall, with respect to its ownership or capital stock, and in relation to the right granted herein to use the public forestland described in the attached map, ensure compliance with the nationality requirement under Article XII, Section 2 of the 1987 Constitution of the Republic of the Philippines, at all times throughout the duration of this **AGREEMENT**. In this regard, the **SECOND PARTY** shall secure the approval of the **FIRST PARTY** or his duly authorized representative in case of transfer of majority of its shares or capital stock after execution of this **AGREEMENT**.

XXVII. The **SECOND PARTY** may transfer this **AGREEMENT** or any rights therein or any assets used therewith, if authorized by the DENR Secretary, subject to the following conditions:

- a) The FLAgT has been in existence for at least three (3) years;
- b) The **SECOND PARTY** has been faithfully complying with the terms and conditions of the FLAgT including implementation of CDMP;
- c) The transferee has all the qualifications and none of the disqualifications to hold a FLAgT;
- d) The transferee shall assume all the obligations and responsibilities of the transferor specified in the FLAgT, CDMP and ECC.

Amendment and Renewal

XXVIII. This **AGREEMENT** may be modified, altered or amended upon agreement in writing by both parties.

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
(FIRST PARTY)

By:

RAMON J.P. PAJE
Secretary

PALAWAN COVE CORPORATION
(SECOND PARTY)

By:

LESLIE ANN T. YAPKIANWEE
Authorized Representative

WITNESSES:

CERTIFIED TRUE COPY

WITNESSES: [Signature]



XXIX. This AGREEMENT may be renewed upon filing by the SECOND PARTY of an application six (6) months prior to the expiration hereof.

Miscellaneous Provisions

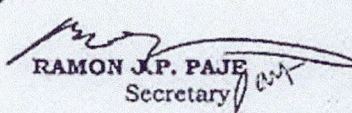
XXX. This AGREEMENT is subject to pertinent DENR Laws, Rules and Regulations, provided the same shall not impair the contractual obligations of both parties herein.

IN WITNESS WHEREOF, the parties have affixed their signatures below at Quezon City, Philippines, this _____ day of _____, 2010.




DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
(FIRST PARTY)

By:

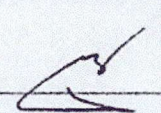

RAMON J.P. PAJE
Secretary

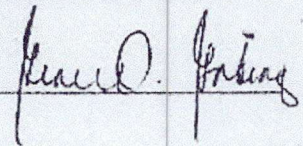
PALAWAN COVE CORPORATION
(SECOND PARTY)

By:

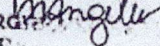



LESLIE ANN T. YAPKIANWEE
Authorized Representative

WITNESSES:





CERTIFIED XEROX COPY.

VIRGIL 
F. 
C. 

ACKNOWLEDGEMENT

REPUBLIC OF THE PHILIPPINES)
 QUEZON CITY, PHILIPPINES) S.S.

BEFORE ME, a Notary Public for and in _____, Philippines, this
 day of _____, 20____, personally appeared the following:

<u>Name</u>	<u>Evidence of Competent Identity</u>
Ramon J.P. Paje	
Leslie Ann T. Yapkianwee	CTC-28599311 - January 26, 2010, Makati City

known to me to be the same persons who executed the foregoing instrument, and who
 acknowledge to me that the same is their free and voluntary act and deed.

This instrument, which is Forest Landuse Agreement for Tourism Purposes
 (FLAGT) No. 01-2012, consists of seven (7) pages including this page where this
 Acknowledgement is written and has been signed by the parties and their witnesses on
 each and every page hereof.

WITNESS MY HAND AND SEAL, at the place and on the date written.

NOTARY PUBLIC

Doc No. _____
 Page No. _____
 Book No. _____
 Series of 2010

**DEPARTMENT OF ENVIRONMENT
 AND NATURAL RESOURCES**
 (FIRST PARTY)

By:

RAMON J.P. PAJE
 Secretary

PALAWAN COVE CORPORATION
 (SECOND PARTY)

By:

LESLIE ANN T. YAPKIANWEE
 Authorized Representative

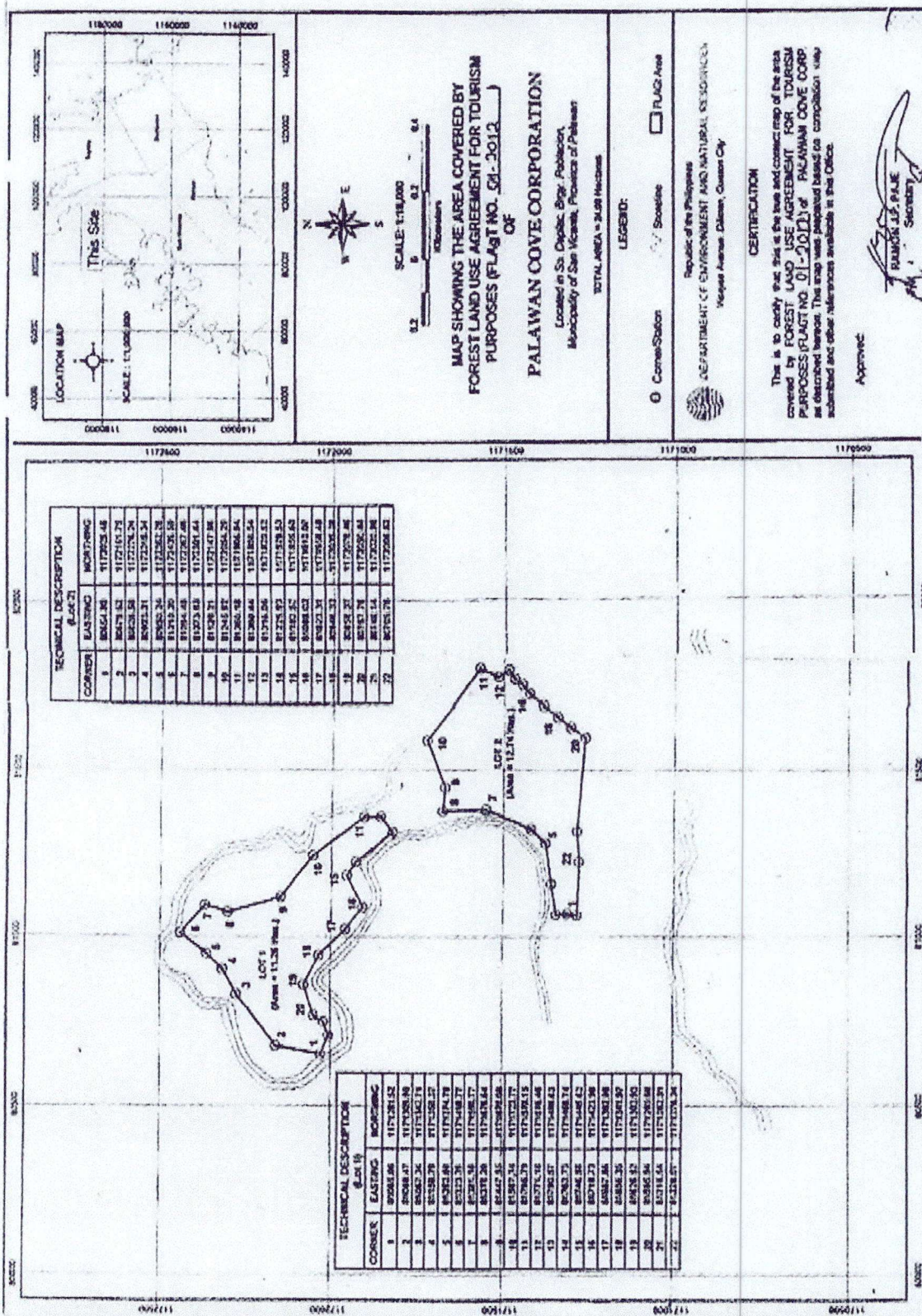
WITNESSES:



My Docs-FLAGT-palawan cove
 UI6-eqf-6-25-10

CERTIFIED TRUE COPY

VERIFIED

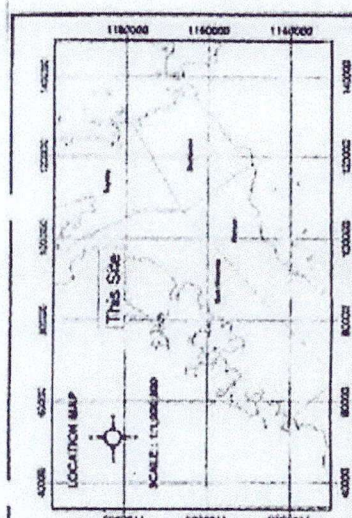


TECHNICAL DESCRIPTION (LOT 1)

CORNER	EASTING	NORTHING
1	80651.38	1172025.48
2	80679.12	1172101.29
3	80728.58	1172174.24
4	80801.31	1172258.54
5	80853.24	1172382.28
6	81011.20	1172426.19
7	81094.48	1172487.48
8	81203.63	1172501.44
9	81238.71	1172477.88
10	81241.87	1172364.20
11	81264.48	1171864.64
12	81309.44	1171802.54
13	81374.04	1171822.12
14	81373.92	1171828.53
15	81350.25	1171825.85
16	80988.02	1171875.06
17	80821.31	1172028.48
18	80646.33	1172028.48
19	80458.27	1172078.48
20	80357.78	1172026.48
21	80148.14	1172022.88
22	80101.78	1172008.48

TECHNICAL DESCRIPTION (LOT 2)

CORNER	EASTING	NORTHING
1	80648.86	1172012.52
2	80688.17	1172058.88
3	80682.34	1172142.18
4	80728.79	1172202.22
5	80821.68	1172164.78
6	80821.36	1172168.17
7	80821.36	1172168.17
8	80821.36	1172168.17
9	80821.36	1172168.17
10	80821.36	1172168.17
11	80821.36	1172168.17
12	80821.36	1172168.17
13	80821.36	1172168.17
14	80821.36	1172168.17
15	80821.36	1172168.17
16	80821.36	1172168.17
17	80821.36	1172168.17
18	80821.36	1172168.17
19	80821.36	1172168.17
20	80821.36	1172168.17
21	80821.36	1172168.17
22	80821.36	1172168.17



**MAP SHOWING THE AREA COVERED BY
FOREST LAND USE AGREEMENT FOR TOURISM
PURPOSES (PLAT NO. 021-2012)
OF
PALAWAN COVE CORPORATION**

Located in Sta. Dyocis, Brgy. Poblacion,
Municipality of San Vicente, Province of Palawan

SCALE: 1:100,000

0.2 0.4 0.6 0.8 Kilometers

0.2 0.4 0.6 0.8 Kilometers

TOTAL AREA = 24.08 Hectares

LEGEND:

○ Corner Station --- Sootline □ RAC Area

Republic of the Philippines
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
Palawan Division Office, Coron City

CERTIFICATION

This is to certify that this is the true and correct map of the area covered by FOREST LAND USE AGREEMENT FOR TOURISM PURPOSES PLAT NO. 01-2011 of PALAWAN COVE CORP. as described herein. This map was prepared based on completion map submitted and other information available in this Office.

Approved:

RAMON J. P. PAINE
Secretary

CERTIFIED APPROX. COPY
DATE 10-2-16

ATTACHMENT 2

Environmental Compliance Certificate (ECC)





Department of Environment and Natural Resources
Environmental Management Bureau
Regional Office No. IV - B MIMAROPA

ENVIRONMENTAL COMPLIANCE CERTIFICATE

(Issued under Presidential Decree 1586)

ECC-R4B-1002-0037

THIS IS TO CERTIFY THAT PROPONENT PALAWAN COVE CORPORATION, is granted this Environmental Compliance Certificate (ECC), for the ECOTOURISM (SITE I: PUEBLO INDIGO) PROJECT, located at SITIO DAPLAG AND PULANG BATO, BOAYAN ISLAND, BRGY. POBLACION, SAN VICENTE, PALAWAN by the Department of Environment and Natural Resources (DENR), through the Environmental Management Bureau, Region IV-MIMAROPA.

SUBJECT ONLY to the conditions and restrictions set-out in this ECC and in the attached document labeled as Annex A and B.

PROJECT DESCRIPTION

This ECC covers the Ecotourism (Site I: Pueblo Indigo) Project, having a total area of 117,170.00 square meters, located at Sitio Daplag and Pulang Bato, Boayan Island, Brgy. Poblacion, San Vicente, Palawan.

The proposed project will have the following building facilities and structures to wit: Offshore-Fifteen (15) units Bedroom Cottages, One (1) unit restaurant and lounge, One (1) unit viewing station, One (1) unit service/power area and ten (10) units septic tank.

This ECC is issued in compliance to the requirements of Presidential Decree No. 1586, in accordance to Department Administrative Order No. 2003-30. The Bureau, however, is not precluded from reevaluating, adding, removing, and correcting any deficiencies or errors that may be found to be inconsistent with the Revised Procedural Manual of DAO 2003-30 after issuance of this ECC.

DATE 17 2010

Issued at EMB-MIMAROPA Region Manila, Philippines this _____

Approved by:

EnP Sixto E. Tolentino, Jr.
EnP SIXTO E. TOLENTINO, JR.
Regional Director

Recommending Approval:

Engr. A. Rioflorido
QUENAPPE A. RIOFLORIDO
Chief, EIA Division

ECC-R4B-1002-0037
Ecotourism (Site I: Pueblo Indigo) Project

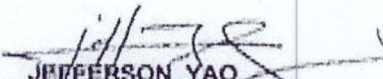
CC: The R4B DENR Region IV-B
The PENRO - Palawan
The CENRO - Roxas, Palawan

CERTIFIED XEROX COPY

6th Floor DENR by the Bay Bldg., 1515 Roxas Blvd., Ermita Manila
RD's Office 536-9786; Admin/Finance Division Teletex No. 400-5960
PC Division 521-8904, EIA Division Teletex No. 400-5960
E-mail Address: admin-emb@denr.gov.ph and emb_mimaropa@denr.gov.ph

SWORN STATEMENT OF OWNER

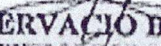
The Palawan Cove Corporation, Proponent of the Ecotourism (Site 1: Pueblo Indigo) Project located at Sitio Pulang Bato, Boayan Island, Brgy. Poblacion, San Vicente, Palawan takes full responsibility in complying with all conditions contained in this Environmental Compliance Certificate (ECC).


JEFFERSON YAO
Proponent/Representative

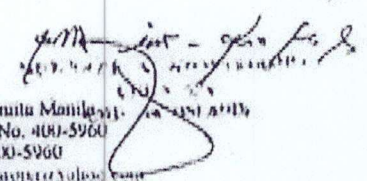
TIN _____

Subscribed and sworn to before me this MAR 26 day of 2010, 2010 the above-named affiant taking oath presenting Residence Certificate No. _____ issued on _____ 2010 at _____

DOC. NO. 1 67
PAGE NO. 1 14
BOOK NO. 1 14
SERIES OF 14


ATTY. GERVACIO B. ORTIZ JR.
NOTARY PUBLIC FOR MAKATI CITY
Sole and Principal Officer
UNTIL DECEMBER 31, 2010
IDP NO. 656155 - LIFETIME MEMBER
PTR NO. 2073348 JAN. 4, 2010 MAKATI CITY
APPT - 84/201 ROLL NO. 40091

CERTIFIED XEROX COPY


6th Floor DENR by the Bay Bldg., 1515 Roxas Blvd., Ermita Manila
RD's Office 330-9786; Admin/Finance Division Telefax No. 400-5960
PC Division 521-8934, EIA Division Telefax No. 400-5960
E-mail Address: admin_cen@denr.gov.ph and cen_admin@denr.gov.ph

Annex A

I. CONDITIONS

A. ENVIRONMENTAL MANAGEMENT & MONITORING PLAN (EMMoP)

1. The proponent shall ensure that all commitments, appropriate mitigating/enhancement measures and monitoring requirements especially those contained in the EMMoP in the IEE Report, its modifications shall be instituted and strictly implemented throughout the project implementation;
2. An Environmental Officer (EO)/ Pollution Control Officer (PCO) must be appointed to handle environmental impact management related aspects of the project as specified in the Impact Management Plan (IMP) and the Environmental Monitoring Plan (EMoP). The EO/PCO shall:
 - 2.1 Monitor actual project impacts vis-a-vis the predicted impacts and management measures in the IEE;
 - 2.2 Submit quarterly Self-Monitoring Report (SMR) and semi-annually an ECC Compliance Monitoring Report (CMR) to EMB MIMAROPA Region, wherein each second or year end report shows the summary of cumulative performance of Proponent against previous years' requirements and commitments.
3. The proponent shall submit an Abandonment Plan to the EMB MIMAROPA Region at least one year prior to the project's abandonment. The plan shall include rehabilitation measures/clean-up, remediation of areas affected by the project and proposed alternative projects in the area.

GENERAL CONDITIONS

4. The project operations shall conform to the applicable provisions of PD 1500 (Philippine Environmental Impact Statement System, DAO 2003-30), RA 6969 (Toxic Substances, Hazardous Waste Control Act of 1990), RA 8749 (Philippine Clean Air Act of 1990), RA 9003 (Ecological Solid Waste Management Act of 2000), RA 9275 (Philippine Clean Water Act of 2004);
5. A billboard containing this message : " Notice to the Public, This project (Ecotourism (Site I: Pueblo Indigo) Project) of (Palawan Cove Corporation) has been issued an Environmental Compliance Certificate (ECC-R40-1002-0037) by the Environmental Management Bureau of the Department of Environment and Natural Resources, Region IV-B, on ()." This message must be installed at all entry and exit points and at all perimeters of the project facing the road to inform the general public within thirty (30) days from receipt of the certificate. A copy of the certificate shall also be posted by the Proponent at the barangay bulletin board of the affected barangays within thirty (30) days from receipt of the certificate. An accomplishment report which shall include picture verification of compliance to the posting of notices and the billboards shall be submitted to this Office within ninety (90) days from receipt of the Certificate;

II. RESTRICTIONS

6. Non-compliance with any of the provisions of this ECC shall be a sufficient cause for its cancellation or suspension and/or imposition of a fine in an amount not to exceed Fifty Thousand Pesos (Php 50,000.00) thereof;
7. In case of transfer of ownership/management turn-over of this project, these same conditions and restrictions shall apply unless otherwise revised in writing. In such case, Palawan Cove Corporation shall be required to notify the EMB - MIMAROPA Region within fifteen (15) days

O. R. No. : 0581060
Date : 18 December 2009

Processing Fee: Php 4,000.00

For the Office of the Regional Director
Environmental Management Bureau

6th Floor DIRM by the Bay Bldg., 1515 Roxas Blvd., Manila Manila
RD's Office 526-9780, Admin/Finance Division Telefax No. 400-5960
PC Division 521-8904, EIA Division Telefax No. 400-5960
E-mail Address: eub@denr.gov.ph and eia@denr.gov.ph

CERTIFIED XEROX COPY

[Handwritten signature and stamp]

[Handwritten signature]

PROJECT ASSESSMENT PLANNING TOOL

For the assistance of the Proponent, other concerned government agencies and LGUs in the management of the project and for better coordination in mitigation on the impact of the project on its surrounding areas and to the environment.

By way of recommendation, the following have been taken notice of by the EMB MIMAROPA Region and are forwarding these recommendations to parties and authorities concerned for proper action and integration into their decision-making process.

A. Recommendations to Concerned Government Agencies/LGUs	Concerned Permitting, Deciding, Monitoring Entities
1. Palawan Cove Corporation shall ensure that socio-economic concerns of various stakeholders are adequately addressed.	San Vicente, Palawan LGU
2. Palawan Cove Corporation should implement segregation, collection, recycling and disposal mechanism for solid waste in accordance with RA 9003.	San Vicente, Palawan LGU
3. The occupational health and safety standards/regulation must be complied with by Palawan Cove Corporation.	San Vicente, Palawan LGU
4. The adequate storm drainage canal, concrete culverts and other flood control measures need to be provided to adequately receive and channel the run-off of silt laden rainwater to the nearby receiving body of water.	San Vicente, Palawan LGU
5. The structural design of component structures of the project shall conform with the design guidelines of Building Code of the Philippines.	San Vicente, Palawan LGU
6. Planting of fast growing species/ornamentals should be affected within the project site in support to the greening project of the government.	San Vicente, Palawan LGU
7. Palawan Cove Corporation shall establish and implement a Social Development Program (SDP) to include training and hiring of local residents and applicable livelihood program and appropriate Information, Education and Communication (IEC) Program.	San Vicente, Palawan LGU
8. Palawan Cove Corporation shall secure permits/clearances from concerned agencies and shall submit to this Office prior to project implementation.	Proponent, San Vicente, Palawan LGU and Other Government Agencies concerned
B. Environmental Planning Recommendations for the Proponent	
1. Palawan Cove Corporation shall undertake close monitoring in all stages of the project implementation to maintain a high level of environmental safety and performance efficiency and immediately address any environmental hazards.	

For dissemination and proper action of the parties concerned.

[Signature]
BUENA FE A. RIOFLORIDO
OIC, EIAM Division

[Signature]
Enr SIXTO E. TOLENTINO, JR.
Regional Director

6th Floor DENR by the Bay Bldg., 1515 Roxas Blvd., Ermita Manila
RD's Office 536-9786; Admin/Finance Division Telefax No. 400-5960
IC Division 521-8904, EIA Division Telefax No. 400-5960
E-mail Address: admin@denr.gov.ph; ic@denr.gov.ph; eia@denr.gov.ph

CERTIFIED XEROX COPY

[Signature]
BUENA FE A. RIOFLORIDO
OIC, EIAM Division



Department of Environment and Natural Resources
Environmental Management Bureau
Regional Office No. IV - B MIMAROPA

ENVIRONMENTAL COMPLIANCE CERTIFICATE

(Issued under Presidential Decree 1586)

ECC-R4B-1002-0035

THIS IS TO CERTIFY THAT PROPONENT PALAWAN COVE CORPORATION, is granted this Environmental Compliance Certificate (ECC), for the ECOTOURISM (SITE II: PUEBLO VERDE) PROJECT, located at SITIO DAPLAC AND PULANG BATO, BOAYAN ISLAND, BRGY. POBLACION, SAN VICENTE, PALAWAN by the Department of Environment and Natural Resources (DENR), through the Environmental Management Bureau, Region IV-MIMAROPA.

SUBJECT ONLY to the conditions and restrictions set-out in this ECC and in the attached document labeled as Annex A and B.

PROJECT DESCRIPTION

This ECC covers the Ecotourism (Site II: Pueblo Verde) Project, having a total area of 122,000.00 square meters, located at Sitio Daplac and Pulang Bato, Boayan Island, Brgy. Poblacion, San Vicente, Palawan.

The proposed project will have the following building facilities and structures to wit: Offshore-Six (6) units Bedroom Cottages, One (1) unit restaurant and lounge; Inland Resort- Nine (9) units cottages, One (1) unit picnic area, One (1) viewing station, One (1) unit service/power area and ten (10) units septic tank

This ECC is issued in compliance to the requirements of Presidential Decree No. 1586, in accordance to Department Administrative Order No. 2003-30. The Bureau, however, is not precluded from reevaluating, adding, removing, and correcting any deficiencies or errors that may be found to be inconsistent with the Revised Procedural Manual of DAO 2003-30 after issuance of this ECC.

Issued at EMB-MIMAROPA Region Manila, Philippines this MAY 17 2010

Approved by:

[Signature]
EnP SIXTO E. TOLENTINO, JR.
Regional Director

Recommending Approval:

[Signature]
BUENA FE A. RIOLFLORIDO
Chief, EIA Division

ECC-R4B-1002-0035
Ecotourism (Site II: Pueblo Verde) Project

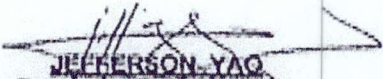
CC: The R4B DENR Region IV-B
The DENRO - Palawan
The CENRO - Roxas, Palawan

CONFIRMED XEROX COPY

6th Floor DENR by the Bay Bldg., 1315 Roxas Blvd., Manila Manila
RD's Office 336-9786; Admin/Finance Division Telefax No. 400-3960
PC Division 521-8904, EIA Division Telefax No. 400-3960
E-mail Address: admin-embr-rlb@denr.gov.ph and emb_mimaropa@yahoo.com

SWORN STATEMENT OF OWNER

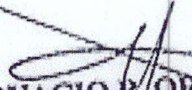
The Palawan Cove Corporation, Proponent of the Ecotourism (Site II: Pueblo Verde) Project located at Sitio Pulang Bato, Boayan Island, Brgy. Poblacion, San Vicente, Palawan takes full responsibility in complying with all conditions contained in this Environmental Compliance Certificate (ECC).


JEFFERSON YAO
Proponent/Representative

TIN _____

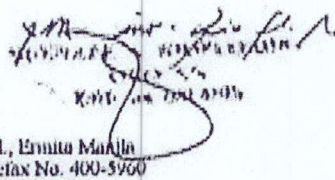
Subscribed and sworn to before me this _____ day of MAR 26 2010 the above-named affiant taking oath presenting Residence Certificate No. _____ issued on _____ 2010 at _____

DOC. NO. : 624
PAGE NO. : 1
BOOK NO. : _____
SERIES OF : 2010

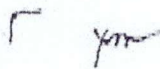

ATTY. CERVACIO B. ORTIZ JR.
NOTARY PUBLIC for Notarial Office
UNTIL DECEMBER 31, 2010
IBP NO. 656155 - LIFETIME MEMBER
PTR NO. 2075543 JAN. 4, 2010 MAKATI CITY
APPT - 14/201 RCA.L NO. 40091

ECV - 0012 00000001
Consentation - 10 - B. Pueblo Verde Project

CEMILAKAS XENOK 1000Y



6th Floor DENR by the Bay Bldg., 1515 Roxas Blvd., Ermita Manila
RD's Office 536-9786; Admin/Finance Division Telefax No. 400-5960
PC Division 521-8904, EIA Division Telefax No. 400-5960
E-mail Address: admin-sub-1@denr.gov.ph and sub-admin@denr.gov.ph



Annex A

I. CONDITIONS

A. ENVIRONMENTAL MANAGEMENT & MONITORING PLAN (EMMoP)

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GENERAL CONDITIONS

4. The project operations shall conform to the applicable provisions of PD 1583 (Philippine Environmental Impact Statement System, DAO 2003-30), RA 6909 (Toxic Substances, Hazardous Waste Control Act of 1990), RA 8749 (Philippine Clean Air Act of 1999), RA 9003 (Ecological Solid Waste Management Act of 2000), RA 9275 (Philippine Clean Water Act of 2004);
5. A billboard containing this message : " Notice to the Public, This project (Ecotourism (Site II: Pueblo Verde) Project) of (Palawan Cove Corporation) has been issued an Environmental Compliance Certificate (ECC-R4B-1002-0035) by the Environmental Management Bureau of the Department of Environment and Natural Resources, Region IV-B, on (_____)." This message must be installed at all entry and exit points and at all perimeters of the project facing the road to inform the general public within thirty (30) days from receipt of the certificate. A copy of the certificate shall also be posted by the Proponent at the barangay bulletin board of the affected barangays within thirty (30) days from receipt of the certificate. An accomplishment report which shall include picture verification of compliance to the posting of notices and the billboards shall be submitted to this Office within ninety (90) days from receipt of the Certificate;

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7. In case of transfer of ownership/management turn-over of this project, those same conditions and restrictions shall apply unless otherwise revised in writing. In such case, Palawan Cove Corporation shall be required to notify the EMB - MIMAROPA Region within fifteen (15) days

O. R. No. : 0581001
Date : 18 December 2009

Processing Fee: Php 4,000.00

CERTIFIED XEROX COPY

6th Floor Bldg. by the Bay Bldg., 1515 Roxas Blvd., Ermita Manila
RD's Office 836-9780, Admin/Finance Division Teletax No. 400-5960
PC Division 521-8904, I&A Division Teletax No. 400-5960
Email Address: emb_cib@den.gov.ph and emb_admin@den.gov.ph

[Handwritten signature]
EMB - MIMAROPA Region

PROJECT ASSESSMENT PLANNING TOOL

For the assistance of the Proponent, other concerned government agencies and LGUs in the management of the project and for better coordination in mitigation on the impact of the project on its surrounding areas and to the environment.

By way of recommendation, the following have been taken notice of by the EMB MIMAROPA Region and are forwarding these recommendations to parties and authorities concerned for proper action and integration into their decision-making process.

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2. Palawan Cove Corporation should implement segregation, collection, recycling and disposal mechanism for solid waste in accordance with RA 9003.	San Vicente, Palawan LGU
3. The occupational health and safety standards/regulation must be complied with by Palawan Cove Corporation.	San Vicente, Palawan LGU
4. The adequate storm drainage canal, concrete culverts and other flood control measures need to be provided to adequately receive and channel the run-off of silt laden rainwater to the nearby receiving body of water.	San Vicente, Palawan LGU
5. The structural design of component structures of the project shall conform with the design guidelines of Building Code of the Philippines.	San Vicente, Palawan LGU
6. Planting of fast growing species/ornamentals should be affected within the project site in support to the greening project of the government.	San Vicente, Palawan LGU
7. Palawan Cove Corporation shall establish and implement a Social Development Program (SDP) to include training and hiring of local residents and applicable livelihood program and appropriate Information, Education and Communication (IEC) Program.	San Vicente, Palawan LGU
8. Palawan Cove Corporation shall secure permits/clearances from concerned agencies and shall submit to this Office prior to project implementation.	Proponent, San Vicente, Palawan LGU and Other Government Agencies concerned
B. Environmental Planning Recommendations for the Proponent	
1. Palawan Cove Corporation shall undertake close monitoring in all stages of the project implementation to maintain a high level of environmental safety and performance efficiency and immediately address any environmental hazards.	

For dissemination and proper action of the parties concerned.

[Signature]
BUENA FE A. RIOFLORIDO
OIC, EIAM Division

[Signature]
ENP SIXTO E. TOLENTINO, JR.
Regional Director

6th Floor DENR by the Bay Bldg., 1515 Roxas Blvd., Ermita Manila
ED's Office 536-9786; Admin/Finance Division Telefax No. 400-5260
IC Division 521-8904, EIA Division Telefax No. 400-5260
E-mail Address: admin@denr.gov.ph; eia@denr.gov.ph

CERTIFIED XEROX COPY

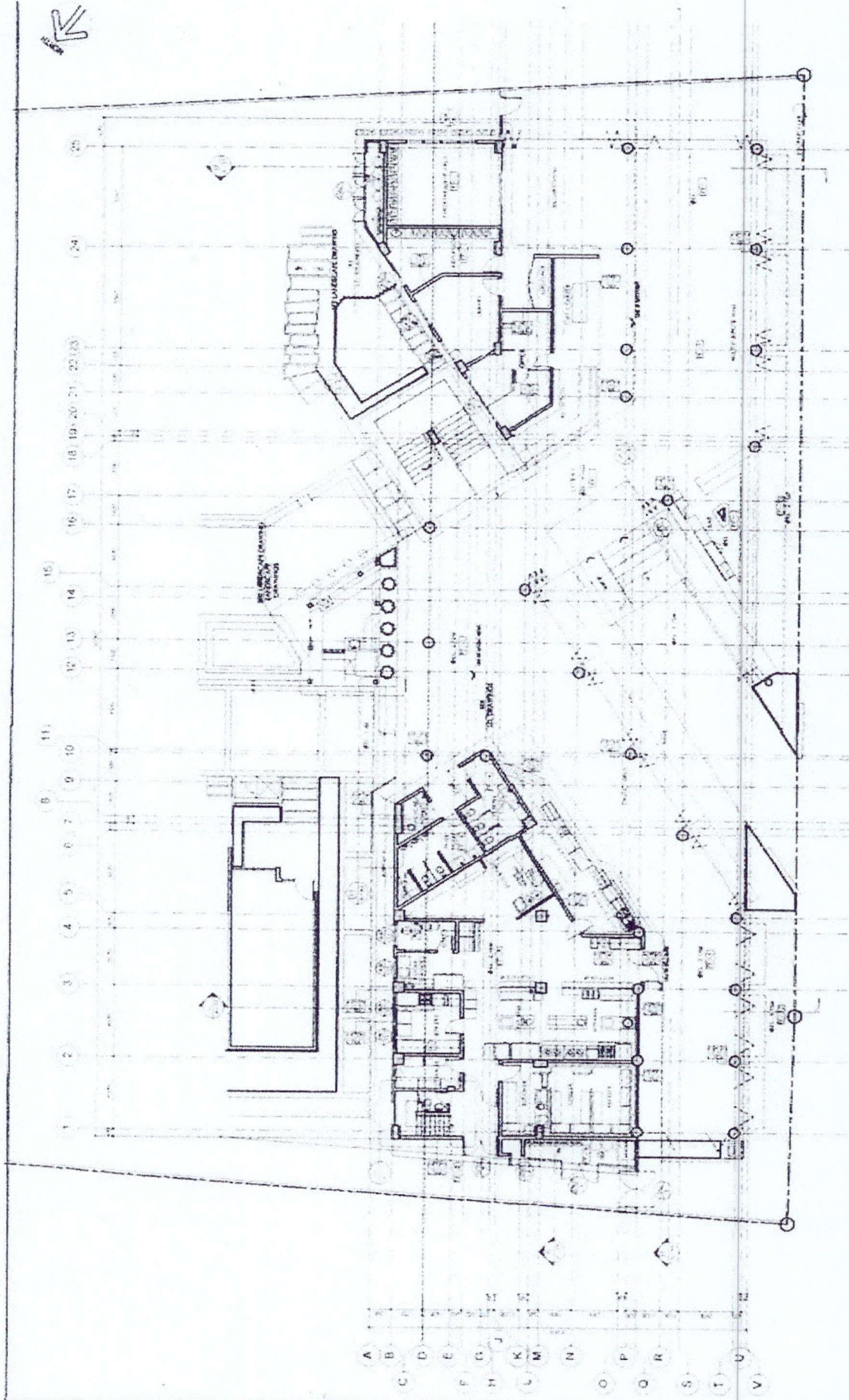
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ATTACHMENT 3

Engineering Design

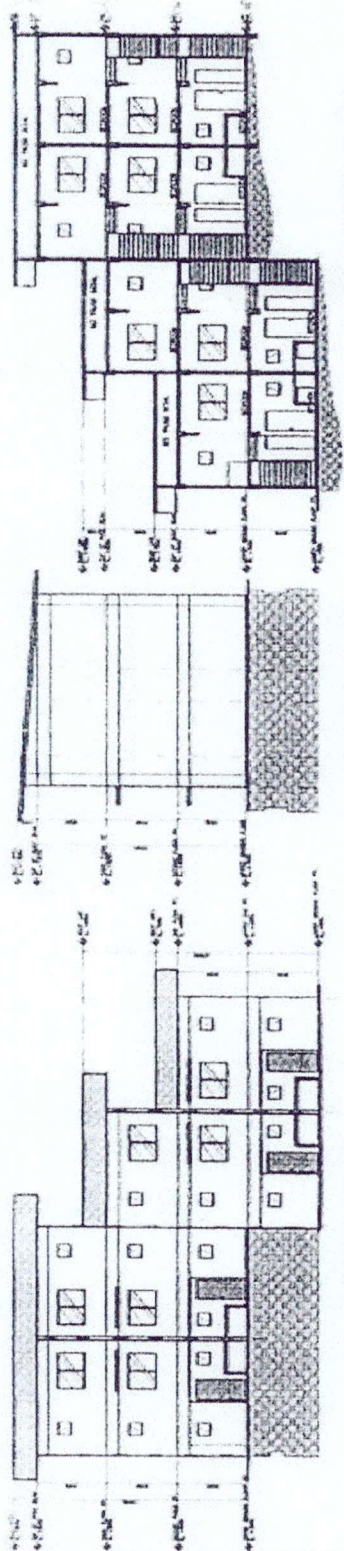


GlobalTenets
CONSULTANCY



CLUBHOUSE
GROUND FLOOR PLAN
1:500

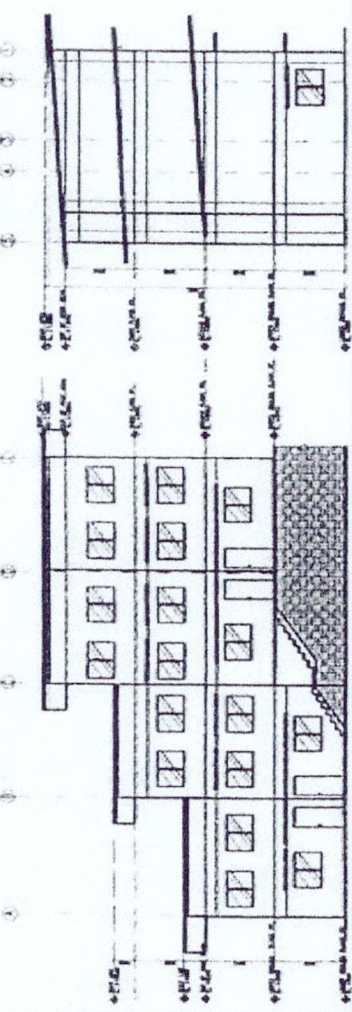
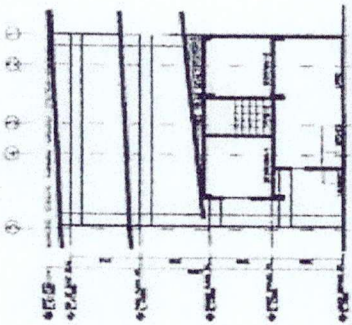
PROJECT NAME	PROPOSED RESORT DEVELOPMENT BOVANI ISLAND, BOVANI FOR ACQUISITION VICENTE PALAWAN PHILIPPINES	DRAWING TITLE	GROUND FLOOR PLAN CLUBHOUSE	DATE	01 MARCH 2012	SCALE	1:500	SHEET NO.	1
DESIGNED BY	HICKLETT	CHECKED BY	HICKLETT	DATE	01 MARCH 2012	SCALE	1:500	SHEET NO.	1
DRAWN BY	HICKLETT	CHECKED BY	HICKLETT	DATE	01 MARCH 2012	SCALE	1:500	SHEET NO.	1
DATE	01 MARCH 2012	SCALE	1:500	SHEET NO.	1	PROJECT NAME	PROPOSED RESORT DEVELOPMENT BOVANI ISLAND, BOVANI FOR ACQUISITION VICENTE PALAWAN PHILIPPINES	DRAWING TITLE	GROUND FLOOR PLAN CLUBHOUSE



EAST ELEVATION

SOUTH ELEVATION

LONGITUDINAL SECTION

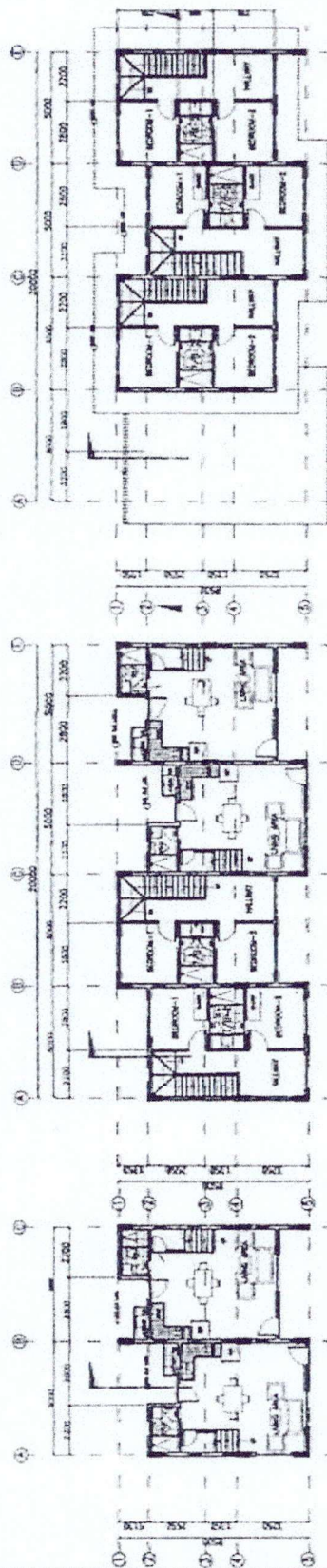


WEST ELEVATION

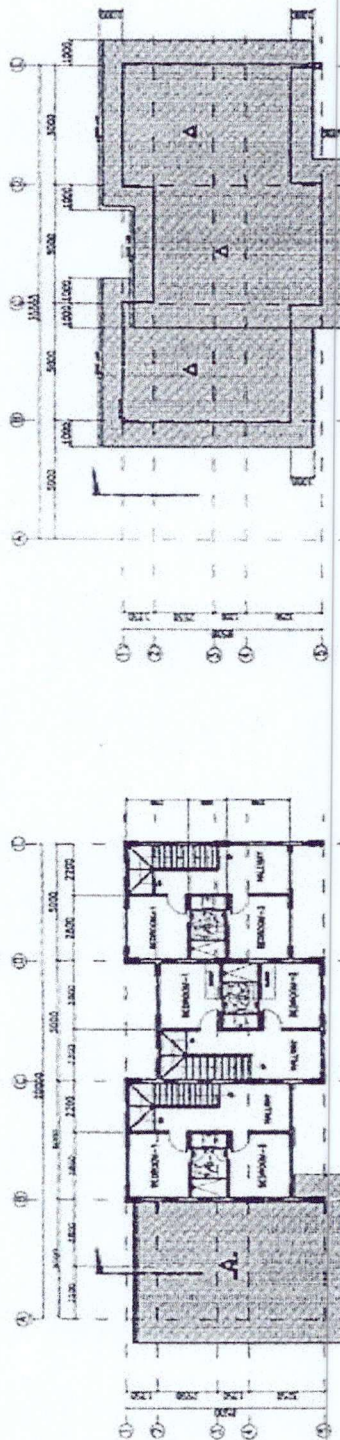
NORTH ELEVATION

TRANSVERSE SECTION

PROJECT TITLE	PROPOSED RESORT DEVELOPMENT	ARCHITECT	HAWAIIAN COVE CORPORATION	OWNER	SCALE
DRAWN BY	REVISION 1, YAO	DATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
DATE	1/1/2000	1/1/2000	1/1/2000	1/1/2000	1/1/2000



① LOWER GROUND FLOOR PLAN



⑦ SECOND FLOOR PLAN 1329

① ROOF PLAN 200

PLAN OF 3-STOREY RESORT HOTEL

[illegible]